

REASONS AND DYNAMICS OF RESHORING IN THE EUROPEAN UNION AND USA

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Methods. The results of the study were obtained through the application of scientific research methods, namely: abstraction – to define the essence of the concept of «reshoring»; historical and logical – to study the evolution of the theory of reshoring; general and specific – to determine the forms of reshoring; comparative studies – to establish the specifics of reshoring in the countries of the European Union and the USA.

Results. The essence of reshoring is established and it is presented as a process of returning to the homeland the assets of numerous European and American multinational corporations that have faced a decrease in the competitiveness and efficiency of their foreign branches, which affects the economic growth of national economies as a whole. Methodological approaches are presented, on the basis of which the economic activity of European and American companies in the field of reshoring is measured, as well as their comparison.

The main reasons for the spread of reshoring have been identified and its most widespread forms in the developed countries of the world have been singled out. The impact of reshoring on the process of reindustrialization is demonstrated and the current trends in its development are determined.

Novelty. The scientific novelty of the research results lies in identifying the current trends of reshoring in the countries of the European Union and the USA, determining the nature of its impact on the economic development of these countries, as well as the socio-economic consequences for the world economy.

Practical value. The results of the study actualize the processes inherent in the modern economy, which is becoming more and more globalized. The identified modern trends in the spread of reshoring allow companies to build and implement more effective production strategies, and for politicians to adjust the directions of economic growth of national economies.

Keywords: reshoring, nearshoring, reindustrialization, manufacturing, global trade, trend.

Statement of problem. The international division of labor that characterized the second half of the 20th century contributed to deindustrialization due to such factors as rising prices for raw materials and energy, as well as environmental degradation in industrial areas of the United States and Europe. The role of industry has also steadily declined due to the rapid growth of the service sector, a sharp increase in imports and outsourcing of industry. Tens of thousands of enterprises were closed as

production facilities were transferred to developing countries and transition countries.

The share of industry in the GDP of the US and Europe has declined significantly. According to the World Bank in 2010 the share of industry in GDP in the recipient countries due to outsourcing and offshoring increased significantly and amounted to: Republic of Korea – 31 %; China – 30%; Germany – 21%; Italy – 17%; Brazil – 16 %. The backwardness of the USA and Europe in the development of

industrial production has led to new trends in the location of production capacities [20].

Outsourcing and offshoring have been replaced by a new stage – reindustrialization, which is based on reshoring and nearshoring. Reshoring became possible due to the growth in the production of own energy resources, which affected the cost of energy for industry, as well as automation and robotization of production, which led to a decrease in employment in labor-intensive industries [19].

The reshoring strategy is becoming increasingly popular in the international politics of developed countries. But, despite the relevance of this strategy in management practice, relatively little attention is paid to reshoring issues in the academic environment, including no clear definitions of this concept, understanding the reasons for the scale and consequences of this phenomenon, its impact on the economies of developed and developing countries, as well as models which can help predict future trends.

These global trends are reported by UNCTAD and UNIDO organizations at the UN, Boston Consulting Group (BCG), McKinsey studying the principles of global investment and industrial development in the world.

Analyses of recent papers. Reshoring in the industry has become one of the most pressing problems of recent times. A feature of such studies is the solution of the economic problems of the process, since the geographical component has been little studied. There is no explicit theory of reshoring or backshoring. The literature explains reshoring in the framework of existing theories of the multinational firm, as a subsequent decision of a previous offshoring decision Bals, et al., 2013 [1]; Ellram et al., 2013 [6]; Gray et al., 2013 [7]; Tate, 2014 [16]; Foerstl et al., 2016 [8]. To put it simply, reshoring takes place when the trade-offs between cost advantages, market and knowledge seeking, transaction costs and maintaining control are not advantageous for the firm anymore.

With regard to the European Union, the peculiarity of the interpretation of reshoring is that it is understood as an unforced strategy for returning the activities of a European company not so much to the country of origin, but to any EU country, provided that the company's

headquarters is also located in the European Union [5].

