International Business and Global Economy 2016, no. 35/1, pp. 455–467
Biznes międzynarodowy w gospodarce globalnej 2016, nr 35/1, s. 455–467

Edited by the Institute of International Business, University of Gdańsk
ISSN 2300-6102
e-ISSN 2353-9496 DOI 10.4467/23539496IB.16.033.5614

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Reindustrialisation of the European Union member states in the context of reshoring

In the recent years, the academic literature has repeatedly expressed its doubts with regard to the advantages of the relocation of production to low-cost Asian countries, drawing attention to the significant differences between the initially estimated and the actually achieved savings. As a result, some MNCs have undertaken activities which resulted in the decrease of the engagement in international operations (de-internationalisation) or in the transfer of business processes back to the home countries (reshoring). The current debate regarding the necessity of reindustrialisation of the EU member states, which has been taking place among scientists, business practitioners and politicians, is largely based on the expectations that the return of the production companies will contribute to the restoration of the competitiveness of the EU economies. The goal of the article is to evaluate the possibility of reindustrialisation of the EU in the context of its long-term industrial strategy and the reshoring trend, perceived as one of the main chances to strengthen the European industrial potential. The research was based on the conclusions drawn from the in-depth and critical literature review.

Keywords: backshoring, reshoring, European Union, reindustrialisation, industrial policy

JEL classification: F21, F23, L21, L23, L50

Reindustrializacja krajów Unii Europejskiej w kontekście reshoringu

W ostatnich latach w literaturze wielokrotnie podawano w wątpliwość zalety relokacji procesów produkcyjnych w kierunku niskokosztowych krajów azjatyckich, zwracając uwagę na znaczące różnice pomiędzy początkowo szacowanymi a faktycznie osiągniętymi przez przedsiębiorstwa oszczędnościami. W rezultacie część KTN podjęła działania, których efektem było zmniejszenie zaangażowania w operacje międzynarodowe (deinternacjonalizacja) lub przeniesienie procesów biznesowych z powrotem do krajów macierzystych (reshoring). Obecna debata na temat potrzeby reindustrializacji krajów Unii Europejskiej, tocząca się wśród naukowców, praktyków biznesu i polityków, bazuje w dużej mierze na oczekiwaniach, że powrót firm produkcyjnych przyczyni się do przywrócenia konkurencyjności gospodarek UE. Celem artykułu jest ocena możliwości reindustrializacji Unii Europejskiej w kontekście jej długofalowej strategii przemysłowej oraz trendu reshoringu, postrzeganego jako jedna z głównych szans na wzmocnienie europejskiego potencjału przemysłowego. Badanie oparto na wnioskach płynących z pogłębionych i krytycznych studiów literaturowych.

Słowa kluczowe: backshoring, reshoring, Unia Europejska, reindustrializacja, polityka przemysłowa

Klasyfikacja JEL: F21, F23, L21, L23, L50

Introduction

In the recent decades, the world economy has gone through a process of intense reorganization. This change was characterized by a distribution of business processes and, as a consequence, deep modifications in the global value chains. Parent enterprises located in developed countries were concentrating mainly on performing activities with high added value, while other operations were located in low-production-cost countries through captive offshoring or offshore outsourcing.

As the above-described trend led to a significant weakening of the industrial position of the European Union, in 2012 the European Commission adopted a strategy towards the reindustrialization of Europe with the perspective that in 2020 the share of the manufacturing sector in the EU economy should increase from 15% to 20% of GDP [EC COM, 2012]. According to the European Economic and Social Committee, to reach this goal it is necessary to implement efficient and broadly scoped actions conducive to the return of the production activity transferred outside of the EU [Iozia, Leirião, 2014]. One way of conducting reindustrialization is through reshoring, which is the subject of a heated debate in many European economies (e.g. Germany, Italy or the UK). This phenomenon is perceived as a potential source of new jobs, especially in the manufacturing sector, which until now was to the most significant degree subject to offshoring. As much as the topic is current, it is difficult to explain decisively to what extent can we pin hopes on the return of the companies from offshore locations. Despite the numerous research studies in this area, many issues still remain unclear.

