

UDC 332.1:339.97

JEL: O33, O47, O57, R11

Assessment of the impact of the development of global value chains on the dynamics of transformation of the national economies of the countries of the world

A.G. Shelomentsev^a, K.S. Goncharova^b, N.N. Masyuk^{*c}

^a*Yugra State University (UGU), Khanty-Mansiysk, Russia*

^b*Institute of Economics Ural Branch of the Russian Academy of Sciences, Yekaterinburg, Russia;*

^{*c}*Vladivostok State University, Vladivostok, Russia; masyukn@gmail.com*

ABSTRACT

Relevance. The key trend of recent decades, embedded in the transformation of the national economies of the countries of the world, has been the active deployment of global value chains and the expansion of the activities of transnational corporations (TNCs). At the same time, despite the scale of these phenomena, they remain insufficiently studied both on the scale of individual countries and at the global level.

Research Objectives. The purpose of this article is to illustrate the trends in the development of global value chains in the context of their impact on the dynamics of the development of national economies of the countries of the world.

Method. To achieve the goal of the study, the authors used a set of methods that complement each other: descriptive and comparative analysis, the method of generalization and grouping, as well as the cartographic method.

Results. This paper presents the results of a generalization of theoretical approaches and an empirical analysis of the relationship between the processes of formation and active expansion of global value chains and the dynamics of transformations in the national economies of the countries of the world in the aspect of the activities of foreign multinational companies represented in the industries - chemistry and pharmaceuticals, electronics, electrical engineering, automotive industry.

Conclusion. The paper draws a number of conclusions about the presence in the sectors under consideration of a global trend of a gradual reduction in the share of domestic producers.

Keywords: global value chains, transformation, national economies.

ОЦЕНКА ВЛИЯНИЯ РАЗВИТИЯ ГЛОБАЛЬНЫХ ЦЕПОЧЕК СОЗДАНИЯ СТОИМОСТИ НА ДИНАМИКУ ТРАНСФОРМАЦИИ НАЦИОНАЛЬНЫХ ЭКОНОМИК СТРАН МИРА

А.Г. Шеломенцев^а, К.С. Гончарова^б, Н.Н. Масюк^{*с}

^а Югорский государственный университет (ЮГУ), Ханты-Мансийск, Россия

^б Институт экономики УроРАН, Екатеринбург, Россия

^{*с} Владивостокский государственный университет, Владивосток, Россия masyukn@gmail.com

АННОТАЦИЯ

Актуальность. Ключевой тенденцией последних десятилетий, заложенной в трансформации национальных экономик стран мира, стало активное развертывание глобальных цепочек добавленной стоимости и расширение деятельности транснациональных корпораций (ТНК). В то же время, несмотря на масштабность этих явлений, они остаются недостаточно изученными как в масштабах отдельных стран, так и на глобальном уровне.

Цели исследования. Цель данной статьи - проиллюстрировать тенденции развития глобальных цепочек добавленной стоимости в контексте их влияния на динамику развития национальных экономик стран мира.

Метод. Для достижения цели исследования авторы использовали комплекс методов, дополняющих друг друга: описательный и сравнительный анализ, метод обобщения и группировки, а также картографический метод. Оригинальность авторского методологического подхода заключается в комплексности подхода к изучению влияния динамики развития системы глобальных цепочек стоимости на процессы трансформации национальных экономик стран мира, на стороны, путем выявления ключевых этапов работы, с другой стороны, путем использования как количественных, так и качественных методов анализа.

