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Reshoring as the new trend in contemporary economy. The case of Poland¹

Abstract: The COVID-19, the war in Ukraine, and other international events have all conspired to increase supply-chain deficiencies. Supply chain leaders are investigating numerous approaches for building more robust supply chains, including one that has arisen in response to these difficulties. According to a Capgemini Research Institute (2023) analysis, 89% of executives polled identified supply chain disruption as the largest short-term risk to their firm. To assist limit this risk, businesses are modifying and revamping entire supply chains, including sourcing, manufacturing, packaging, storage, transportation, technological investments, and more. That is why, the aim of the undertaken research is to determine the scale and scope of reshoring activities in various industries and regions, with particular emphasis on the Polish economy, and to identify the main factors behind reshoring decisions. A combination of research methods including data analysis and literature reviews were used to achieve these goals. The research approach took into account the interdisciplinary nature of reshoring, including economics, supply chain management, technology and public policy, among others. The author's research has shown that reshoring decisions are influenced not only by the costs of enterprise operations, but by a combination of various factors, including costs, supply chain resilience, quality and sustainability issues, technology capabilities, or government legislation. Moreover, reshoring results in the creation of new jobs, but the scale of this phenomenon depends on the industry and the region where the business is located. It was also reiterated that reshoring patterns vary between regions (countries), with some regions seeing more reshoring activity than others.

Keywords: investments, reshoring, offshoring, internationalization

Reshoring jako nowy trend we współczesnej gospodarce. Przypadek Polski

Abstrakt: Pandemia Covid-19, wojna na Ukrainie i inne wydarzenia międzynarodowe przyczyniły się do zwiększenia braków w łańcuchu dostaw. Liderzy łańcucha dostaw badają liczne podejścia do budowania solidniejszych łańcuchów dostaw, w tym takie, które powstały w odpowiedzi na te trudności. Według analizy Instytutu Badawczego Capgemini (Capgemini Research Institute, 2023) 89% ankietowanych menedżerów uznało zakłócenia w łańcuchu dostaw za największe krótkoterminowe ryzyko dla ich przedsiębiorstwa. Aby ograniczyć to ryzyko, przedsiębiorstwa modyfikują i unowocześniają całe łańcuchy dostaw, w tym zaopatrzenie, produkcję, pakowanie, przechowywanie, transport, inwestycje technologiczne i nie tylko. Dlatego też celem podjętych badań jest określenie skali i zakresu działań reshoringowych w różnych branżach i regionach, ze szczególnym uwzględnieniem gospodarki polskiej, a także identyfikacja głównych czynników

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stojących za decyzjami reshoringowymi. Aby osiągnąć te cele, zastosowano kombinację metod badawczych, w tym analizę danych i przeglądy literatury przedmiotu. W podejściu badawczym uwzględniono interdyscyplinarny charakter reshoringu, obejmujący m.in. ekonomię, zarządzanie łańcuchem dostaw, technologię i politykę publiczną. Badania autora wykazały, że na decyzje dotyczące reshoringu wpływają nie tylko koszty działalności przedsiębiorstwa, ale kombinacja różnych czynników, w tym kosztów, odporności łańcucha dostaw, kwestii jakości i zrównoważonego rozwoju, możliwości technologicznych czy krajowego ustawodawstwa. Co więcej, reshoring skutkuje utworzeniem nowych miejsc pracy, jednak skala tego zjawiska zależy od branży i regionu, w którym zlokalizowana jest przedsiębiorstwo. Podkreślono również, że wzorce reshoringu różnią się w zależności od regionu (kraju), przy czym w niektórych regionach aktywność w zakresie reshoringu jest większa niż w innych.

Słowa kluczowe: inwestycje, reshoring, offshoring, internacjonalizacja

JEL: F23, F41, F62

Introduction

„Offshoring”, „friendshoring”, „nearshoring” and „reshoring”, are examples of business strategies of companies in the contemporary world economy. Offshoring is the practice of relocating some of a company's or organization's operations, procedures, or services to another country. Offshoring is frequently done to take advantage of specific benefits that a foreign country provides, such as lower labor costs, favorable tax regulations, access to specialist talents, or a more business-friendly regulatory environment (Antras, 2020). Companies may shift their production facilities to nations with lower labor and production expenses, allowing them to make items at a reduced cost. Offshoring is a sensitive issue since it can result in job losses in the home country and raise worries about service quality and data security. However, it is also viewed as a chance for businesses to remain competitive, reduce operating expenses, and focus on their core competencies. It is important to distinguish between offshore and outsourcing. Outsourcing entails engaging a third-party company, frequently from the same nation, to do certain tasks or provide services. Offshoring explicitly refers to the relocation of certain duties or services to another country (Dachs et al., 2019).