The main goal of this article is to evaluate the adequacy of the activities conducted by the EU institutions as part of the long-term industrial policy in relation to the motives of reshoring indicated by the companies. Keeping the above goal in mind, the article has evaluated the current industrial position of the European Union and analysed the effects of deepening deindustrialization. Subsequently, the literature review regarding reshoring was conducted which allowed to define and classify the main motives of this phenomenon. Next, with regard to the characteristics of reshoring, an evaluation was performed regarding the EU institutions' policy directed towards reindustrialization.

Within the research, a broad literature review was conducted, including the academic articles, reports, statistical data and legal acts. For this purpose, selected academic databases (EBSCO, Emerald, Scopus), legal act bases (e.g. EUR-Lex) and statistical databases (such as Eurostat) were used.

1. De-internationalization of the European Union and main indications for the strengthening of its industrial potential

1.1. Industrial position of the European Union

The subsequent economic cycles, as a result of which the flexible production systems (1970–1980) and lean manufacturing systems (1990–2000) were introduced, led to the gradual de-internationalization [Westkämper, 2014, p. 11]. Although the EU still has the biggest share in the world trade (37.5% of export of manufactured goods and 43% of services exports[1]), its share in global exports has decreased in recent years. Analysing the share of the manufacturing sector in the GDP in the particular economies of the European Union (Table 1), in the case of most EU member states a clear downward trend is visible between 1995 and 2014. However, if we take into consideration Eastern European EU countries, it may be observed that the share of the production sector in GDP dropped only slightly and, in some cases (including Poland), even increased.

Table 1. Share of manufacturing industries in the GDP in selected economies, %

Country/Year	1995	2000	2005	2010	2014
Belgium	20.4	19.6	17.6	14.7	13.8
Czech Republic	23.7	25.9	25.5	23.4	26.6
Germany	22.8	23.0	22.4	22.2	22.6
Denmark	17.0	16.4	14.4	12.6	13.9
France	16.2	15.7	13.3	11.3	11.2
Hungary	21.5	22.4	22.0	21.7	23.5
Italy	20.9	19.5	17.2	15.8	15.4
Netherlands	17.2	15.3	14.1	11.8	12.1
Poland	21.2	18.1	18.4	17.5	18.4
United Kingdom	18.8	15.7	11.8	10.3	10.6

Source: Own elaboration based on: [Eurostat, 2016a].

The member states from CEE experienced growth in lower-tech industries, which may, to a certain degree, reflect the nearshoring of production from the EU-15 states, while certain member states (e.g. Greece, Italy, Spain or UK) reduced their manufacturing output regardless of technology-intensity; the EU as a whole, on the other hand, increased the high- and medium/high-tech manufacturing output [Eurostat, 2016a].

[1] Both also include intra-EU trade.

Figure 1 indicates that the GVA (gross value added) of agriculture, industry and construction decreased, while that of service sectors went up. As a result, market and non-market services accounted for 74% of the GVA in 2014. In the period between 2000 and 2014, the share of production dropped by as much as 3.5%.

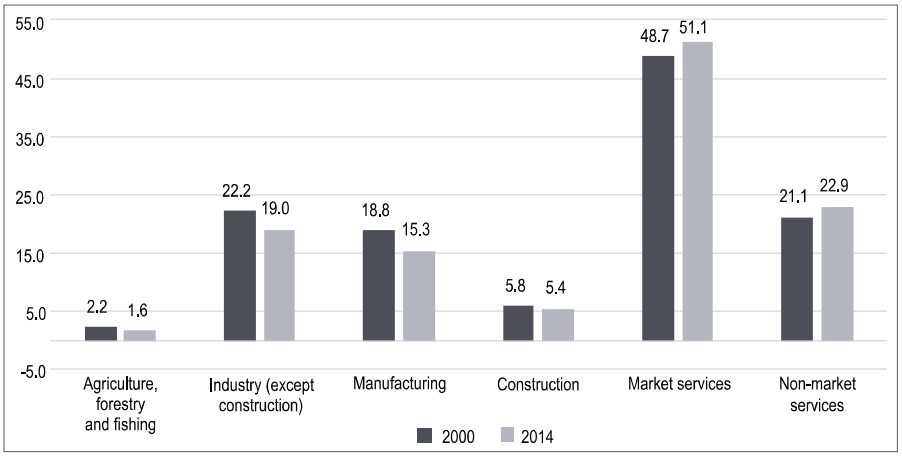


Figure 1. Shares of the major sector in EU-28 GVA (2000 and 2014; % of total GVA)
Source: Own elaboration based on: [Eurostat, 2016a].