Полученные результаты. Обобщения теоретических подходов и эмпирический анализ взаимосвязи процессов формирования и активного расширения глобальных цепочек добавленной стоимости и динамики трансформации национальных экономик стран мира в аспекте деятельности зарубежных транснациональных компаний, представленных в представлении отрасли химии и фармацевтики, электроники, электротехники, автомобилестроения. Делаются

выводы, во-первых, о наличии в рассматриваемых отраслях общемировой тенденции постепенного сокращения доли отечественных производителей; во-вторых, что доля иностранных компаний в общем объеме выпускаемой продукции в наибольшей степени приходится на сферу автомобилестроения. В-третьих, значительный вклад в развитие ГЦС вносит ряд государств Западной Европы, Ближнего Востока и Азиатско-Тихоокеанского региона за счет активной экспансии национальных ТНК.

Выводы. Международные компании в этих странах постепенно выстраивают глобальную социально-экономическую систему - транснациональный корпоративный капитализм, который, по мнению авторов, должен стать основой для дальнейших исследований.

INTRODUCTION

It is generally accepted that the particon of countries in international trade cooperation is the key to their economic growth, based on the reduction of unemployment and poverty, the growth of wages, the inflow of foreign investment (FDI), and innovation. Thus, according to World Bank experts, Russia's long-term economic prospects are largely related precisely to the level of its participation in global value chains (GVCs) (Europe and Central Asia Economic Update the World Bank, 2021).

However, often the benefits described in the documents of public organizations are declarative in nature and do not find confirmation in the empirical studies of scientists. Thus, transnational companies entering the national economy, the main organizers and participants of the GVCs, adhere to the average level of wages in the national industry market and leave their technological developments in their home countries, which are mainly the developed countries of Europe and North America. At the same time, the redistribution of funds carried out within the framework of GVCs contributes to an increase in the level of global inequality, the reduction of which is declared by the UN as one of the goals in the field of sustainable development.

At the same time, there is no doubt that when foreign companies enter new countries for themselves, they bring their own paradigms of existence and development there. These paradigms are based on the corporate culture of TNCs and often include, among other things, a vision of the company's interaction with the outside world and ways to transform it. Thus, TNCs implement their models of the development of societies in the host countries. Thus, the hypothesis tested in this study is as follows: the pace of transformation of the national economies of the countries of the world is largely determined by the dynamics of the development of global value

chains in the process of active economic and social activities of transnational corporations.

Accordingly, the purpose of our study is an empirical assessment of the relationship between the development of GVCs and the dynamics of the transformation of the national economies of the countries of the world. The scientific significance of the results of the study lies in clarifying the theoretical aspects and analytical substantiation of the relationship between the processes of development of global value chains and the adaptation of national economies to them.

This study is structured in 7 sections.

Thus, the section "Materials and Methods" reveals the research methodology based on the complex application of traditional and modern methods of analysis for economic research. In addition, this section describes the information base that serves as the basis for a quantitative assessment of the impact of the phenomena and processes analyzed in the work.

At the same time, the originality of the author's methodological approach lies in the complexity of the approach to studying the influence of the dynamics of the development of the system of global value chains on the processes of transformation of the national economies of the countries of the world by, on the one hand, determining the key stages of work, on the other hand, using both quantitative and qualitative methods analysis.

Sections 3 and 4 present the theoretical and methodological foundations of the study, namely: Section 3 describes the main approaches to the analysis of the concept of global value chains (GVCs), and Section 4 describes approaches to assessing the impact of transnational companies (TNCs) on the national economies of the countries of the world. Thus, in these sections (3 and 4) the following conclusions are made: firstly, on the interdependence of the processes of development of GVCs and the activities of TNCs; secondly, about the key role of TNCs in the national economies of the countries of the world; thirdly, insufficient knowledge of the aspects of the dependence of the processes of transformation of national economies on the development of GVCs.

Section 5 presents a description of the results of assessing the impact of the development of the system of global value chains on the dynamics of the transformation of the national economies of the countries of the world.

Section 6 - "Discussion" gives an interpretation of the results obtained in the context, on the one hand, of the hypothesis formulated earlier, on the

other hand, the theoretical and methodological approach defined in sections 3 and 4. In addition, the section includes information about the limitations of this work, as well as future directions of research.

