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## FEATURES OF THE FORMATION OF INTERNATIONAL PRODUCTION NETWORKS IN MODERN CONDITIONS

## ОСОБЛИВОСТІ ФОРМУВАННЯ МІЖНАРОДНИХ ВИРОБНИЧИХ МЕРЕЖ В СУЧАСНИХ УМОВАХ

# ОСОБЕННОСТИ ФОРМИРОВАНИЯ МЕЖДУНАРОДНЫХ ПРОИЗВОДСТВЕННЫХ СЕТЕЙ В СОВРЕМЕННЫХ УСЛОВИЯХ

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Abstract. In this paper we provide an overview of the origins and development of the global value chain (GVC) concept and group extant research in the eld according to different aspects of the GVC analysis in order to identify promising areas for further research. Institutional dimension of the GVC analysis is emphasized in terms of the specifics cs of emerging-market multinational enterprises (EMNEs). Based on a detailed review and systematization of the extant research in the eld two main areas for further research are identified. Firstly, the influence of institutional distance between different countries taking part in GVCs on GVC configuration parameters (governance type, geographical distribution of GVC operations and GVC upgrading type) and secondly, the role of various contracting methods (outsourcing, o shoring, franchizing, etc., as opposed to traditional foreign direct investment) in the configuration and improvement of GVC operations. us institutional and geographical aspects of the GVC analysis as well as upgrading in GVCs in the context of EMNEs are identified to be the most promising areas for future research in the field concerning the development of network of global corporate control.

**Keywords:** global value chains, global commodity chains, emerging-market multinational enterprises, institutional dimension of the GVC analysis, network of global corporate control.

**Анотація.** У статті розглядаються особливості становлення і розвитку концепції глобальних вартісних ланцюгів і проводиться систематизація існуючих досліджень з різних аспектів аналізу даного феномена з метою виявлення актуальних напрямків

подальших досліджень. Особлива увага приділяється інституційному аспекту в його взаємозв'язку з іншими аспектами аналізу, в контексті включення в глобальні вартісні ланцюги компаній з країн з ринками, що розвиваються. На основі систематизації та вивчення наукових статей виділяються два найбільш перспективні напрямки подальших досліджень: вплив інституційної дистанції між країнами - учасниками глобальних вартісних та виробничих ланцюгів на параметри конфігурації цих зв'язків і роль різних видів контрактних відносин між компаніями в конфігурації і вдосконаленні операцій всередині глобальних виробничих і вартісних ланцюгів. Вплив інститутів, а також розвиток в глобальних ланцюгах вартості представляються найбільш перспективними аспектами для розширення наявного спектра існуючих наукових робіт в контексті формування глобальних корпоративних мереж та контрою.

**Ключові слова:** глобальні вартісні ланцюги, глобальні виробничі ланцюги, багатонаціональні компанії з країн з ринками, що розвиваються, інституційного ний аспект аналізу глобальних ланцюжків цінності, глобальні корпоративні мережі.

Аннотация. В статье рассматриваются особенности становления и развития концепции глобальных цепочек ценности и проводится систематизация существующих исследований по различным аспектам анализа данного феномена с целью выявления актуальных направлений дальнейших исследований. Особое внимание уделяется институциональному аспекту в его взаимосвязи с другими аспектами анализа в контексте включения в глобальные цепочки ценности компаний из стран с развивающимися рынками. На основе систематизации и изучения научных публикаций выделяются два наиболее перспективных направления дальнейших исследований: влияние институциональной дистанции между странами — участниками глобальных цепочек ценности на параметры конфигурации этих цепочек и роль различных видов контрактных отношений между компаниями в конфигурации и совершенствовании операций внутри глобальных цепочек ценности. Влияние институтов, а также развитие в глобальных цепочках ценности применительно к компаниям из стран с развивающимися рынками представляются наиболее перспективными аспектами для расширения имеющегося спектра работ по проблемам анализа глобальных цепочек ценности в контексте формирования глобальных сетей.

**Ключевые слова:** глобальные цепочки ценности, глобальные производственные цепочки, многонациональные компании из стран с развивающимися рынками, институциональный аспект анализа глобальных цепочек ценности, глобальные корпоративные сети и контроль.

**Intoduction.** With regard to employment growth, the creation of price pressure by global buyers often results in the absence of job security guarantees associated with GPS and the lack of adequate working conditions, with particular concern for safety and health.