Through the lens of internalisation theory (Casson, 2013 [4]; Rugman, 2010 [14]) reshoring is a result of changes in the ownership, location and internalization advantages from international production, or a consequence of a wrong assessment of these advantages (Ellram et al., 2013 [6], Fratocchi et al., 2016 [9]). Some managers have offshored manufacturing activities based on simple comparisons of easily measurable costs, in particular labor costs (Kinkel & Maloca, 2009 [11]).

The resource-based view of the firm can also be applied to explain reshoring strategies. Reshoring decisions may be a result from the limited abilities of companies to sufficiently develop and maintain such critical capabilities in foreign locations, or to exploit the host country's resources in order to create competitive advantage for the multinational company as a whole (Canham & Hamilton, 2013 [3]). Here, advanced production technologies also come into play.

Transaction cost theory can also help to understand reshoring. Bounded rationality and possible contingencies in transactions across companies and countries may lead to inaccuracy of the projected cost and performance of manufacturing offshoring decisions (Pisano & Shih, 2009 [13]; Cabral et al., 2013 [2]) to higher than expected costs, poorer than expected quality, and higher than expected efforts for the management of transborder activities (Fredriksson & Jonsson, 2009 [10]).

Task uncertainty is another factor influencing offshoring and reshoring decisions. Here, to some extent uncertain potentials of technological innovations in manufacturing processes, e.g. by an intensified use of Industry 4.0, come also into play. The higher and more specific investments in advanced production technology are, the higher the possibility to integrate the specific manufacturing operations at one focal plant, favoring rather reshoring than additional offshoring activities.

Aim of the paper. Due to the presence of unresolved theoretical problems, this article is supposed to analyze the theoretical foundations of reshoring, identify the causes of reshoring and its impact on the process of reindustrialization, development trends.

Materials and methods. Proceeding from the position on the cyclical nature of world industrial production, reshoring is the next step after offshoring. Reshoring is a form of implementation of the process of reindustrialization, which is typical for countries with developed economies. Countries like China and India became offshoring hubs, as companies moved manufacturing, assembly, and distribution operations – along with the associated expertise – overseas to take advantage of new global trade agreements between countries, lower wages, and niche-industry expertise. Countries with developing economies are not characterized by reshoring processes, and reindustrialization is carried out through the restoration of industry, building up technological capabilities at the expense of internal reserves. It should be noted that not all developing countries have the domestic capacity for reindustrialization. It is possible to implement this process subject to the accumulated innovation potential through the

absorption of new technologies from developed countries or points with a high concentration of productive forces, provided with the minimum necessary socio-economic potential of the previous stages of technical and economic development.

The starting point in the evolution of the reshoring theory was the fundamental statement of the problem in the UNCTAD World Investment Report–2013 [18], which, in fact, marked the beginning of a whole series of studies. For the first time, the report formulated and introduced into scientific circulation a system of interrelated categories that characterize the processes of global spatial reconfiguration of business: reshoring, offshoring, divestment, repositioning, relocation, nearshoring. In accordance with [18], reshoring in this study is understood as the process of returning by a transnational company a part or all of its own production, previously moved abroad, back to the country of origin (fig. 1).