Section 7 - "Conclusions" formulates the main results of the study.

Materials and methods

The study was carried out in stages. So, at the first stage, based on the results of the content analysis of scientific articles published in Russian and foreign libraries, theoretical and methodological approaches to understanding the nature of, on the one hand, phenomena are global value chains, on the other hand, activities in national economies transnational corporations.

At the second stage, based on the analysis and generalization of studies of domestic and foreign scientists, as well as international organizations, we have established a list of industries that are most included in the GVCs. In this regard, we have selected companies operating in the following types of economic activities: cars, trailers and semi-trailers; electrical equipment; chemical and pharmaceutical products; computer, electronic and optical products. According to the report prepared by the World Bank experts, these activities are the most actively involved in GVCs. At the same time, TNCs operating in these industries account for about 22% of world production and about 70% of total trade (Qiang, Liu, Paganini, & Steenbergen, 2020).

At the third stage, based on the statistical data downloaded from the OECD website, the following were determined (in the context of each selected type of economic activity): firstly, the total global volume of products produced in 58 analyzed countries; secondly, the total intra-country output (in a single country); thirdly, the volumes of products and their shares in the total domestic volume produced by domestic companies; fourthly, the volumes of products and their shares in the total domestic volume produced by foreign companies.

At the fourth stage, groups of countries were identified: with a low degree of participation in the production of foreign companies (less than 50%) - a low degree of participation in GVCs in all sectors analyzed; with a high degree of participation in the production of foreign companies (more than 50%) - a high degree of participation in the GVC in one or more of the sectors analyzed; with a high degree of participation in the production of foreign companies (more than 50%) - a high degree of participation in GVCs in all sectors analyzed.

At the fifth stage, we carried out a retrospective analysis of the state and development of the sectors under consideration in each group of countries. At the sixth stage, based on the study, the main conclusions were made about the relationship and impact of global value chains on the dynamics of the transformation of the national economies of the countries of the world.

The main research methods were: descriptive (descriptive) analysis, which allows to analyze the main trends in the dynamics of the processes and phenomena considered in the study; method of comparative (comparative) analysis - for conducting a comprehensive assessment of complex systems of the same type in nature (countries, regions, industries); the method of generalization and grouping, as well as the cartographic method - for a visual display of reasoning and conclusions.

The information base of the study was the data of the AMNE analytical database (www.oecd.org) - multinational enterprises and global value chains, for the period available for analysis on the official website of the OECD for the year - 2005 - 2016. which aims to clearly define the role and activities of multinational corporations in GVCs. The database distinguishes between three types of firms: foreign affiliates (firms with at least 50% foreign participation), domestic multinational enterprises (domestic firms with foreign affiliates), and domestic firms not involved in international investment, and contains data for 36 countries – OECD members (the database does not contain data for the Republic of Colombia, which became the 37th member of the organization in 2020) and 22 countries outside the organization (Argentina, Brazil, Bulgaria, China, Colombia, Costa Rica, Croatia, Cyprus, India, Indonesia, Malaysia, Malta, Morocco, Philippines, Romania, Russian Federation, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, Vietnam). The data set covers 34 industries according to the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4). In addition, data from cross-country input-output (ICIO) tables were used for analysis, where the block diagonal of the matrix indicates the output of a good or service by a domestic firm, while the off-diagonal elements correspond to the output of firms owned by foreign owners (where the source country is the country in a table column). Values were indicated in basic prices.

Theoretical and methodological approaches to the study of the phenomenon of global value chains

The theoretical and methodological basis of the concept of global value chains (GVCs) is traditionally considered to be the theories of absolute (A. Smith) and comparative (D. Ricardo) advantages developed at the turn of the 18th-19th centuries, described in (Kaplinsky, 2013; Gudkova, 2020). At the

same time, as noted in the study of the World Bank, a key feature of the GVC paradigm is "the diversity of its intellectual origins" (Measuring...In World Bank Group, 2021).