Employment in the GPS may also be unstable because of the fluctuations in demand is exacerbated, passing to the neighbouring production system links, and the production of TNCs within the GPS can be relatively easy to relocate. At the same time, GPS can serve as a mechanism for spreading international best practices in the social and environmental fields, even if compliance with rules below the first tier of the production system remains a challenge.

In the longer term, GPS may be an important means of building capacity for developing countries, including through the spread of technology and training of workers, thereby opening up the possibilities for industry modernization. However, within the framework of the GPS, potential long-term development benefits do not appear automatically. Participation in the GPS can lead to a certain degree of dependence on the narrow technological base and access to value added production within the framework of production systems that coordinate TNCs. [10]

At the company level, the ability of local firms to increase production and transition to higher value-added production within the GPS depends on the nature of the GPS in which they operate, the systems of management and hierarchy within the system, their capability to absorb funds, as well as business and institutional conditions the economy. At the national level, the achievement of progress in the GPS implies not only the intensification of participation in the GPS, but also the creation of greater domestic value added. At the same time, it involves the gradual expansion of participation in the GPS using increasingly advanced technologies, with the transition from export of resources (raw material exports) to exports of products (technological and industrial exports) and services increasingly complex.

Before considering the reasons for the rapid growth of offshoring in the last few years, it is necessary to give a clear definition of this relatively new phenomenon. In a broad sense, offshoring refers to any transfer of production activities or functions (in the production of goods or services) to another country. In modern economic and business literature, the terms "global outsourcing", "international outsourcing", "global offshoring" and "offshoring" are often used as synonyms. It is necessary to consider the evolution of these concepts and clarify the understanding of these terms.

Theoretical framework. In the last twenty years of the last century, the concept of "outsourcing", that is the transfer of certain functions and business processes to an external contractor on an ongoing basis, has become part of everyday business. The driving force behind outsourcing has been and remains the need to reduce costs. The technical prerequisites for outsourcing were the fundamental changes in the nature of the activities of a modern international company. The development of the transport system and the reduction in the cost of transportation, the rapid breakthrough in communications and information technology, and the strengthening of horizontal links have made it possible to divide many intra-firm processes into separate functions or operations that can be carried out absolutely independently of others. As a result, it became possible to delegate these functions to an external executor in order to save costs. American economists D. Grossman and E. Rossi-Hansberg [29] put forward the concept of dividing modern production into functions (tasks). In their opinion, the activities of modern American multinationals are increasingly based on global supply chains of "functions" necessary for the production of goods or services, rather than the most final finished goods. As a result, the producer company wins not only from the specialization and division of labor, but also from the fact that it is possible to place each operation (or function) where its production is cheaper. Inter-firm and intersectoral competition is transformed into competition between individual functions, such as assembly, construction, programming, packaging, data entry, etc., carried out by various companies. [46]

These processes are part of a worldwide trend that affects all modern organizations – the transition from the vertical to the network model of their construction. Transition to the horizontal, network principle of the organization opens up opportunities for interaction of companies of different sizes on the basis of the distribution of functions between them and the creation of "efficiency chains", and also allows to develop outsourcing, the real boom of which has been observed in the last ten years.

As a result of the growth of communication technologies, it became possible to perform certain services or functions not directly within the company itself (traditionally) or in its geographical proximity (which was often assumed at the first outsourcing experiments), but virtually anywhere in the world. This made it possible to raise outsourcing to a global level. This process relies on the development of global technologies, primarily information systems and global management systems, which, as a rule, are formed under the influence of mechanisms of international competition. The possibility of transferring functions related to the service sector to other countries is closely connected with the so-called revolution of the foreign trade mobility in the service sector, which consists in the fact that services now do not necessarily have to be produced in the same place where they are consumed. [48]

**Determinants.** Transnational corporations initially began to transfer production capacity to countries with low labor costs in order to save costs and conquer large (especially Asian) markets. This process began massively about thirty years ago. The objects of outsourcing became functions, auxiliary, technical processes that could be easily transferred to a specialized firm (database maintenance, accounting and financial accounting, back office functions, support of information networks). Gradually, the range of transferred functions has expanded, some research functions, development of computer support, personnel services and centers of communication with clients began to be outsourced to outsiders. The globalization of outsourcing has given both the reproductive process of American companies and their organizational structure qualitatively new features. The development of communications has led to the fact that in the last decade multinationals began to transfer to other countries (especially in the rapidly developing countries of the third world) not only production but also other functions, especially those that had already been outsourced on the domestic market. At the same time, the transferred functions can be performed either by contractors (local companies) external to the contracting company, which is traditional outsourcing, or own foreign divisions of American companies. Both these situations fall under the broader definition of "offshoring". Offshoring is any transfer of functions abroad, both intra-company and external contractor. Outsourcing also implies any transfer of functions to an external contractor either in the home country or abroad.