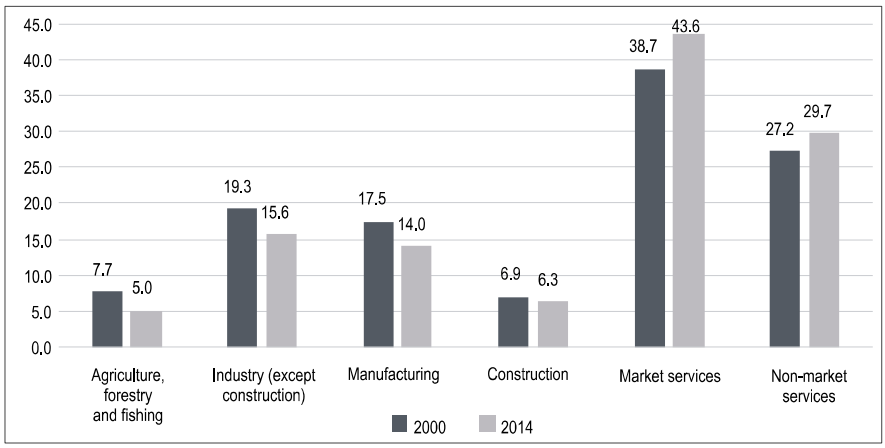


Figure 2. Employment share by sector in the EU-28 (2000 and 2014; % of total employment)
Source: Own elaboration based on: [Eurostat, 2016a].

A decidedly more relevant matter from the point of view of public opinion is the issue of jobs. In the period 2000–2014, the employment share in manufacturing dropped from 17.5% to 14.0%, while the share of services (market and non-market) increased to 73.3%. The decrease in employment in agriculture (-32.5%), manufacturing (-16.1%) and construction (-4.0%) is a result of an amalgamation of

many factors. In the case of all member states, a drop of employment was observed in low-tech manufacturing (excluding the economies where the output in those sectors grew).

Although the decrease of relevance of the EU industry may be partially explained by the increase of the relevance of the services sector, in the case of some countries, a drop in competitiveness may be observed, despite the fact that EU enterprises have the extraordinary advantage of the Single Market (corresponding to about 23% of the global GDP). To a large extent, this is due to high labour costs; however, the differences in this area between the EU countries are substantial. The average cost of an hour's work in Bulgaria in 2015 amounted to EUR 4.1, Denmark reported EUR 41.3, and Belgium EUR 39.1. Poland, with EUR 8.6, belongs to the group of rather 'cheap' countries [Eurostat, 2016a].

1.2. The scale of offshoring in the European Union and main indications for the realization of the reinternationalization strategy

The scale of offshoring is very difficult to evaluate due to the fact that it includes not only FDI, but also offshore outsourcing. Estimates regarding the share of EU enterprises using offshoring oscillate between 5% and 10%. Within manufacturing, the offshoring rate is highest in the leather and footwear industry (at over 85%) and lowest in the food and beverages industry (at just below 20%) [Pashev et al., 2015].

The drop in the share of industrial production in the EU is a cause for concern for at least several reasons. First of all, the services sector is dependent, to a large extent, on the production base (due to the supply of equipment and materials). If the production is realized in third countries, some services in the value chain may follow. Secondly, as services are less tradable than goods, they do not guarantee a potential increase in the EU exports (production constitutes around 15% in EU-28 GVA, but, at the same time, as much as 40% of the EU exports). Apart from that, an overwhelming majority of expenditures on R&D is directed towards manufacturing; therefore, the decrease of its importance may result in lowering the innovative potential and export, which is a pillar of long-term development [Pashev et al., 2015]. The above problems related to limiting the manufacturing potential explain the intensification of actions of European institutions aimed at restoring the industrial competitiveness of the EU.