So, to date, there are three main approaches to the study of GVCs.

First, the production approach that developed by the end of the 70s. XX century, based on the world-system theory, which explores the issues of social macroevolution - global social development. A significant contribution to this theory was made by I. Wallerstein, according to whom, by 2025, the expansion of the "world economy" is expected, the basis of which will be the monopolization of the leading industries, accompanied by the processes of geographical expansion and de-uralization. At the same time, the first of these processes (geographical expansion) has actually already ended with the formation in the period 1945-1973. production chains (Wallerstein, 2001).

As a number of researchers note (Kukushkina, 2016); Pisareva, & Volgin, 2018), the term "global commodity chains (GCC)" was first used by I. Wallerstein and T. Hopkins. Within the framework of the world-systems theory, the GTS implies a global hierarchical (main and peripheral economies) division of labor and related incomes (Kaplinsky, 2013). At the same time, according to T. J. Sturgeon, in their study, I. Wallerstein and T. Hopkins emphasized "the power of the state in the formation of global production systems, carried out to a large extent in the form of tariffs and local content rules, affected at the point of intersection of goods across borders" (Sturgeon, 2008, p. 5).

In the 1980s, the concept of "global commodity chains" was transformed into the theory of "value chains (value chain, value-added chain)". The new term was first introduced by F. Gluck and R. Bueron, described in (Dementyev, Novikova, & Ustyuzhanina, 2016) (the first half of the 1980s), a little later the understanding of this term was refined by M. Porter (the second half of the 1980s), who considered chains value creation in the context of competitive advantages, which consist in a set of operations and activities of an individual enterprise performed by management and personnel in order to create value for their customers (Porter, 1985), this approach, according to T. A. Meshkova and E. Ya. Moiseichev, was close "to the concept of "the value stream" developed by American specialists in the field of management J. Womack and D. Jones" (Meshkova, & Moiseichev, 2015). Later, according to V. E. Dementiev, E. S. Novikova and E. V. Ustyuzhanin, the term "value creation chains" "began to be used to analyze stable cooperative ties between companies, and then moved to

the cross-country level - global chains appeared. value creation (GVC)” (Dementyev, Novikova, Ustyuzhanina, 2016, p.18) - GVCs.

In the 1990s the description and analysis of GCCs were presented simultaneously in several theoretical concepts. First, in the theory of fragmentation of production (international production fragmentation trade theory), proposed by R. W. Jones and H. Kierzkowski, who considered the phenomenon of fragmentation of the production process, on the one hand, as an intra-company transition to a locally fragmented (in different regions) production process with production blocks related service links, on the other hand, as the concept of the functioning of the global market, which consists in the use of “several international locations to accommodate the production blocks that make up a given production process”, which is “facilitated by the possible existence of increasing returns within the production blocks” (Jones, & Kierzkowski, 1990, p. 31-32).

Secondly, in the concept of “great unbundling” by R. Baldwin, developed within the framework of the high development theory. The author identifies two periods of revolutionary transformations in industry and trade, which had a significant impact on the models and mechanisms for the production and supply of goods and services to end consumers: the first - before 1985 (the times of the industrial revolution) - the separation of producers from consumers (factories from households (Dementyev, Novikova, Ustyuzhanina, 2016); the second - from 1985 to the end of the 1990s, associated with the active development of information technology (Baldwin, 2022).

The importance of information technologies for the segmentation of production within individual countries, and, accordingly, the development of GVCs is emphasized both in the works of Russian scientists (Kovalenko, Temnova, & Masyuk, 2020) and in the materials of international organizations. This is how a World Bank study talks about building theory: “Manufacturing processes can now be “cut” into several production segments, each time we solve tasks such as design, purchase of parts, assembly and receipt. These segments are moving, often across the border of South America, to places where tasks can be most effectively implemented” (Measuring... In: World Bank Group, 2021).