Offshoring is rapidly gaining momentum. These trends affect primarily large companies and high-tech industries, but are quickly spreading further – at present globalization concerns the most "ordinary" industries and companies.

In essence, with the introduction of global outsourcing, the era of a new international division of labor has begun, affecting not only the sphere of production of goods, but also the sphere of production of services. The provision of outsourcing services to companies was a separate business function, there were companies that specialize in how best to organize and coordinate offshoring services for other companies. At present, outsourcing services on the global market have become a separate branch of activity, which is being captured by rapidly developing companies from India, Singapore, and Malaysia [36]. However, in this regard, developed countries should not be dismissed. Low salaries of qualified personnel were only a starting impetus, an incentive for the start of international outsourcing. However, the driving force of both in-country and global outsourcing was also a more effective organization of outsourced functions through specialization, higher qualifications, economies of scale, better organization of work, and so on.

Initially, the motivation for offshoring for companies was two key factors – reducing production costs (mainly through the use of a lower-cost, low-skilled labor force) and ensuring strategic development of companies through access to new markets in service provider countries. However, in the last few years, both the motives for this process and the very essence of offshoring have substantially changed. [55]

First, it turned out that the labor markets of many Asian and Eastern European countries are able to provide competitive highly skilled labor at a relatively low price. At the same time, there is a certain shortage of qualified personnel in the new formation in the United States – young people who were educated in the era of information technology and global relations, who are not afraid of change and are able to quickly adapt to changing conditions. The expansion of American companies to India, China, South American countries naturally opens up access to a huge number of qualified specialists and talented university graduates and significantly increases the choice. The consulting company Booz Allen Hamilton together with the Fuqua business school of the University of Duke (S. Carolina) recently conducted a survey of managers of companies intending to transfer part of the operations abroad. The survey showed that managers' concern about finding access to the broadest market of qualified personnel is growing most rapidly. It was also revealed that more and more

companies are transferring operations abroad with the aim of gaining access to highly qualified scientific and engineering personnel in China, India, Eastern Europe, etc.

Secondly, more and more complex functions are transferred abroad. This process proceeds in two ways. On the one hand, the traditional functions that are the object of offshoring are becoming more complex. If originally only simple technical functions were transferred abroad, then gradually their collection and level of complexity increases. Companies are beginning to transfer to other countries more complex financial and accounting functions, such as financial planning and analysis, and even investigation of accounting errors. Also, American companies are beginning to transfer overseas and such complex functions as programming and computer design, marketing and research, legal services, and even consulting and management functions. [51]

On the other hand, those business processes inside companies that previously were considered mainly technical and one of the first to move beyond the US, are now beginning to play an increasingly important strategic role. First of all, this refers to information technology. From a secondary purely technical function, this sphere is increasingly being brought to the forefront, since it is impossible to build an effective information system within the company without reliance on clearly formulated strategic goals and objectives of the company [36]. In addition, the construction of a global information system linking operations in different countries geographically far from each other requires working out the company's global strategy not only from the marketing, financial, but also from the organizational and technological point of view. All these are quite complex, highly skilled jobs are performed with active interaction with personnel in the host countries.

The geography of the host countries is also changing: the financial and accounting functions of American companies are now being transferred not only to traditional India, but also to Latin America – Costa Rica, Mexico, Brazil and Argentina, which a year ago seemed unlikely. Rapidly improving the technology of communications, processing and data transfer, minimizing the need for air travel. In these conditions, the role of the latter in the mutual relations of American companies with foreign partners is growing, they play an increasingly equal role. [50]

Modern offshoring has acquired new quality features, the most significant of which is not just a mechanical transfer of functions abroad, but the creation of a new, flexible system of organization and interaction between US and foreign companies globally that qualitatively transforms all internal business processes of the company and the most active influence its strategic component. Instead of a simple model for transferring a strictly defined part of the functions to one supplier, flexible schemes appear, the purpose of which is the ability to quickly transfer different functions to different specialized suppliers in different countries. As a result, operations in foreign countries are having an increasingly strong back impact on American business, as they are closely interlaced in the company's business processes.