Friendshoring is a term that is not generally used in business, and it could be a neologism or a regional term in a given industry or region. It's probable that it refers to a business arrangement between friends or individuals with close relationships, but without a commonly accepted definition, it's difficult to provide a specific explanation without more context. Friendshoring is investigated using a similar approach, in which the political proximity between an importer and its suppliers is estimated based on similarity in foreign policy. Foreign policy similarity is calculated as the average similarity in each country pair's voting record, adjusted for the fact that non-alliance relationships are more common than alliance

ties. An increase in the average political proximity of trade suggests a movement in the importer's import structure toward countries with comparable global perspectives, which is viewed as a tendency toward friend-shoring (Ambroziak et al., 2023).

Nearshoring is a commercial technique in which a firm or organization outsources some of its operations or services to another country or place that is close by, often in the same region or time zone. In contrast, offshore occurs when a corporation transmits certain tasks to a remote, generally lower-cost site in another country or continent. The primary goal of nearshoring is to take advantage of lower labor costs and operating expenses in adjacent nations while remaining geographically and culturally close. Companies want to remove language barriers, lessen time zone variations, and improve collaboration and communication with the outsourced staff by doing so. Because of the benefits it provides, nearshoring has become an appealing alternative for businesses, particularly in the technology and service sectors. While nearshore labor expenses may be lower than in the company's home country, they are frequently higher than in offshore sites. However, these reductions are offset by the advantages of proximity. Nearshoring allows teams to work in time zones that are comparable, facilitating real-time communication and collaboration. Countries in the same region typically have comparable cultural norms and commercial traditions, which can aid in team collaboration and understanding. If on-site inspections are required, traveling to a close location is often more convenient and less expensive than traveling to a distant offshore location. Some businesses choose nearshoring because it allows them to access a competent workforce in areas of knowledge that may be limited or unavailable in their native nation (Chu, et al., 2013).

Reshoring is the practice of returning previously offshored (i.e., based in foreign countries) company activities, manufacturing, or services to the home country. Changing economic conditions, growing labor prices overseas, supply chain interruptions, or a desire to promote the domestic economy are all variables that influence this decision (Chu, et al., 2013). Reshoring is the activity of relocating business operations, manufacturing, or services formerly outsourced to foreign countries to the company's home country. It is essentially the inverse of offshoring, in which corporations relocate their operations overseas to take advantage of cost reductions or other advantages. It is crucial to highlight that, while reshoring might provide numerous benefits, it may not be appropriate for all firms or industries.

According to an analysis by the Capgemini Research Institute (Capgemini Research Institute, 2023), 89% of surveyed managers considered supply chain disruptions to be the

greatest short-term risk for their company. To mitigate this risk, companies are modifying and modernizing their entire supply chains, including sourcing, manufacturing, packaging, storage, transportation, technology investments, and more.

Therefore, the aim of the research undertaken is to determine the scale and scope of reshoring activities in various industries and regions, with particular emphasis on the Polish economy, as well as to identify the main factors behind reshoring decisions. There were also formulated hypotheses that specifically address the dynamics and implications of reshoring:

- Reshoring decisions in are influenced by a combination of factors, including cost, supply chain resilience, quality, and sustainability considerations.
- Reshoring results in significant job creation across various industries and regions.
- Reshoring patterns vary by region, with some regions experiencing more significant reshoring activity than others.

To achieve the goals of research, a combination of research methods was used, including data analysis and literature reviews. The statistical data used came from the databases of the Organization for Economic Co-operation and Development, The European Reshoring Monitor developed by the European Commission and from reports prepared by the Polish Economic Institute and Capgemini Research Institute. In the article was used also a research method based on the analysis of literature on international economics as well as strategic management (scientific articles, reports published by international research institutions, monographs).

The first part of the research explains the basic concepts of offshoring, "friendshoring", "nearshoring" and "reshoring" and the relationships between these processes, with particular emphasis on the factors determining the reshoring activities undertaken by enterprises. The next part includes a review of the literature on the subject, taking into account the most important results of empirical research on the motives and effects of reshoring activities undertaken by enterprises from the USA, Great Britain and Northern Europe. In the next stage, a thorough analysis was made of the motives behind reshoring processes to and from Poland, while indicating the potential effects of these processes on the Polish economy.

1. Motivations for reshoring decisions

The choice to reshore should be carefully considered, taking into account issues such as cost consequences, market dynamics, skilled labor availability, and overall business strategy. Some businesses may discover that combining components of reshoring with offshore production is the most effective method to attain their goals (Ancarani, et al., 2018).