The next approach to the study of GVCs is a conceptual macroeconomic approach, which is a search and description of formalized models of economic integration in modern conditions. There are two main participants in its development. The first since presented in the 70s -80s - related. gg. of the twentieth century by V. Norman and P. Krugman of the

New Theory of Trade (New Trade Theory (NTT)), the second - with the proposed in the late 1990s. M. J. Melitz (Melitz, 2003) and P. Antras (Antràs, 2003) New-New Trade Theory (“new” New Trade Theory (NNTT)). At the same time, based on the New Trade Theory, an analysis of international trade models under conditions of imperfect competition is laid down, which give “a plausible predominance of intra-industry trade between countries with similar technologies and resources” (Measuring...In World Bank Group, 2021). In turn, within the framework of the future-new economic evolution, a comparative assessment of the data of export-oriented and non-export companies has developed, which further develops into the process of developing an endogenous selection of firms entering industry markets (ibid.).

The third approach to the analysis of GVCs is cost. This approach is found in the production aspect of M. Porter, however, here the main attention is concentrated - on his increase in the share of profit as he moves along the so-called "smile line" ("smile curve"). The main theory is the theory of the formation of the high cost of chains by J. Henderson (end of the 20th century) (Henderson, Dicken, Hess, Coe, & Wai-Chung, 2002), according to which, according to A. V. Streltsov, G. I. Yakovlev and O. A. cost in the country”, as well as the value imported “together with imported components in the remaining final product” (Streltsov, Yakovlev, & Bulavko, 2019, p. 36). The second key theory in the analysis of GVCs within the framework of the cost approach is the theory of creating a value stream (value stream; early 2000s), which has now become the basis for building a modern business architecture. In this theory, GVC arises from the point of view of the occurrence of consequences that arise in connection with the formation of the value of a product or service, the emergence from the alleged generated request and the completion of the already created and presented development of the activity.

In accordance with the approaches described above, complex definitions of value chains can be distinguished. Firstly, from the point of view of the production approach, GVCs are, on the one hand, a set of interrelated management decisions of the company's management, including those made within the framework of holding structures, aimed at coordinating production and marketing activities, namely the decision on the place or locations of production (including the availability of a resource base), its staffing, marketing strategy, etc. (Belousov, 2016; Kondrat'ev, Popov, & Kedrova, 2020; Smirnov, & Lukyanov, 2019; Fengru, & Guitang, 2019; Buckley, Craig, & Mudambi, 2019; Chu, Park, & Kremera, 2020); on the other hand, the logistics system, which consists in the targeted fragmentation (often global) of production stages in order to minimize the cost of

production (but not the final cost), by creating complex vertically integrated structures, in the most common form - transnational corporations – TNCs (Kukushkina, 2016; Pisareva, & Volgin, 2018; Lukyanov, & Drapkin, 2017; Shepherd, & Stone, 2012).

Secondly, within the framework of the conceptual macroeconomic approach, the GVC is a formalized model or mechanism for the functioning of modern macroeconomics, describing the process of global redistribution of funds and production results, mainly between developed and developing countries (Meshkova, & Moiseichev, 2015; Fengru, & Guitang, 2019; Sidorova, 2018; Bush, Oosterveer, Bailey, & Mol, 2015; Hertwich, 2020; Banacloche, Cadarso, & Monsalve, 2020; Fontagne, & Santoni, 2021; Samsonov, & Bocharov, 2018).

Thirdly, in the context of the cost approach, GVCs are considered as a mechanism for creating, incrementing and distributing the cost of a product or service, which is formed at various stages of its production and sale (Meshkova, & Moiseichev, 2015; Streltsov, Yakovlev, & Bulavko, 2019; Samsonov, & Bocharov, 2018). In addition, within the framework of each of the above approaches, the authors highlight the advantages and disadvantages of GVCs.