To create mechanisms for ensuring flexibility of interaction with foreign partner companies and the possibility of rapid changes, some new forms of interaction of US companies with foreign partners arise. One of them was called the model of strategic outsourcing. In the framework of this more flexible model, it is assumed that there are different suppliers located in any geographical locations for various operations and functions. At the same time, those functions that would be transferred to a single supplier within a traditional model are distributed among the more specialized companies within the framework of new models. Thus, in addition to better performing specific functions, the risk associated with the transfer of functions to a single external supplier is also reduced.

The global sophistication of partner offshoring ties inevitably entails an increase in the risks associated with the delegation of functions and the loss of control by the company. This gives rise to a whole range of new problems that companies are forced to solve. We can talk about the creation of a fundamentally new business organization structure based on a network of constantly changing relationships between companies of different sizes and specializations

depending on the goals and needs of the current project. In fact, many US companies in many ways go over to the project-target principle of work. Jointly assuming the risks of an American company and a service provider by creating a joint "entrepreneurial partnership" is also an instrument for reducing risks. The search for the optimal ratio of outsourced functions and the functions left for the company becomes one of the most complex tasks of modern management. After all, despite the rapid growth of offshoring, companies still have to retain a part of each transferred function for the management of supplies, processes and overall coordination. [39]

Undoubtedly, the global economic crisis strongly influenced the development of trends in the field of offshoring. In this case, the impact of the crisis on the processes of offshoring is ambiguous. In connection with the need to drastically reduce costs, many US companies are forced to massively abandon long-term service and scientific and technical projects, including those located in other countries. This, in turn, causes a global decline in demand for outsourcing services and increased competition among providers of such services. As a result, providers are going to reduce prices (according to experts, prices have already decreased by 10-15%), and also review the terms of contracts already concluded for more flexible and more profitable for buyers (for example, payment schedules and lending conditions change, as well as more the payment for the work results is widely offered, and not for the number of hours worked). Opening companies own branches in countries such as India, in connection with the crisis is also much cheaper. In addition, in India, where one of the most acute problems was the high level of staff turnover (reaching up to 30%) and the frighteningly rapid growth of salaries of local staff, over the past few months, employee turnover fell to almost zero. In general, we can state that the outsourcing services market, which was a "seller's market" a year ago, has now become a "buyer's market".

On the other hand, in crisis times, cost reduction is critical, and offshoring offers quality services at lower prices. In addition, it has a number of advantages in terms of the flexibility of organizational forms and methods of payment and the range of services offered. Therefore, the demand for offshoring services, apparently, will remain stable or may even increase in some areas. Also, the appeal to the market of offshoring outsourcing services, especially in IT and R&D, can provide new opportunities for those companies that rely on a strategic breakthrough during the crisis. [43]

The situation in offshoring production capacities is somewhat different, where both demand and supply are less flexible, and global demand for industrial products is sharply reduced. In these circumstances, many US companies will prefer to reduce offshore production, especially given the increased risks, the costs of transporting finished goods, the not favorable dollar rate and the negative impact on the economy of the supplier country. In addition, dependence on foreign component manufacturers in the production of complex products in crisis conditions also contributes to the growing instability of companies.

Thus, the crisis affects the global outsourcing of goods and services in different ways. Global outsourcing of services is in demand during the crisis as one of the ways to reduce costs and in some cases, is one of the means of implementing a strategic breakthrough. It can be expected that the demand from US companies for offshoring services, especially in the areas of IT, business services and client services, will even increase and become one of the tools for many companies to overcome the crisis. Offshore production of goods is more vulnerable in crisis conditions, as it relies on material flows of goods, and therefore less flexible and dynamic. [39]

Value chain analysis allows the firm to understand which parts of its operations create value and which do not. "What should a firm do about primary and support activities in which its resources and capabilities are not a source of core competence and, hence, of competitive advantage? Outsourcing is one solution to consider" [31, p. 93].