2. The concept and scale of reshoring

Different terms are interchangeably used in the reshoring debate (e.g. reshoring, backshoring, nearshoring, onshoring). Ellram [2013] defined reshoring as

'moving manufacturing back to the country of its parent company'. Backshoring, in turn, is characterized as 're-concentration of parts of production from own foreign locations as well as from foreign suppliers to the domestic production site of the company' [Kinkel, Maloca, 2009]. Fratocchi et al. [2014] divide reshoring into back-reshoring, which signifies the return to the home country, or near-reshoring, understood as transferring the business processes to the country of the nearby economy. These differences in definitions result from the concentration on different aspects of this phenomenon. For the purpose of this article, the author assumes that reshoring signifies the strategic decision of the enterprise to transfer the earlier relocated modules of the value chain to the country of origin, independent of whether these processes will be realized in terms of own ownership structures or through domestic outsourcing. This phenomenon may occur next to nearshoring, regarding the transfer of the activity to the countries which are close culturally and geographically.

According to the European Economic and Social Committee, reshoring and nearshoring may constitute a pillar of reindustrialization of the EU [Iozia, Leirião, 2014]. Just as in the case of offshoring, it is difficult to evaluate the scale of the phenomenon of reshoring, both at the aggregate level and within the company itself. This results, first of all, from the fact that enterprises not always make this type of data publicly available. Nevertheless, some studies are available which within their scope include some of the European Union countries.

Dachs and Zanker [2014], drawing on European Manufacturing Surveys, pointed out that 4% of the researched companies (from over 3,000) reshored some of their activities between 2010 and mid-2012. Data from the German market collected by Kinkel [2012] for two periods: 2004–2006 and 2006–2009, indicate that about 3% of the companies decided to reshore some of the processes; at the same time, the relevance of offshoring was decreasing. Fratocchi et al. [2015] gathered a list of 476 decisions of enterprises regarding reshoring/nearshoring made by 404 entities from the US and Europe. The data indicate that the Asian countries (especially China) constituted the most popular offshore locations in the case of reshoring companies from both Western and Eastern Europe.

3. Classification of the motives for reshoring

Due to the fact that reshoring mainly concerns the location of the production process, the debate regarding this topic tackles principally the investment attractiveness of countries [Gray et al., 2013]. OECD [2011] indicated a whole range of factors which play an important role in the decisions of enterprises regarding where they should locate their business activity, including the size and dynamics

of growth of the market, costs, availability of the necessary resources, presence of suppliers and the level of infrastructure. The relevance of particular factors differs, however, depending on the analysed sector and activity within the value chain.

As mentioned above, there is still a lack of exact data regarding the scale and characteristics of the reshoring trend in Europe. A full identification of the complex dynamics of this process is necessary, including companies' internal motivations as well as location and industry-related factors [Fratocchi et al., 2014]. Significant part of the previous research regarding the relocation of business processes (including production) takes under consideration the 'push' factors, which induce the companies to undertake a re-evaluation of the current location of their activity, and 'pull' factors, which include, first of all, the institutional, natural and economic conditions affecting the attractiveness of the host country. Due to the fact that the above distinction basically concerns the relocation of business processes within offshoring (which *de facto* is the fundamental condition of the reverse process – reshoring), Table 2 presents the classification of reshoring motives divided into: factors related to the conditions in the current host country (push), factors related to the home country of the enterprise (pull) and international and technological factors. The first two groups concern such areas as: access to means of production, regional characteristics and infrastructure. International and technological factors, however, include those which do not result directly from the politics of a given country or (as in the case of the EU) economic groups, and, for instance, technological changes or nature of the functioning of the enterprises in international markets. The classification was based on the analysis of the results of available empirical research from 2009–2014, identified with the use of academic databases (EBSCO, Emerald, Scopus).