Thus, the following advantages of participation of the country and the business registered on its territory in the GVC are in the focus of attention in the production approach: gaining access to international markets and expanding markets for products and/or services; improving the quality of domestic products and services and, as a result, increasing the level of their competitiveness due to the forced specialization of the country; modernization of the industrial complex, access to innovative technologies of foreign companies; human capital growth, including through technological education and accelerating the learning curve; obtaining international experience in the social and environmental spheres (Wallerstein, 2001; Dementyev, Novikova, Ustyuzhanina, 2016; Meshkova, & Moiseichev, 2015; Yan, Wang, Zheng, & Zhao, 2020).

In the aspect of production process management, participation in GVCs allows organizations operating in developing countries to: increase the availability and volume of information for decision-making, increase labor productivity, and also identify new areas of activity (Shepherd, & Stone, 2012). In the field of human development, participation in the GVC provides the following opportunities: growth in employment and wages (due to the entry of new international companies into the country's market), and an increase in labor productivity (Meshkova, & Moiseichev, 2015; Buckley,

Craig, & Mudambi, 2019; Reijnders, & De Vries, 2018). In the field of logistics, the advantage of the participation of the country and business in GVCs is: increasing the efficiency of resource allocation and their cross-border complementarity (Smirnov, & Lukyanov, 2019; Shepherd, & Stone, 2012).

At the same time, within the framework of the production approach, the literature also notes the negative aspects of participation in GVCs of countries and organizations operating on their territory: an increase in the level of differentiation of the incomes of the population of countries and regions due to the uneven distribution of value added and its predominant concentration within TNCs; decrease in innovative activity and technological dependence of developing countries - GVC participants, occurring as a result of the unwillingness of TNCs to create an excessively competitive environment; the risks of the company falling into the trap of a single supplier of resources, semi-finished products, goods or services, as well as the risks of pressure and lobbying of interests from the main coordinators of GVCs, for example, the top management of TNCs; withdrawal from local markets of small enterprises not connected to GVCs (Dementyev, Novikova, Ustyuzhanina, 2016; Gusev, Shirov, Polzikov, & Yantovsky, 2018; German, Bonanno, Foster, & Cotula, 2020).

An empirical study conducted by V.G. Varnavsky on the basis of the TiVA (The development of Trade in Value-Added database access) database showed that participation in the GVC "does not lead to a qualitative transformation of the business" (Varnavskij, 2018). In addition, according to the results of a number of studies, from the point of view of environmental development, the participation of developing countries in GVCs can lead to such negative consequences as an increase, firstly, in carbon emissions (Liu, & Zhao, 2021), and secondly, in the level of environmental pollution (Wang, He, & Song, M. (2021).

With regard to the production and management aspect, domestic researchers note the following disadvantages of participation in GVCs: an increase in transaction costs, namely, the costs of control by TNCs in relation to subsidiaries, a decrease in product quality due to the involvement of low-skilled personnel in developing countries. In addition, a study by L. A. German, A. M. Bonanno, L. C. Foster, L. Cotula notes that "for smallholders, contractualized forms of inclusion in value chains often involve significant risks: loss of habitual livelihoods, limited freedom of choice regarding land redistribution and labor force for more profitable or less demanding activities that bear the brunt of market and climate risks, as

well as unfavorable contract terms and debt” (German, Bonanno, Foster, & Cotula, 2020, p.15).

In terms of labor and employment, the negative consequences of the participation of countries and businesses in GVCs include: job cuts and increased unemployment; if there is still an increase in employment, it is often accompanied by instability and deterioration of working conditions; activation of the process of deskilling the workforce; in a number of developing countries - Brazil, India, Indonesia, China and South Africa, the results of an empirical study did not confirm the thesis that participation in GVCs contributes to an increase in wages (Kukushkina, 2016; Meshkova, & Moiseichev, 2015; Lukyanov, & Drapkin, 2017; Machacek, & Hess, 2019).