Most companies create a major portion of their incremental value and draw their real competitive advantage from relatively few activities, which are generally services. In

addition, the authors add: "At each stage, technology has increased the relative power of services to the point where they dominate virtually all companies' value chains". Quinn *et al.* [43] describe what is happening in organizations:

The process begins by redefining what the company really does. Most companies primarily produce a chain of services and integrate these into a form most useful to certain customers. (...) The vast majority of their systems costs, value-added, profits, and competitive advantage grow out of services activities. (...) Value is added primarily by service activities.

The value chain can be explained and explored in many ways, depending on the focus of the analysis. Recently, some radical perspectives have been proposed: to fragment the value chain into as many parts as possible. This obviously has an impact on the chain. If one looks at the value chain with its building blocks, imagines a generic firm and thinks of it as a set of systems, then how many subsystems can a system be fragmented into? In which system(s) lie(s) its core competence? Supposing the core competence is in the operations link, one might ask: does the core competence involve the entire operations link or only a part (parts) of it? If the answer is parts of it, other operation link subsystems could be outsourced.

In addition, the value chain should be seen as a dynamic model. Moori and Zilber [in a survey with 100 companies found that there is a movement of activities among primary and support tasks and vice-versa as a fluidic perspective].

Another question is: where do innovations occur in this firm? Innovations can happen in any system of the chain, probably; therefore, the ensuing question would be: do innovations happen in all systems or in some subsystems of this system? If the answer is in some subsystems, the others can be outsourced. However, is this firm recognized for its innovations? If it is, subsystems can contain core competencies, if it is not, why not outsource to best-in-class companies around the world?

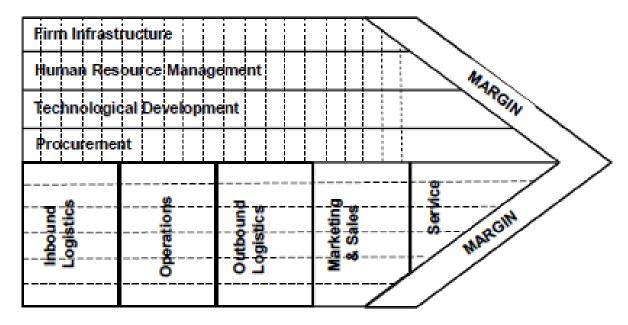


Figure 1. Fragmented Value Chain [31]

This is a simple way to think strategically about the value chain in connection with outsourcing (and offshoring), to identify possible opportunities and, of course, to identify the real core competencies and protect them.

Approximately 80% of world trade is coordinated by TNCs within their global production networks. Countries that are most integrated with global capital flows, as compared to their economies, tend to be active members of the GPS. TNCs coordinate GPS

through complex networks of interactions between suppliers and different management modes: from direct ownership of foreign affiliates to contractual relations and commercial transactions. [2]

Both partnerships based on non-equity capital modes of international production (NEMs) and international production arrangements and foreign branches can provide host countries the opportunity to integrate into global production and distribution chains.

One of the main benefits of NEMs is that they are flexible mechanisms for interacting with local companies that provide TNCs with inherent incentives to invest in maintaining the viability of their partners in terms of knowledge, technology and skills. On the other hand, creating a local affiliate through FDI(foreign direct investments), TNC signals its long-term commitment to the development of the host country. FDI attraction is also the best option for countries with limited production capacity. [10]

The place, country occupied in the global manufacturing system determines its competitiveness in the international division of labour. First of all, countries have to determine the real potential of developing competitive advantages, which will enable them to strategically state themselves in global manufacturing systems. In order to gain access to GPS, to benefit from participation in GPS and to realize the facilities provided by the modernization facilities, a structured approach is required. It involves determining the specific place of the GPS in general development strategies and industrial development policies, creating conditions for GPS growth as a result of creating and maintaining a favourable environment for investments and trade, and the creation of auxiliary infrastructure and capacity building for local firms. To reduce the risks associated with participation in the GPS, the reliable environmental, social and managerial framework is needed.