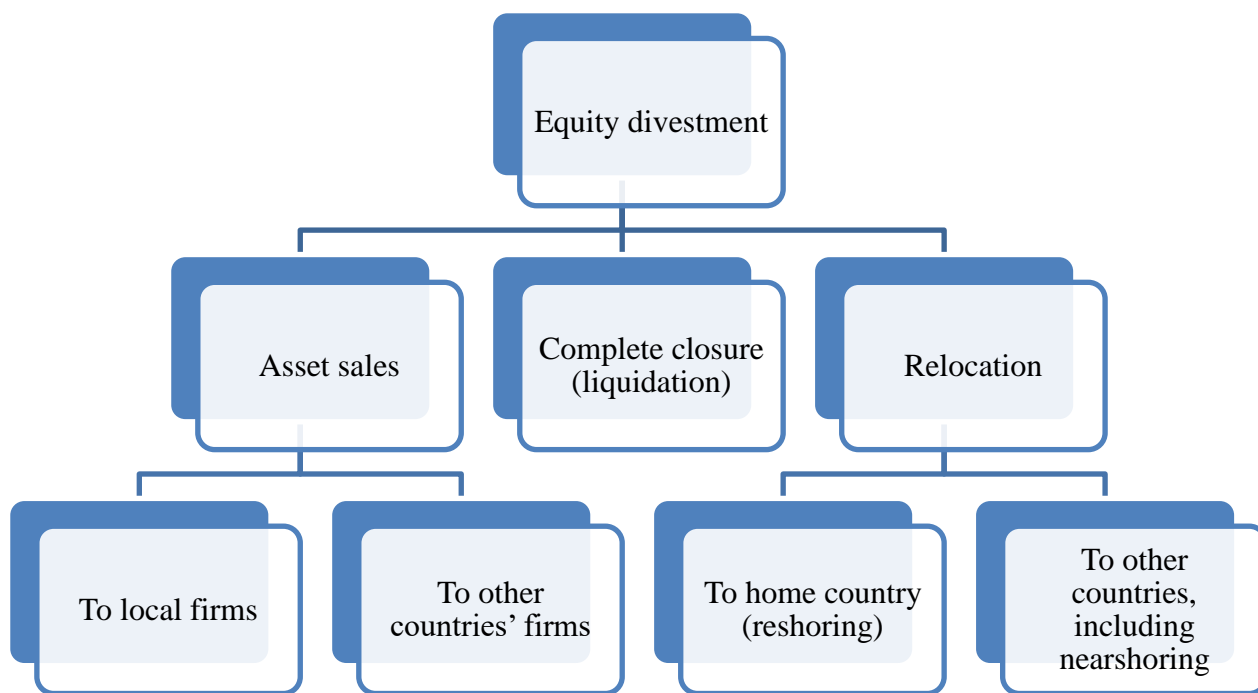


Figure 1. Structure of equity divestment [18]

The key forms of strategic positioning are defined below. Offshoring is the process of transferring part or all of the value added activities conducted by a TNC from the home country to another. When it engages in offshoring, the TNC maintains ownership over

activities conducted overseas. This differs from offshore outsourcing, which involves purchasing products or services from another firm located overseas.

Divestment is the process of reverse investment, involving capital withdrawals and

reduction in the stock of assets TNCs hold abroad. Divestment can involve either full or partial withdrawals of foreign assets. It is difficult to measure globally because FDI statistics are recorded on a balance-of-payments basis. National statistics do not report the magnitude of divestment explicitly because they record only net flows or stocks.

Relocation is the movement of existing assets, resources and people from one location to another. It can be linked to divestment. TNCs may decide to relocate all or part of value added activities in response to new environmental conditions or to reflect new strategies adopted by the firm. Relocation can take place within a host country, across borders to a new host country or back to the home country of the TNC.

Reshoring is the process through which a TNC relocates all or part of value added activities conducted abroad back to the home country of the TNC.

Nearshoring is the process of positioning all or part of the value added activities in a country that is geographically, economically and culturally close to the country of origin of the TNC. In terms of operational elements, equity divestment involves asset sales, liquidation and relocation [18].

The debate on reshoring in the US was largely stimulated by the 2011 report «Made in America Again» of the Boston Consulting Group.

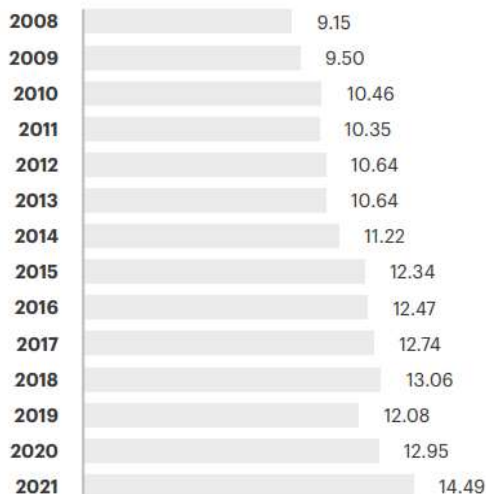
Kearney’s annual Reshoring Index tracks trends in manufacturing returning to the United States from the 14 low-cost countries (LCCs) and regions in Asia where sourcing, production, and assembly have historically been offshored to. Latest research shows that US companies relied more on manufacturing operations in LCCs in 2021 than they did in 2020, keeping the Reshoring Index in negative territory. But there are strong indications that corporate attitudes and strategies are changing.