Table 1. The essence of offshoring, friendshoring, nearshoring and reshoring

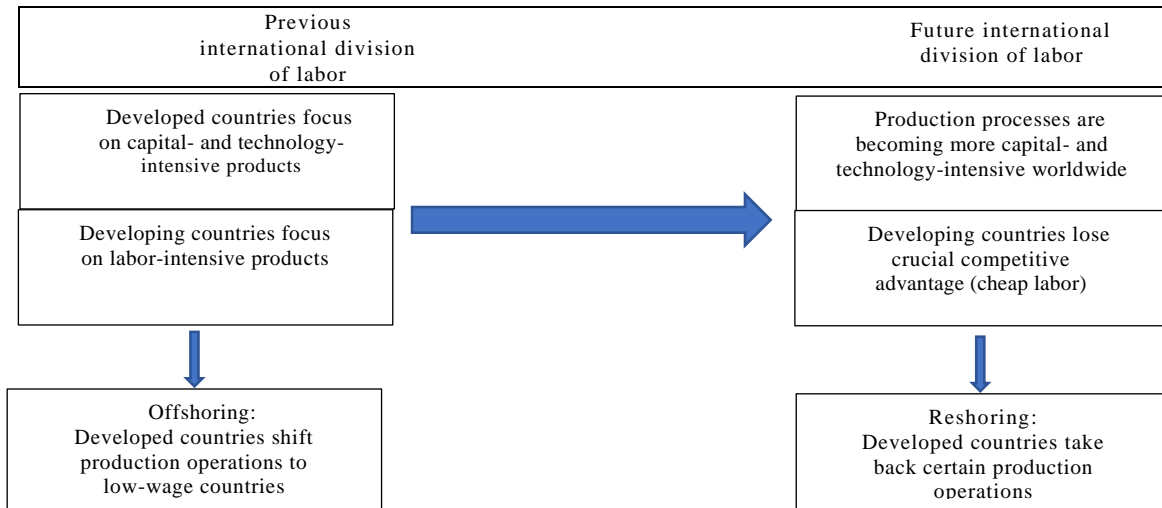
Offshoring	Friendshoring	Nearshoring	Reshoring
Relocation of activities to far-off location, often developing countries	Relocation of activities to politically and economically aligned countries	Relocation of activities to nearby location, often neighboring countries	Relocation of activities to lower-cost location inside national borders

Source: own study.

Currently, companies in many industries are transferring manufacturing to home country as a result of recent reduced industrial activity in China and supply chain problems caused by the war in Ukraine. Within these industries, there is a desire to respond rapidly to growing production demands by guaranteeing that their suppliers can produce high-quality items in large quantities. These shifts are also occurring as many countries, notably the United States, establish incentives for reshoring production. Research conducted in 2021 shows that 83% of producers in the USA were willing to reshore their operations, while in March 2020 it was less than 54% of enterprises (Thomas Industrial Survey, 2021).

It's important to note that the future international division of labor will be shaped by a complex interplay of economic, technological, geopolitical, and societal factors. Predicting precise outcomes is challenging, but these trends provide a broad framework for understanding potential developments.

Figure 1. From offshoring to reshoring



Source: (Petersen, 2019).

Changes in economic conditions, adjustments in labor costs, advancements in technology and automation, changes in government legislation, supply chain interruptions, and a desire to lessen reliance on foreign suppliers all promote reshoring. Some of the reasons why businesses may decide to reshore are presented in the table 2.

Table 2. Reasons for reshoring

Reasons	Explanations
Budgetary considerations	Rising labor costs in offshore locales, along with potential cost reductions from automation in the home country, can make reshoring economically appealing
Quality assurance	Some businesses find that having production closer to their headquarters allows them to maintain better control over the quality of their products or services
Resilience of the supply chain	When production is overseas, natural disasters, geopolitical tensions, or other unanticipated events can interrupt supply networks. By reducing supply chains, reshoring can help to mitigate such risks.
Protection of intellectual property	Keeping sensitive technology and intellectual property within the nation of origin might reduce the risk of theft or unauthorized usage.
Concerns about national security.	Certain industries may be considered essential to national security, and reshoring may be viewed as a means to provide improved security

Source: (Dachs et al., 2019).

In the long run, reshoring can result in significant cost reductions. While outsourcing to a foreign country initially reduces labor costs, rising wages in typical offshore manufacturing destinations, as well as growing shipping and logistics costs, have eroded this advantage. Companies can cut shipping expenses associated with long-distance shipping, import and export, and inventory holding by reshoring. Furthermore, closeness to suppliers and consumers can reduce transportation costs and give chances for just-in-time manufacturing, lowering inventory carrying costs even further (Petersen, 2019).

Switching to domestic manufacture allows for better quality control throughout the manufacturing process. Direct supervision and enhanced proximity enable real-time tracking, quicker discovery of errors or concerns, and swift corrective action. Manufacturers can develop strict quality controls, do regular inspections, and communicate more effectively with the production crew. This emphasis on quality at the production plant can lead to enhanced customer satisfaction, improved brand reputation, and lower expenses for product recalls or returns. Reshoring reduces lead times in procurement, manufacturing, and the sales cycle, boosting market response. By removing the need for long offshore transit, businesses can minimize order cycle times and improve speed-to-market. Shorter lead times offer for greater flexibility in production planning, allowing businesses to respond swiftly to changes in client preferences, market trends, or unforeseeable events. This adaptability gives the company a competitive advantage by allowing for faster product releases, decreasing stockouts, and satisfying consumer demand and expectations for timely delivery (Barbieri, 2020).