Among the motives which support production localization in the EU, the enterprises usually indicated higher innovativeness, productivity and quality of production in their home countries. Investment incentives used in some countries are equally important. On the other hand, among the faults of their current localizations, attention was paid to, *inter alia*, an increase in the cost of production and labour (not comparable to productivity increase), or low level of intellectual property protection. International and technological factors include, e.g., rate of reaction to consumer demands and high costs of supply chain coordination connected with production realization abroad. The above list basically correlates with the motivation for production relocation from China to the EU indicated by the European Economic and Social Committee [Iozia, Leirião, 2014].

Table 2. Motives for reshoring in the light of selected empirical studies

Factors related to the current host country (push)	Factors related to the home country (pull)	International and technological factors
– increase of the labour costs (10) – increase of the costs of production (including logistical ones) (9) – threat of loss of intellectual ownership (6) – unbeneficial legal-administrative conditions (3) – inappropriate infrastructure (1)	– quality improvement (12) – higher productivity (10) – innovativeness (8) – investment incentives (3)	– proximity of the market/consumers (9) – high costs of control and coordination (6) – relevance of the effect of country of origin (made-in effect) (5) – possibility of automation of production (3) – exchange rate risk (3) – cultural distance (2) – limiting the risk of the supply chain (2)

* The numbers in the brackets signify the frequency of occurrence of the factor in the research.

Source: Own elaboration based on: [Arlbjørn, Mikkelsen, 2014; Bailey, De Propris, 2014; Canham, Hamilton, 2013; Gray et al., 2013; Kinkel, 2012; 2014; Kinkel, Maloca, 2009; Leibl et al., 2011; Martínez-Mora, Merino, 2014; Pearce, 2014; Shih, 2014; Tate, 2014; Tate et al., 2014; Van den Bossche et al., 2014].

4. Analysis and assessment of current initiatives of the EU in the context of reindustrialization

The political debate on reshoring is visible especially in the United States, where this phenomenon raises high hopes [TBCG, 2013][2]. In Europe, this topic is being discussed to a lesser extent, which could result from the fact that fewer European than American companies are present in China. Since reshoring is closely related to the investment attractiveness of countries, political actions directed at its improvement are of particular importance in this context [OECD, 2011].

According to the European Economic and Social Committee, 'The EU's current industrial policy aims to improve the existing legislative framework and increase the competitiveness of businesses' [Iozia, Leirião, 2014]. In 2010, the European Commission adopted a flagship initiative termed 'An Integrated Industrial Policy for the Globalization Era' [EC COM, 2010a], which established new attitude to industrial policy, simultaneously pointing to the great importance of industry for the European economy. In November 2012, a completed and updated version of the above document was published [EC COM, 2012]. The current shape of the EU's industrial policy has been established in the 2014 Communication *For*

[2] However, there are also opinions that the great expectations about the return of industrial production created in the media were overvalued [AT Kearney, 2015].

a European Industrial Renaissance [EC COM, 2014]. This document defines directions of future activities aimed towards the reindustrialization of the European Union.

The high cost of workforce in the EU constitutes the most important push factor which forced companies to offshore. Even if the wage gap is decreasing, the European countries will probably not be cost-attractive in the coming years [TEIU, 2014, p. 11]. However, the European Union is perceived as a manufacturing area which guarantees high quality and productivity, which to some extent compensates for the high costs of employment. The high quality is being achieved thanks to well-educated workforce and spending on R&D. Activity directed towards productivity growth covers actions in many areas, although the EC admits that productivity of the European Union is gradually worsening in comparison to its competitors. Further simplification of rules applicable in the internal market by using the Single Market's potential to a greater extent may increase business effectiveness. Some actions in this area have already been taken. In the recent years, the EC has published a series of documents about cross-border inheritance tax issues, e.g. Communication *Tackling Cross-Border Inheritance Tax Obstacles within the EU*, *A Recommendation Regarding Relief for Double Taxation of Inheritances* or a Commission staff working paper *Non-Discriminatory Inheritance Tax Systems: Principles Drawn from EU Case-La*w. In 2014, the EC initiated two further public consultations asking for information: 1) on tax problems faced by EU citizens when active across borders within the EU 2) on cross-border inheritance tax problems within the EU [EC COM, 2010b]. A more intensive inclusion of European enterprises into regional value chains may have pivotal meaning for productivity growth.