Thanks to a combination of the pandemic, trade wars and tariffs, and ongoing supply chain disruptions, American companies are getting more serious about bringing manufacturing closer to the US market.

In 2021, US imports of manufacturing goods from the 14 Asian LCCs and regions tracked in our annual study totaled 14.49 % of US domestic gross manufacturing output, up from 12.95 % in 2020 and a continuation of the growth that restarted in 2019, resulting in a negative 2021 Reshoring Index of – 154 (Fig. 2) [17].

US manufacturing import ratio (MIR)

MIR = total manufactured goods import as % of domestic output



Year-over-year change in the US MIR

(Basis points, 2008–2021)

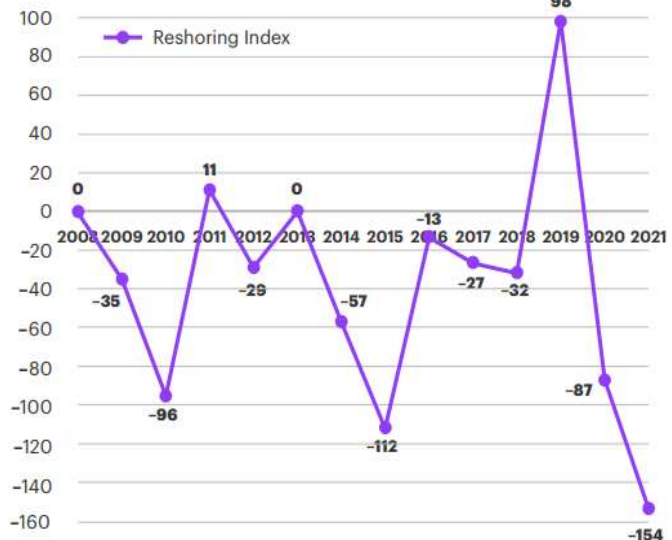


Figure 2. US manufacturing imports from 14 Asian low-cost countries rose in 2021, resulting in a negative score on the Reshoring Index

Sources: [17]

Some form of reshoring will need to be part of most companies' plans if they want to protect themselves and their customers from disruptions. Because of difficulties finding nearby suppliers for components or materials at an acceptable quality and cost, many companies continued to operate long supply chains that tapped into China and other Asian countries' established supplier ecosystems. Finding suppliers locally, or at least regionally, will therefore be crucial to successful reshoring, albeit in ways that expand the typical definition of reshoring.

Kearney is seeing more companies abandon the search for lowest cost and focus on best-cost models that not only balance cost and resiliency, but also consider factors such as sustainability. This new approach is causing more companies that serve the US market to look for closer supply options, including south of the border. This, in turn, requires finding materials and components suppliers or relocating production or assembly, ideally in ways that manufacturers can still benefit from «Made in the USA» labeling.

The collected reshoring cases are covering several sectors. They include sectors where

reshoring was rather expected, as e.g. in appliances and electrical equipment, transportation equipment or computers and electronics, but also sectors that many thought would never return to the US, such as apparel and textiles [17].

Not only the political and business community of the United States, but also Europe, pragmatically began to reindustrialize, as they realized that breakthrough innovations and new technological platforms simply cannot be deployed without having their own industrial base.

Reshoring due to «made-in» motivations is also associated with shorter durations offshore, but only for EU companies, which overall exhibit a shorter offshore duration than US companies.

European industry can deliver growth and can create employment. Today we tabled the conditions for the sustainable industry of the future in Europe, to develop the investments needed in new technologies and to rebuild a climate of confidence and entrepreneurship. By working together and restoring confidence, we can bring back the industry to Europe [12].