While reshoring has numerous advantages, it is critical to assess the potential downsides and problems involved with a large strategy shift. One of the most significant obstacles of reshoring is the possibility of higher labor rates than in offshore locations. Labor rates are also affected by the number of skilled workers or the amount of skilled labor. Offshoring

frequently sought reduced labor prices by leveraging cheaper labor markets. Companies that bring production back home may face higher wages and benefits costs, which can have an impact on profitability, particularly in labor-intensive industries. State and local government tax breaks, on the other hand, can balance greater costs when firms create jobs and use domestic suppliers. Automation technology also contributes to cost savings when reshoring manufacturing activities.

Infrastructure constraints in specific places may hamper specific sectors. Offshore locales may have established specialized infrastructure, manufacturing facilities, and manufacturing ecosystems that are not easily accessible or cost-effective in the home market. Industries that rely on modern technology, specialized equipment, or technical skills, for example, may have difficulties while seeking to reshore. To ensure the viability of reshoring activities, companies must analyze the availability and cost-effectiveness of essential infrastructure, such as transportation networks, energy supply, and supporting services. Reshoring might cause initial supply chain problems. Transitioning production from offshore locales to the US may present complicated logistical problems, such as the requirement for new supplier relationships, the re-establishment of local supply chains, and inventory management adjustments. Furthermore, the initial stages of reshoring can cause temporary production disruptions, thereby affecting client orders and delivery timelines. To minimize disruptions and ensure continuity during the reshoring process, careful planning, risk assessment, and good communication with suppliers and customers are essential.

Reshoring may also present new regulatory and compliance issues for organizations to deal with. Offshoring production frequently takes advantage of particular tax structures, trade agreements, and regulatory frameworks that do not exist while operating domestically. The regulatory environment, compliance requirements, environmental restrictions, labor laws, and safety standards must all be evaluated by businesses. Complying with these requirements may incur additional expenses and administrative burdens, which should be carefully examined when weighing the advantages of reshoring (Moore, et al., 2018).

Choosing to reshore entails carefully weighing many aspects to assess the return on investment and other advantages of relocating manufacturing operations. Beyond the cost of labor, organizations should consider doing a full overall cost study, analyzing market proximity, and addressing intellectual property protection and local legislation.

Organizations should do a full overall cost analysis in addition to labor and material expenses. While labor expenses are crucial, companies must also consider transportation costs, inventory management, taxes, regulatory compliance, and currency fluctuations.

Companies can acquire a more accurate picture of the financial implications of reshoring and identify possible long-term cost reductions by examining the overall cost of manufacturing (Chen and Hu, 2017).

Organizations may also face new regulatory and compliance challenges as a result of reshoring. Offshoring production usually takes advantage of certain tax systems, trade agreements, and regulatory frameworks that do not exist when doing business in the United States. Businesses must analyze the regulatory environment, compliance requirements, environmental constraints, labor regulations, and safety standards. Complying with these standards may result in extra costs and administrative responsibilities, which should be carefully considered when assessing the benefits of reshoring.

The ability to be closer to market customers is a significant benefit of reshoring. Transportation cost savings and shorter lead times boost supply chain efficiency and responsiveness. Proximity enables for speedier product delivery, lower inventory carrying costs, and greater adaptability to market needs and variations. Organizations can gain a deeper understanding of their customers' needs, preferences, and evolving trends, increasing customer satisfaction and market competitiveness (Pennacchio, 2023).

Reshoring frequently provides greater intellectual property protection than offshore locations. Many countries have strong legal frameworks and enforceable intellectual property rights, making it easier for companies to protect their valuable technologies, designs, and trade secrets. Intellectual property protection is critical for retaining a competitive advantage, encouraging innovation, and avoiding unlawful copying or counterfeiting (Baraldi, et.al., 2018).

When reshoring, businesses must consider local rules and compliance needs. Legal frameworks, tax policies, labor laws, environmental regulations, and safety requirements differ by country. Businesses must examine the impact of these restrictions on their operations and comprehend the expenses and administrative responsibilities that come with them. Compliance with area legislation is critical for avoiding legal issues, maintaining a good reputation, and ensuring a smooth transition during the reshoring process.

Reshoring decisions should take supply chain resilience and risk management into account. While reshoring might help to reduce the risks associated with long and complicated global supply chains, it can also present new risks and issues. To address disruptions, supplier dependencies, geopolitical variables, and unforeseen events, organizations must assess potential risks, devise mitigation techniques, and develop contingency plans. A well-planned risk management strategy provides operational continuity and reduces the effect of potential

disruptions (Bals et al., 2016).

2. Literature review on the reasons and effects of reshoring processes

So far, many empirical analyzes have been published regarding the potential determinants, benefits and costs related to business reshoring, and in most cases, they refer to American, British and northern European enterprises. For example, Pennacchio (2023) provides empirical evidence that reshoring may boost company productivity. Productivity benefits were not evident in all reshoring cases, but rather in manufacturing SMEs, particularly those who repatriated output to advanced economies from some Asian countries. These findings have significant implications for policymakers seeking to boost SMEs and regional competitiveness. Several industrialized countries, notably the United States and the United Kingdom, believe that reshoring will increase regional employment in the home country while also improving regional competitiveness and resilience in more developed regions.