The main problem in the labour market of the European Union is the mismatch between competences and enterprises' expectations. In the Communication *Rethinking Education*, a call was voiced to pay more attention to this issue. The problem concerns many European countries (e.g. Poland) [Hays plc., 2015]. Initiatives such as the European Alliance for Apprenticeships are indented to support the system of apprenticeship under partnership between employers and educational systems in the whole EU [EC COM, 2014, p. 16]. Nevertheless, these actions seem to be not enough, especially in the context of aging population as well as increasing qualifications of workforce in offshore locations.

One of main aims of the Europe 2020 strategy was to raise the expenditures on R&D up to 3% of the EU's GDP [EC, 2010]. For the time being, most of the EU member states are far from achieving this level (from 2010 to 2013, R&D expenditures in all sectors have risen only from 0.08% to 2.01% [Eurostat, 2016b]). On the other hand, nanotechnology, micro- and nanoelectronics, biotechnology, photonics, robotization, and 3D print are the sectors which have noted a spectacular develop-

ment in the recent years, which indicates positive prospects for EU industry development [European Competitiveness Report, 2013].

The European Union uses a whole set of financial incentives. Under the financial framework for the years 2014–2020, the EU member states will be granted access to approximately EUR 100 billion from the European Structural and Investment Funds (ESIFs) to develop compatible innovations in line with the priorities of the EU's industrial policy. As a complement to the more general rules of the EU, some countries undertook autonomous initiatives in order to support reshoring (and hence reindustrialization). The British Government proposed 245 million GDP fund to help rebuild British manufacturing prowess and additional financial resources under the Advanced Manufacturing Supply Chain Initiative [EY, 2015]. The Dutch Government proposed to put emphasis on creating competitive business environment instead of offering direct financial support, thus endeavouring to encourage domestic companies to come back [De Backer et al., 2016]. Similar measures are being implemented in other countries as well.

Although up until now the European Union has not been focusing on reshoring as such, its current policy line in the context of reindustrialization seems to be largely adequate regarding the pull factors indicated in Table 2 (innovativeness, quality, investment incentives, productivity). However, creating a counterbalance for unfavourable conditionings in offshore locations seems to be difficult, especially in the case of production costs. Manufacturing within the EU may eliminate some negative trends and phenomena connected with activities in international markets (risk of supply chain, coordination costs, cultural distance). To sum up, a proactive industrial policy may improve the competitiveness of the EU, which can intensify the reshoring trend. The EU institutions have some assistance measures at their disposal, but much depends on the internal policies of particular member states.

Conclusions

The offshoring trend has contributed to the loss of one-third of the European economy's industrial base within the last 40 years [Westkämper, 2014, p. 109]. This article focuses on reshoring, which is perceived as one of the ways to reindustrialize the European Union countries. Due to the fact that this phenomenon is quite new, there are still many areas to be examined. First, there is a lack of comprehensive and detailed data on particular sectors as well as the whole European Union, which could constitute the basis for the effectiveness evaluation of the current industrial policy. Nevertheless, the review of the literature sources, statistical data and legal texts carried out in this article let us draw several relevant conclusions.

The fact that reshoring gains in importance indicates that developed countries are once again becoming an attractive location for some sectors of manufacturing [Fratocchi et al., 2015]. It is partially the result of the enhancement of actions taken by European institutions within a policy heading toward a 'European Industrial Renaissance'. The activities performed in the realm of innovativeness or education allow the EU to maintain high quality and productivity. The growing awareness among Europeans, guided by consumer ethnocentrism, justifies production in some sectors [Grappi et al., 2015]. An opportunity may be seen in the increase of demand in the common market and the highest utilization of nearshoring as a part of the EU's long-term strategy. Location of production in CEE is aided by high dynamics of productiveness growth with simultaneous moderate wage growth in this region [Eurostat, 2016a].