Table 1

Shares of companies active in reshoring for selected European countries

Country	Share of companies active in reshoring	Time-frame (years covered)	Share of companies active in reshoring over a 2 years period
Sweden	27.0%	6	9.0%
Ireland	13.0%	3	8.7%
Belgium	9.5%	3	6.3%
Slovakia	9.0%	3	6.0%
France	14.0%	5	5.6%
Denmark	13.0%	6	4.3%
Finland	13.0%	6	4.3%
DACH	4.0%	2	4.0%
Portugal	6.0%	3	4.0%
Netherlands	6.0%	3	4.0%
Selected European countries(EMS survey)	4.0%	2	4.0%
UK	13.0%	8	3.3%
Germany	3.0%	2	3.0%
Estonia	3.5%	3	2.3%
Lithuania	2.0%	3	1.3%
Bulgaria	2.0%	3	1.3%
Romania	1.0%	3	0.7%

Sources: [12]

In Europe, the average share of companies active in reshoring at all manufacturing companies is around 4%, varying significantly from around 1% in Eastern European countries like Romania or Bulgaria over 3% in large industrial countries like Germany, 10% in small Western economies like Belgium, 13% in Ireland or Nordic countries like Denmark or Finland, up to around 15% in France and the UK or even 27% in Sweden Table 1.

Accordingly, reshoring levels seem to be highest in Sweden and Ireland (around 9% each), followed by Belgium, Slovakia and France (around 6% each). Many countries are not significantly differentiating from a 4% level that seems to be common for quite a number of Western European countries (e.g. Denmark, Finland, Portugal, Netherlands, UK, Germany). Only some small Eastern European countries as Lithuania, Bulgaria or Romania show significantly lower reshoring levels of around 1% of their manufacturing companies [5].

Fratocchi et al. (2014) [9] draw some conclusions by using the Uni-CLUB MoRe data set to analyse the differences in reshoring between Europe and US companies:

- backshoring seems to be a more common phenomenon than nearshoring, particularly in the US, with 10 times more backshoring cases than nearshoring cases in the US, and seven times more in Europe;

- reshoring in Europe goes back to the 1990s and even the 1980s, whereas it is much

more recent in the US;

- backshoring occurs across a broad range of manufacturing industries from low-tech (clothing and footwear in Europe and furniture in the United States) to high-tech (e.g. electronics, electrical appliances, automotive), whereas nearshoring seems to be more concentrated, especially in the European textiles and clothing industry.

The main reasons for considering reshoring, executives cited five main reasons: labor cost; labor availability; delivery lead times; logistics costs; reduced carbon footprint.

US and EU companies are almost equally represented in the sample. Interestingly, when was segmented by small, medium, and large companies, there were differences in the ranking of these top five factors. The most surprising one is that large companies quote labor cost as their primary reason, especially since that used to be the main reason for offshoring.

However, this appears to align with their overall intent to invest in automation, thereby mitigating the higher labor cost associated with coming back to the home country.

It's also interesting to note that the quality of goods is not one of the top five reasons that large companies would consider for reshoring to the home country but is a top factor for small and medium enterprises. Delivery lead times and logistics costs are common concerns across all companies (Table 2).

Table 2

A variety of factors affect a company's decision to reshore manufacturing

№	Small companies	Medium-size companies	Large companies
1	Quality of goods	Quality of goods	Labor costs
2	Delivery lead times	Labor costs	Logistics costs
3	Logistics costs	Reduced carbon footprint	Labor availability
4	Ease of conducting business	Delivery lead times	Delivery lead times
5	Quality of goods	Logistics costs	Reduced carbon footprint

Small=less than \$250 million, medium=\$250 million to \$5billion, large=more than \$5 billion

Source: [17]

In accordance with to the Reshoring Initiative Data Report [15] there are tendencies likely to help reshoring in future:

1. Government actions to reduce national dependence on imports of key products – this

effort is starting aggressively with medical products, chips, rare earth minerals, EV batteries, etc. to fill in current supply chain gaps.

2. Risk of aggressive “decoupling” by China. As tensions grow over Taiwan and any

Chinese support of Russia in Ukraine, the probability of an abrupt termination of shipments of a broad range of products increases.