Buciuni, Canello and Gereffi (2022) studied how micro and small enterprises participate in the global economy using global value chains. The results of the empirical analysis show that the vast majority of micro and small enterprises are unable to establish direct connections with global value chains. However, after the 2008 economic crisis, two categories of subcontractors and branded manufacturers were able to modernize and participate in global value chains. For both groups of companies, the strategies implemented in their domestic value chains contributed to their future participation in global value chains. Therefore, smaller enterprises are not able to participate in the process of outshoring and, consequently, inshoring of business activities to the same extent as large enterprises.

The results of the study conducted by Cosimato and Vona (2021) showed that innovative digital technologies should be considered one of the main factors influencing reshoring decisions. Thus, companies are often forced to move production back to their home countries because there they can benefit from the availability of knowledge assets, innovative solutions, and soft/hard digital/technology skills. This means that by introducing reshoring of decisions and related strategies, manufacturing companies can easily change their production process towards partial or complete automation, or even digitalization, based on the latest advanced technologies.

Dachs et al. (2019) discovered that throughout the studied period, 105 out of 2450 enterprises (4.3%) reported backshoring (reshoring) activities. 11.7% of these enterprises backshored from their suppliers, while 2.6% backshored from their own subsidiaries.

Backshoring was more prevalent in the high and medium-high technology sectors (6.7% and 6.2% of surveyed high/medium-high technology enterprises, respectively) than in the medium-low and low technology sectors (3.2% and 1.7%, respectively). The authors consider the potential relationship between backshoring and innovation in this environment. Furthermore, the study discovered that enterprises producing single units are less likely to backshore than firms generating batch or large quantities, because single-unit production necessitates more connection with customers and is less wage-sensitive. The authors also claim that the higher share of high-tech reshoring can be explained by higher offshoring rates in high-tech industries compared to low-tech industries (such as paper, wood, food, and beverage). Larger enterprises are likewise more likely to reshore than smaller firms for the same reason.

Companies welcomed offshore, according to Chen and Hu (2017), to take advantage of low labor costs, a business-friendly regulatory framework, and availability to raw commodities. Wages in nations such as China and India, on the other hand, have increased by 10-20% per year in recent years. Increased labor costs in China, as well as the Yuan's rise against the dollar, were most likely drivers in reshoring choices (Pearce, 2014). According to Ancarani et al. (2015), enterprises who initially establish new factories in Asia are far more likely to reshore than those that establish plants in other locations, such as Eastern Europe or Mexico. Many corporations' cost savings from offshoring have been decreased as costs grow in developing countries.

Fratocchi and Di Stefano (2019) undertook a study of the literature on the motivations for garment manufacturers reshoring manufacturing components of their value chain. According to these analysts, one of the key reasons for reshoring is the shrinking labor cost gap between the offshore host country and the home country. Among the other causes revealed was the poor quality of items manufactured in other countries.

The Hackett Group (2012) conducted an interesting study, particularly in terms of the relative relevance of offshore and reshoring. One of the primary conclusions of this analysis, based on survey data of large corporations' global sourcing policies, was that the net amount of manufacturing capacity returning to developed countries scarcely offsets the quantity that continues to be moved overseas. Looking at global sourcing strategies, the results showed that offshore from high-cost to low-cost nations will continue to be more important than moving from low-cost to high-cost countries, despite the fact that reshoring is projected to accelerate.

Chu et al. (2013) describe an inverted U-shape pattern of offshoring and reshoring as economic development progresses. They contend that a developing country with a low capital

stock and low wages attracts labor-intensive business from elsewhere. As the country grows, capital accumulation is accompanied by wage increases, making offshore less appealing. However, this is momentarily offset by a decrease in the rental cost of capital. At some point, wage growth surpasses the fall in capital rental rates, resulting in reshoring.

The study of the links between reshoring and technology is still limited to northern European countries. Emerging research indicates that backshoring firms are among the most active in adopting new technologies, lending credence to the notion that this phenomena will be bolstered in the near future by process changes linked to the adoption of new technologies. The evidence emerging tends to confirm the evolutionary hypotheses of the reshoring phenomenon described in the previously mentioned OECD report (De Backer et al, 2016), particularly the fact that after years of large-scale offshoring and outsourcing, companies increasingly seek more diverse sourcing strategies and consider more options in structuring their production processes. Furthermore, according to De Backer et al. (2016), it is reasonable to expect that changes in cost structures, demand factors, and new technologies will promote regional rebalancing of some global value chains, as well as a growing concentration of manufacturing activities in regional or local hubs closer to end markets.

3. Reshoring in Poland

More and more European industrial enterprises are moving previously off-shored output closer to home. According to Buck Consultants International research, Central and Eastern Europe are rising as the new favorite for production locations (Buck Consultants International, 2022). One of the most significant trends in the last three decades has been the outsourcing of activities to low-wage Asian countries. Companies cut costs while increasing profits by outsourcing portions of production to countries such as China and Bangladesh, or aspects of customer service and software engineering to nations such as India. Companies who have used outsourcing to gain a competitive advantage over competitors that have kept business in more expensive labor markets.