The main problem, which seems impossible to be settled in the foreseeable future, is the significant wage gap between most of the EU countries (especially EU-15) and low-cost Asian countries. Even though this wage gap is decreasing, in many (especially labour-intensive) sectors bringing the activities back to the domestic market is not economically justified. Bureaucracy is also an obstacle, and even if it is less complex within the internal market, it seems that it not always favours enterprises. There is also a certain contradiction between the EU's industrial and climate policies. Regulations aimed at decreasing the amount of permissions issued within the emissions trading system (European Union Emission Trading Scheme) contribute to the growth of energy costs for recipients; thus, the owners of energy-intensive companies may be in even bigger risk of losing their competitiveness. The production sector needs safe and cheap energy and it seems that without it being available the declarations about the reindustrialization of the EU countries will only be an expression of good intentions. As Bailey and De Propris [2014] claim, improving EU industrial competitiveness demands a more long-term, proactive and holistic pro-manufacturing policy to create better business conditions, which will persuade companies to reshore.

References

Arlbjørn J.S., Mikkelsen O.S., 2014, *Backshoring Manufacturing: Notes on an Important But Under-Researched Theme*, Journal of Purchasing & Supply Management, no. 1.

AT Kearney, 2015, *U.S. Reshoring: Over Before it Began?*, https://www.atkearney.com/documents/10192/7070019/US+Reshoring.pdf/14777afa-0c14-460e-937b-11233be340b6 [access: 12.03.2016].

Bailey D., De Propris L., 2014, *Manufacturing Reshoring and Its Limits: The UK Automotive Case*, Cambridge Journal of Regions, Economy and Society, no. 3.

Bellego C., 2014, *Reshoring: A Multifaceted Decision Involving Much More Than Just Labour Costs*, Le 4 Pages, no. 30.

Canham S., Hamilton R.T., 2013, *SME Internationalisation: Offshoring, Backshoring, or Staying at Home in New Zealand*, Strategic Outsourcing: An International Journal, no. 3.

Dachs B., Zanker C., 2014, *Backshoring of Production Activities in European Manufacturing*, EMS Bulletin, no. 3, http://www.isi.fraunhofer.de/isi-wAssets/docs/i/en/publikationen/EMS-Bulletin-3_en3.pdf [access: 17.06.2015].

De Backer K., Menon C., Desnoyers-James I., Moussiegt L., 2016, *Reshoring: Myth or Reality?*, OECD Science, Technology and Industry Policy Papers, no. 27, OECD Publishing, Paris.

EC, 2010, European Commission, *Europe 2020: A Strategy for Smart, Sustainable and Inclusive Growth*, http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf [access: 21.03.2016].

EC COM, 2010a, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage*, COM(2010) 0614 final, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0614&from=EN [access: 25.03.2016].

EC COM, 2010b, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Taxation: Removing Cross-Border Tax Obstacles for EU Citizens*, COM(2010), http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/tax_policy/com(2010)769_en.pdf [access: 21.03.2016].

EC COM, 2012, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *A Stronger European Industry for Growth and Economic Recovery*, COM(2012) 582 final, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0582:FIN:EN:PDF [access: 22.03.2016].

EC COM, 2014, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *For a European Industrial Renaissance*, COM(2014) 014 final, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0014&from=EN [access: 21.03.2015].

Ellram, L.M., 2013, *Off-Shoring, Reshoring and the Manufacturing Location Decision*, Journal of Supply Chain Management, no. 2.

European Competitiveness Report, 2013, *Towards Knowledge Driven Reindustrialisation: EU Production and Trade Based on Key Enabling Technologies*, http://edz.bib.uni-mannheim.de/daten/edz-h/gdb/13/eu-2013-eur-comp-rep_en.pdf [access: 26.06.2016].

Eurostat 2016a, European Statistical Office, http://ec.europa.eu/eurostat [access: 14.03.2016].

Eurostat 2016b, *Research and Development Expenditure, By Sectors of Performance*, http://ec.europa.eu/eurostat/web/products-datasets/-/tsc00001 [access: 25.03.2016].

EY, 2015, *Reshoring Manufacturing: Time to Seize the Opportunity*, http://www.ey.com/Publication/vwLUAssets/Reshoring_manufacturing_%E2%80%94_time_to_seize_the_opportunity/$FILE/3451_EY%20Reshoring%20Report_V8%20Online.pdf [access: 22.02.2016].