3. Russian-Ukrainian war. Nickel, argon and neon are a few of the materials whose supply is severely disrupted by the war. Equally important, companies can now better appreciate the possible impact of geo-politics.

4. Continued growth in efforts by MEPs (Manufacturing Extension Partnerships), EDOs (economic development organizations) and states to enable reshoring.

5. Environmental, Social and Governance (ESG) trend:

a. Corporate responsibility expands. We anticipate companies will recognize that reshoring is the most effective and least expensive way to fulfill their commitments. Companies can strengthen the three new stakeholder constituencies while increasing the return to shareholders if they do the math correctly.

b. Climate crisis and increasing environmental consciousness – domestic supply chains are more transparent than offshore and less polluting, cutting the world's environmental impact by up to 25%, depending on the product. Sustainability practices will continue to increase as a corporate strategy and will help drive reshoring and FDI.

6. Continued increases in usage of TCO (total cost of ownership) instead of price in making sourcing decisions. Universal TCO usage, alone, would reshore about 1.5 million jobs.

7. Continued improvement in skilled workforce programs. The biggest challenge will be bolstering our skilled workforce, which is not adequate to support a much higher rate of reshoring. There are signs of positive change. Awareness of the problem is growing, Perceptions of manufacturing jobs are improving, more companies and governments are adding programs.

8. Automation, IoT, Industry 4.0, AI shrinking the unit labor cost gap.

Conclusions. Current global supply issues mean that, at the moment, the reshoring trend is the result of an immediate need for security and stability. However, when global trade begins to stabilize, American and European suppliers will

need to remain competitive in their quality and pricing to keep new partners on board. Reshoring will undoubtedly create new opportunities for local businesses and suppliers, but they need to take care to maintain the momentum if they are to ensure long-term success. Reshoring can be a long and costly process where compromises have to be made.

All things considered, reshoring is emerging as a viable, sustainable, and progressive alternative to offshoring. In addition to business benefits, American and European companies have the opportunity to positively impact the home economy, create jobs, and enrich local communities while simultaneously building customer trust in quality and predictability with a «Made in America» or «Made in Europe» product.

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ПРИЧИНИ І ДИНАМІКА РЕШОРИНГУ В ЄВРОПЕЙСЬКОМУ СОЮЗІ ТА США

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Методологія дослідження. Результати дослідження отримані за рахунок застосування методів наукового дослідження, а саме: абстракції – при визначенні сутності поняття «решоринг», історичного і логічного – при дослідженні еволюції теорії решорингу; загального й особливого – при визначенні форм здійснення решорингу; кампаративістики – при встановленні специфіки решорингу в країнах Європейського Союзу та США.

Результати дослідження. Встановлено сутність решорингу і представлено його як процес повернення на батьківщину активів численних європейських та американських транснаціональних корпорацій, які зіткнулися із зниженням конкурентоспроможності та ефективності діяльності своїх зарубіжних філій, що позначається на економічному зростанні національних економік в цілому. Представлено методологічні підходи, на основі яких здійснюється вимір економічної активності європейських та американських компаній у сфері решорингу, а також їхнє порівняння.

Виявлено основні причини поширення решорингу та виокремлено його найбільш розповсюджені у розвинутих країнах світу форми. Продемонстровано вплив решорингу на процес реіндустріалізації та визначено сучасні тенденції його розвитку.

Новизна. Наукова новизна результатів дослідження полягає у виявленні сучасних тенденцій решорингу у країнах Європейського Союзу та США, визначенні характеру його впливу на економічний розвиток цих країн, а також соціально-економічних наслідків для світової економіки.

Практична значущість. Результати дослідження актуалізують процеси, властиві сучасній економіці, яка все більше стає глобалізованою. Виявлені сучасні тенденції поширення решорингу дозволяють компаніям побудувати та реалізувати більш ефективні стратегії виробництва, а політикам скоригувати напрями економічного зростання національних економік.

Ключові слова: решоринг, неаршоринг, реіндустріалізація, виробництво, глобальна торгівля, тренденція.

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