However, the policy is not without dispute. Offshoring to take advantage of low wages frequently resulted in firms taking advantage of labor in countries that restricted organized labor and rarely applied human rights legislation. While reshoring has been on the agenda since the crisis's inception, Buck Consultants International discovered in a new study that the strategy is gaining traction. According to the Global Reshoring & Footprint Strategy research, more than 60% of supply chain executives intend to return some Asian production to Europe and the United States.

Companies from Europe are primarily interested in Central and Eastern Europe as potential production locations. These nearshore destinations have higher labor costs right now, but in the aftermath of the epidemic, maneuverability and flexibility have become more crucial than low labor prices. This is shown by the countries now being considered for reshoring. People may recall "the Czech Republic, Poland, and Hungary."

According to the Fraunhofer Institute's report "Top 100 in transport and logistics services," which ranks countries based on the value of the logistics industry in individual European markets, Poland ranks seventh in Europe, trailing Germany, France, the United Kingdom, Italy, Spain, and the Netherlands (The Fraunhofer Institute For Integrated Circuits, 2021). Labor expenses are another reason to use the services of Polish transport and logistics firms. Even though they are increasing in Poland, they remain lower than in Western countries.

According to Reuters data from 2022, managers indicate that Germany and Poland are the top European countries for shifting production. Poland is also referenced prominently in numerous other polls, research, and reports. According to experts, Poland still has cheaper labor expenses than Western countries. However, lower labor costs are not the only reason to locate production in Poland. Equally significant is the high availability of qualified personnel, including top-tier engineers and programmers, as well as the highly established transportation and logistics business. The position is particularly advantageous because Poland appears to be a link between the East and the West, which translates into transportation appeal. In this scenario, ever-improving infrastructure – roads, energy, and telecommunications – is critical. This is not to say that experts do not perceive threats or areas in which Poland is not a leader.

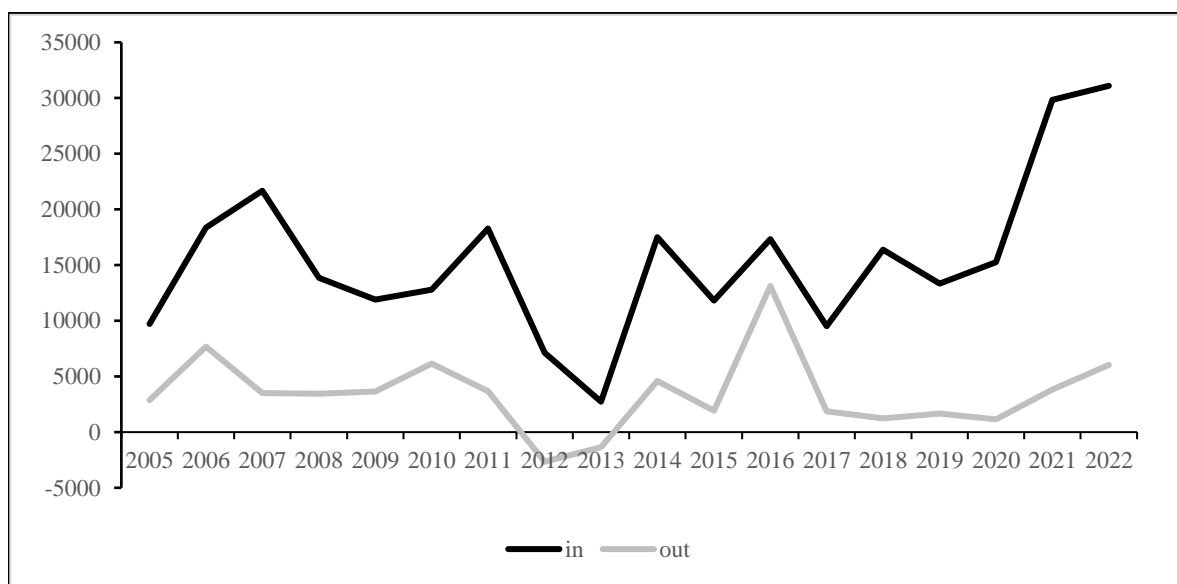
One of the less obvious, but major, issues is the degree of robotization, which is more than half that of the Czech Republic. A legal and political scenario that is unknown from a commercial standpoint is also one of the issues. It must be highlighted that shifting production away from Asian countries will not be straightforward in every industry. For example, in the garment or footwear industries, the labor prices in China or Bangladesh differ greatly from those in Poland. Furthermore, Asian vendors have significantly greater production capacity and access to a much broader selection of fabrics. Pharmacy is another issue. The issue here is, for example, stringent environmental rules and the associated expense of CO2 emission rights. This leads to absurdities, because in order for chemical companies to be environmentally responsible in Europe, they must outsource production to polluters in Asia, where requirements are far less stringent. Such issues should be thoroughly examined at the EU legislative level. Production businesses in the battery and accumulator sectors are

expected to have the greatest potential of relocating in Poland.