It should be noted that at present, the development of global production networks goes in two ways. First, the growth of international competition forces companies to specialize only in those areas of production that can provide them with the most competitive advantages. By concentrating resources on strategic operations (management, R & D, control), companies abandon less important functions in their understanding, transferring them to the competence of other companies that are the first in the cooperative relationship (this phenomenon was called "outsourcing"). As a result, the share of parent companies in the cost of finished products is reduced. Outsourcing is especially well traced in the automotive industry. The average share, for example, of large German concerns in the cost of cars produced does not exceed 20%, and on individual models ("Porsche Cayen") - 10%. [8] Most of the function is given to the competence of regional partners.

The second way is a partial transfer of production or service functions to other regions of the world (offshoring). Using spatial differences (natural, economic, social, humanitarian) in the regions of the world, international companies achieve the greatest efficiency of their activities, which is reflected in the growth of profits and reduction of expenses. In addition, not only factor costs are the main motive for internationalization of production - access to the regional market and technological know-how (knowledge) plays no less important role.

The geography of offshore businesses covers a large number of countries. These are such countries asthose of Southern, Southeast Asia, countries of Eastern Europe, the CIS and Latin America. The number of offshore companies operating in India and China is a leader. Then there are NIS countries of Southeast Asia (especially Philippines, Malaysia, Thailand).

In Eastern Europe, offshore services are concentrated in Hungary, Poland, Romania, Ukraine, Russia; in Latin America - in Costa Rica, Brazil, Uruguay. Most offshore countries specialize in relatively simple IT services and business services. These include, in particular, the back-office activity of Western TNCs, the organization of telephone call centres for customer service (Saii-centres), etc. The services employ the largest number of employees.

Global offshore gives developing countries a chance to overcome technological lag behind developed countries, modernize national economies. Research shows that in the countries where production and service centres of TNCs are located, processes of complication of the work carried out, growth of value added of manufactured goods and services are observed.

The source of competitive advantages for TNCs is the optimal configuration of the global production system. Creation of production abroad is carried out by TNCs through direct foreign investments, the scale of which has dramatically increased over the years.

Foreign subsidiaries and affiliates actively use the parent company's technology to develop their business. At the core of the transfer of production of TNCs abroad are the objective processes associated with the splitting and fragmentation of production and technological processes, when different stages of production can be allocated and transferred to places where the cost of their implementation will be lower.

Another advantage for TNCs in splitting production processes is the ability to concentrate on the most complex and expensive components (for example, on production services) and, by increasing product specialization, to reduce costs for obtaining specific knowledge, experience and know-how.

The motives for the active foreign production of TNCs are different. For example, Japanese automotive TNCs Toyota, Nissan and Honda built their plants in the US to be closer to the markets and to avoid restrictions imposed by the Japanese government on the export of cars from Japan to the United States.

Modern production systems of TNCs are very complex and capital intensive. So, for example, Intel's investment in upgrading three existing semiconductor plants in the states of Oregon, Arizona and New Mexico in the US to produce the latest microprocessor Westmere on a nanotechnology basis will be over \$ 7 billion for 2 years. The cost of a standard new microchip manufacturing plant varies between 1.0 and 3.0 billion dollars. The cost of a modern automobile plant is from 300 million dollars. up to 1 billion dollars. [21]

An important factor in improving the competitiveness of TNCs is the improvement of the production system. Implementation in the production departments of constant modernization and replacement of obsolete equipment, training of workers for more efficient operations, automation of production processes, which significantly improve the efficiency and competitiveness of firms.

In this sense, the well-known experience of Japanese manufacturing companies, many of which use just-in-time production and inventory management systems, are constantly investing in new technologies.

Industrial TNCs in their global production activities are guided by the experience of organizing the production of the most successful companies. The most competitive in the world (and not only in the automotive industry) is Toyota's system of production.

This system, known as "thin production", involves: production precisely in time; minimum stock levels and efficient use of resources; geographical concentration of assemblies and manufacturing of components; quick adjustment of equipment; rationalization of production processes and products, standardization of labor; training of workers to perform various operations; wide introduction of subcontracting relations; selective use of automatic machines; continuous process of implementing improvements; clear organization of group work.

Focusing on the availability of cheap labour and raw materials in the regions, most companies are interested in improving the skills of enterprise workers. With the growth of the skills of employees, the quality of manufactured products is growing, the optimization of labour processes is noted. Over time, the level of work in offshore companies is complicated. This is due to the fact that growing sintering costs compel companies to switch to higher value-added products. Only in this case, the company's products will be competitive.