Fratocchi L., Ancari A., Barbieri P., Di Mauro C., Troiano A., Vgnoli M., Zanoni A., 2015, *Manufacturing Back- and Near-Reshoring: A Comparison of European and North American*, [in:] *Research in the Decision Sciences for Innovations in Global Supply Chain Networks: Best Papers from the 2014 Annual Conference*, eds. J. Stentoft, G. Vastag, A. Paula, Pearson Education, Inc., Old Tappan, New Jersey.

Fratocchi L., Mauro, C., Barbieri, P., Nassimbeni, G., 2014, *When Manufacturing Moves Back: Concepts and Questions*, Journal of Purchasing & Supply Management, no. 20.

Grappi S., Romani S., Bagozzi R.P., 2015, *Consumer Stakeholder Responses to Reshoring Strategies*, Journal of the Academy of Marketing Science, no. 4.

Gray J.V., Skowronski K., Esenduran G., Rungtusanatham M.J., 2013, *The Reshoring Phenomenon: What Supply Chain Academics Ought to Know and Should Do*, Journal of Supply Chain Management, no. 2.

Hays plc., 2015, Hays Global Skills Index, http://www.hays-index.com [access: 25.03.2016].

Iozia E.M., Leirião J.C., 2014, *Opinion of the European Economic and Social Committee on the Reshoring of EU Industries in the Framework of Reindustrialization*, Official Journal of the European Union, 2014/C 311/03, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri =CELEX:52013IE6859&from=EN [access: 26.06.2016].

Kinkel S., 2012, *Trends in Production Relocation and Back-Shoring Activities: Changing Patterns in the Course of the Global Economic Crisis*, International Journal of Operations & Production Management, no. 6.

Kinkel S., 2014, *Future and Impact of Backshoring: Some Conclusions from 15 Years of Research on German Practices*, Journal of Purchasing and Supply Management, no. 1.

Kinkel S., Maloca S., 2009, *Drivers and Antecedents of Manufacturing Offshoring and Backshoring: A German Perspective*, Journal of Purchasing & Supply Management, no. 15.

Leibl P., Morefield R., Pfeiffer R., 2011, *A Study of Effects of Back-Shoring in the EU*, Journal of Business and Behavioural Sciences, no. 2.

Martínez-Mora C., Merino F., 2014, *Offshoring in the Spanish Footwear Industry: A Return Journey*?, Journal of Purchasing & Supply Management, no. 4.

OECD, 2011, *Attractiveness for Innovation: Location Factors for International Investment*, OECD Publishing, Paris.

Pashev K., Casini P., Kay N., Pantea S., 2015, *EU Structural Change 2015*, Publications Office of the European Union, Luxembourg.

Pearce J.A., 2014, *Why Domestic Outsourcing is Leading America's Reemergence in Global Manufacturing*, Business Horizons, no. 1.

Shih W.C., 2014, *What it Takes to Reshore Manufacturing Successfully*, MIT Sloan Management Review, no. 1.

Tate W.L., 2014, *Offshoring and Reshoring: U.S. Insights and Research Challenges*, Journal of Purchasing and Supply Management, no. 1.

Tate W.L., Ellram L.M., Schoenherr T., Petersen K.J., 2014, *Global Competitive Conditions Driving the Manufacturing Location Decision*, Business Horizons, no. 3.

TBCG, 2013, The Boston Consulting Group, *The U.S. as One of the Developed World's Lowest-Cost Manufacturers: Behind the American Export Surge*, https://www.bcgperspectives.com/content/articles/lean_manufacturing_sourcing_procurement_behind_american_export_surge/ [access: 25.03.2016].

TEIU, 2014, The Economist Intelligence Unit, *Still Making It. An Analysis of Manufacturing Labour Costs in China*, https://www.ciaonet.org/attachments/27502/uploads [access: 25.03.2015].

Van den Bossche P., Gupta P., Gutierrez H., Gupta A., 2014, *Solving the Reshoring Dilemma*, Logistics Management, no. 3.

Westkämper E., 2014, *Towards the Re-Industrialization of Europe: A Concept for Manufacturing for 2030*, Springer, Berlin.