Poland is Europe's distribution hub. Companies operating in Europe understand that supplier diversification, adequate inventory generation, and sophisticated supply chain management must be high objectives. Poland has a lot to offer both domestic and international enterprises in terms of access to modern warehouse space and strong logistics process organization. Because of its advanced logistics, our country has the potential to become a distribution hub for most of Europe. There was already 27 million square meters of warehouse space in Poland at the end of December 2022, but the threshold of 30 million square meters will most likely be exceeded in 2023. Last year alone, 4.4 million sqm of new space was provided to the market, which is 42% more than in 2021. Poland was responsible for 20% of new warehouse space in Europe last year. Other figures demonstrate the extent of development of Poland's transport and logistics industry. Poland, for example, ranks 28th in the world in terms of logistics efficiency, according to the World Bank's Logistics Performance Index.

According to data from the Organization for Economic Cooperation and Development (OECD), Poland took 4th place in Europe and 14th in the world in terms of the value of incoming foreign direct investments in 2022. The Polish share in the inflow of global FDI increased year-on-year by 0.3% and amounted to 2.3% in the year in question. The inflow of foreign direct investments to Poland was several times higher than the outflow of these investments from Poland (figure 2). The phenomenon of reshoring was largely responsible for such results.

Figure 2. Inward (in) and outward (out) FDI in Poland in the period 2005-2022 in mln USD



Source: own study based on (OECD, 2023).

Of course enterprises relocated back to Poland, but also a large proportion of European enterprises are relocating from Poland to their home countries. Unfortunately, the scale of this phenomenon is much wider than in the case of the return of Polish enterprises to the country. In the long run, this situation may adversely affect the growth rate of domestic production. Over the last 10 years reshored companies moving own business from Poland to home country pointed different reasons of business reshoring from Poland. There were mainly the large manufacturing companies from the metal and food industries. The most often reasons for reshoring from Poland were realized companies processes of global reorganization as well as automation process of production. Returning or relocating business activity to the home country usually means additional benefits resulting from the creation of new jobs. These types of effects were visible in the case of at least some of the surveyed enterprises, and the number of new jobs in reshored countries varied depending on the size of the enterprise and the scope of its activities (table 3).

Table 3. Reshoring from Poland in the period 2014-2023

Company name	Company country	Number of employees	Sector	Reshored to	Job gains for reshored country	Reasons for reshoring	Offshored to
Premier Is - Mejerigaarden A/S	Denmark	120	Manufacture of food products	Denmark	-	Poor quality of offshored production Quality control	Poland
Hagens Fjedre A/S	Denmark	110	Manufacture of fabricated metal products, except machinery and equipment	Denmark	-	Automation of production process	Poland
Northern Flags Ltd	United Kingdom	700	Printing and reproduction of recorded media	United Kingdom	-	Automation of production process Delivery time	Poland
Pöyry	Finland	4880	Architectural and engineering activities; technical testing and analysis	Finland	30	Know-how in the home country Need for greater organizational flexibility	Poland
Rosenberg WorleyParsons	Norway	1451	Support activities for petroleum and natural gas extraction	Norway	100	Delivery time Poor quality of offshored production	Poland
I. P. Huse	Norway	130	Manufacture of machinery and equipment n.e.c.	Norway	-	Automation of production process Delivery time Poor quality of offshored production Untapped production capacity	Poland
Hunton Fiber	Norway	100	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Norway	60	Automation of production process Clean technology Know-how in the home country	Poland
Cadbury	United Kingdom	71657	Manufacture of food products	United Kingdom	-	Automation of production process Increased home country manufacturing productivity	Poland
EWII	Denmark	30	Manufacture of motor vehicles, trailers and semi-trailers	Denmark	40	Firm's global reorganization Implementation of strategies based on product/process innovation Improvement of production efficiency	Poland
Fazer	Finland	14709	Manufacture of food products	Finland	65	"Made in" effect	Poland

Welltec	Denmark	1000	Industrial and Commercial Machinery and Computer Equipment	Denmark	-	Automation of production process	Poland
Polarica Wild Food	Sweden	300	Manufacture of food products	Sweden	3	Corporate social responsibility image Logistics costs Proximity to suppliers	Poland
Unilever	Netherlands	171000	Manufacture of food products	Netherlands	-	Firm's global reorganization	Poland
Clearview Traffic Group	United Kingdom	37	Manufacture of other transport equipment	United Kingdom	49	Government support to relocation Streamlining of supply chain	Poland
RBI Interior	Norway	40	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Norway	10	Automation of production process Firm's global reorganization Increased home country manufacturing productivity	Poland

Source: own calculations based on (The European Reshoring Monitor, 2023).

Also over the last 10 years many Polish companies decided to reshore own business to home country, usually from China, Australia as well as from neighbour countries like Slovakia or Germany. The first of all there were relatively big manufacturing companies mainly from the electronics and transport industries. The most often pointed reasons for reshoring were increase total costs of outsourcing in host countries and proximity to customers. It should be emphasized that the number of new jobs created as a result of relocating business activities to Poland was much greater than the number of jobs lost as a result of relocating business activities from Poland to home countries (table 4).