**Conclusion.** Consequently, we can conclude that global production networks are one of the important factors in the innovative transformation of countries and regions. They are the channel on which the transfer of global knowledge and technical know-how to regional structures. Due to this part of the regions of the former periphery could in a short time become

a new innovative region of the world, with a specialization in the sector of highly-qualified services, production of high-tech products, generation of scientific knowledge.

Global manufacturing networks include more and more companies. According to rough estimates, in early 2014 there were more than 70 thousand parent companies in the world (in 1990 - 7 thousand) and 870 thousand branches of TNCs located all over the globe. Communication, logistics networks of companies dense ring embraced the whole world. Their configuration is a consequence of the financial investments of companies abroad, their management, the activity of states in marketing their regions.

Networks change the role of countries in the international division of labour. In recent years, there has been an increase in the share of countries in world industrial production. Functionally, developing countries increasingly deviate from the category of simple suppliers of raw materials and agrarian products, transforming into industrial and service departments of large international companies. In some of them there are processes of formation of innovative "islands" of independent science-intensive activity. Although in general R&D, strategic management, management and control of the logistics chain remains the prerogative of the industrialized countries.

Synergies should also be sought through combining into a single whole international investment and trade agreements. Regional trade and investment agreements are of particular importance from the point of view of production systems, since regional liberalization efforts form regional production systems and involve the allocation of value added.

The global division of labour in the production network is a strategic factor in enhancing the company's competitiveness. By distributing production and service functions on a planetary scale, transnational companies reduce their own costs and financial risks by sharing them with other companies.

Cheap labour and low factor costs in developing countries contribute to the transfer of production and service operations. The parent company, which has been saved by this means, aims at creating and developing new products and implementing marketing strategies. Thus, in the formation of the final value of production, the share of R&D, advertising, logistics, located on the territory of developed countries increases, and simultaneously, the share of direct production, localized in developing countries, is reduced.

At the company level, the ability of local firms to increase production and transition to higher value-added production within the GPS depends on the nature of the GPS in which they operate, the systems of management and hierarchy within the system, their capability to absorb funds, as well as business and institutional conditions the economy. At the national level, the achievement of progress in the GPS implies not only the intensification of participation in the GPS, but also the creation of greater domestic value added. At the same time, it involves the gradual expansion of participation in the GPS using increasingly advanced technologies, with the transition from export of resources (raw material exports) to exports of products (technological and industrial exports) and services increasingly complex.

Production processes are increasingly fragmented geographically, and the performance of production tasks is spread across countries. As multinational production progresses, an intriguing phenomenon arises which is referred to as countries and firms "moving up the global value chain."

The concept of the GVC originates from Porter, being further developed by other researches and theories. Among the latest are Contract theory, theory of firms, new trade theory, and other. Porter's value chain concept is concerned primarily with how firm strategies can be renovated by shifting the focus to the configuration of business activities.

The geographical scope of firms' activities should be studied to analyze the GVC characteristics within GPS. Firms should disperse their activities globally and choose the best locations for them to obtain a competitive advantage. Configuring a global value chain may also imply managing heterogeneous languages, cultures, regulations, etc. It is important that

firms have a global orientation. One should remember that there are firms that are born with a global mandate and configure a global chain from the very beginning.

One of the most commonly misunderstood aspects of the global supply chain is the difference between off sourcing and outsourcing. Outsourcing is about moving internal operations to a third-party. This can come in the form of selling physical plant to a supplier, to buy back goods or services, or shifting an entire business division to a third-party and again buying the service back. The basic philosophy being: To move transactional activities to the experts in order to give an organization the capacity to focus on its expertise. Unlike outsourcing, offshoring is primarily a geographic activity. Offshoring takes advantage of these cost differentials by relocating factories from costly countries to the cheaper economies in order to sell the goods back at a hefty discount (and profit). Alongside technological improvements, it has been the decades of productive offshoring that has lowered the costs of consumer goods.

Synergies should also be sought through combining into a single whole international investment and trade agreements. Regional trade and investment agreements are of particular importance from the point of view of production systems, since regional liberalization efforts form regional production systems.

Innovation activity at the same time is becoming global, stopping being a monopoly of industrially developed countries, which is particularly relevant for developing countries and countries with economies in transition, who see innovative development of the bases for long-term, stable economic growth, modernization of the economy, overcoming technological lag from industrially developed countries.

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