Table 4. Reshoring to Poland in the period 2014-2023

Company name	Company country	Number of employees	Sector	Reshored to	Job gains for reshored country	Reasons for reshoring	Offshored to
Lechpol	Poland	276	Manufacture of computer, electronic and optical products	Poland	-	Competitive pressure	China
Baby Design Group	Poland	50	Manufacture of other transport equipment	Poland	25	Change in total costs of sourcing	China
BSH Hausgeräte GmbH	Germany	61856	Manufacture of electrical equipment	Poland	-	Change in total costs of sourcing Proximity to customers	Australia
Jysk	Denmark	18500	Manufacture of furniture	Poland	-	Automation of production process Delivery time Increased production costs in the host country Proximity to customers	China
Jabil	United States	177000	Manufacture of computer, electronic and optical products	Poland	600	Change in total costs of sourcing Proximity to customers	China
Track-Tec	Poland	500	Manufacture of other transport equipment	Poland	-	Customer demand increase Proximity to customers	Serbia
Can-Pack	Poland	3808	Manufacture of fabricated metal products, except machinery and equipment	Poland	-	Implementation of strategies based on product/process innovation Untapped production capacity	Slovakia
Fideltronik	Poland	1500	Manufacture of computer, electronic and optical products	Poland	-	Retailer/customer pressure	Sweden
AB Electrolux	Sweden	59481	Manufacture of electrical equipment	Poland	-	Change in total costs of sourcing Firm's global reorganization Labour costs	Australia
Boryszew	Poland	6623	Manufacture of motor vehicles, trailers and semi-trailers	Poland	250	Government support to relocation Know-how in the home country Labour costs	Germany

Source: own calculations based on (The European Reshoring Monitor, 2023).

Moving production to Poland or establishing a distribution center in our country to serve a significant portion of the region may prove to be quite advantageous for foreign corporations. There are still plots available in Poland with attractive locations that can be used for manufacturing or storage ventures. The strength of Polish business is founded heavily on first-rate logistics. And, if so, the company's location in Poland ensures swift and timely delivery through the use of effective warehouse and supply chain structure.

Low labor costs, along with easy availability to competent workers, make it easier to maintain high production standards. Many organizations, including manufacturing and logistics, can show international quality certificates. At the same time, one should not overlook Poland's internal market, which is relatively absorbent and open to new advancements. Polish clients are ready to shop online, and many businesses may capitalize on this trend. Another point to consider is that, while frequent changes in Polish law do not inspire trust, tax programs and tax breaks for investors have been in place in Poland for many years.

4. Conclusions

The author's research has shown that reshoring decisions are influenced not only by the costs of enterprise operations, but by a combination of various factors, including costs, supply chain resilience, quality and sustainability issues, technology capabilities, or government legislation. Moreover, reshoring results in the creation of new jobs, but the scale of this phenomenon depends on the industry and the region where the business is located. It was also reiterated that reshoring patterns vary between regions (countries), with some regions seeing more reshoring activity than others.

The research so far has focused primarily on the impact of reshoring on the economy, without a detailed analysis of the development determinants of reshoring. The research results expand and deepen the considerations in the field of the theory of business location on an international scale and the existing results of empirical research on the motives and potential effects of internationalization and re-internationalization of business activities. Hence, the research results can be a starting point for further, more in-depth research on contemporary development trends in the field of transferring business activities on an international scale among European enterprises.

While reshoring is becoming more popular, it may not be appropriate for all industries or products. Furthermore, while reshoring may not completely replace offshore production, it may imply a strategic rebalancing of global supply chains. It should be noted in this context

that Poland is a member of the European Union, which makes doing business from Poland on other European Union markets easier. It is also worth noting that Poland has a Western corporate culture, which surely promotes international communication. When we combine this with a highly developed logistics services sector and a favorable geographical location, it becomes clear that our country has the potential to be a major player in the global league of the greatest countries to invest. To begin with, diversification will undoubtedly push some enterprises to offshore (in the case of multinational corporations) and others to reshoring (for example, Polish companies producing in China). First and foremost, it is worth considering that Poland is ideal for nearshoring. Even if a given company cannot become self-sufficient in Asian suppliers in a short period of time, it should attempt to diversify its sources of supply while developing a long-term investment strategy. It does not have to be complete factory relocation right away you can begin by increasing the number of suppliers, including those in Poland.

At the same time, one should be aware of the existing limitations in the results of this research, because they concerned only selected reshoring processes in Poland and did not take into account enterprises with majority foreign capital. Hence, the research results should be interpreted carefully and cannot be generalized to other companies. Therefore, further research directions should include a larger research sample, both domestic and foreign enterprises implementing reshoring processes. At the same time, the analysis period should be extended as much as possible to indicate long-term development trends among enterprises in the field of internationalization or re-internationalization of business activities.

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