In the conceptual macroeconomic approach, for an individual country, the following advantages of its participation in GVCs are determined: improving the conditions for competition and the business climate; attracting foreign direct investment, contributing to the development, on the one hand, of education, science and technology, on the other, social and industrial infrastructure; increasing the efficiency and stabilizing the growth of the national economy, including through its resource optimization, which consists in concentrating the country's available resources on the production of a limited set of goods and/or services, as well as due to an increase in the level of predictability of the development of trade agreements (Meshkova, & Moiseichev, 2015; Smirnov, & Lukyanov, 2019); Lukyanov, & Drapkin, (2017); Fontagne, & Santoni, 2021). According to the experts of the World Bank Group, the country's participation in GVCs will contribute to the diversification of exports of developing countries and the expansion of their participation in international trade.

The disadvantages of countries' participation in GVCs within the framework of the conceptual macroeconomic approach include: a reduction in the share of national production in the export of an individual country and, as a result, a reduction in the amount of profit remaining in the country; dependence of the country's domestic market on imports, including imports of technologies developed in developed countries; high vulnerability of the country from international market fluctuations (Meshkova, & Moiseichev, 2015; Gusev, Shirov, Polzikov, & Yantovsky, 2018).

According to V. E. Dementiev and his colleagues, the positive side of participation in GVCs, within the framework of the cost approach, is that significant financial flows pass through the countries and business

participants of the GVCs, which “nourish all participants” (Dementyev, Novikova, Ustyuzhanina, 2016, p. 19).

Thus, we have identified three main approaches to the evolution and understanding of the phenomenon of global value chains. Within each of the approaches, the authors highlight the advantages and disadvantages of the participation of countries and businesses in GVCs. At the same time, it should be noted that the advantages of participation in GVCs determined in the literature mainly relate to developed countries, since it is on their territory that the parent companies and, accordingly, the top management of TNCs, the main organizers and participants of the entire GVC, are located. It is on the territory of developed countries that all intellectual, creative production activities are concentrated, which have the largest increase in the value of goods and / or services, while routine and low-skilled work is transferred to developing countries. This aspect is also true for the field of industrial ecology - the least environmentally friendly production is transferred from developed countries to developing countries, and in this case, the introduction, for example, of the widely discussed carbon tax in the EU (EU carbon border tax) can be a heavy burden on the business of developing countries.

At the same time, most researchers (Gudkova, 2020; Kukushkina, 2016; Konina, 2016) associate the development of GVCs with the activities of diversified TNCs that control up to 90% of the world economy (Samsonov, & Bocharov, 2018); Varnavskij, 2018). At the same time, this control concerns not only the economic, but also the political spheres, according to C. Fengru and L. Guitang, “the global expansion of TNCs has contributed to the formation of global production networks (GPNs). TNCs distribute and configure various parts and functions of value chains according to the advantages of different countries and regions” and further “GPNs from the point of view of TNCs play an important role in clarifying the main characteristics of GPNs and how they work” (Varnavskij, 2018).

Theoretical and methodological approaches to the study of TNCs

Thus, in most scientific papers, the dynamics of the development of GVCs is directly associated with the activities of TNCs. At the same time, in terms of the formation of the latter, as well as their impact on national economies, three main periods can be distinguished.

The first period is associated with the emergence of TNCs at the end of the 19th century in Western countries (Smorgunov, 2009; Lobacheva, 2011), primarily the United States. The second period was characterized by its active development in the countries of the world and is associated with those taking place in the second half of the 40s, the end of the 80s. gg. 20th century

globalization processes. The third period, which began at the end of the 20th century, continues to the present and is associated with the harmonization of the activities of TNCs with the national socio-economic systems of countries, as well as the scientific analysis of this interaction.

The emergence of multinational companies in modern studies is dated in different ways. The earliest period is the period of the late XIX, early XX centuries (Gordon, 2005; Timberlake, 1986; Kartashev, 2014), which corresponds to the growth and strengthening of the power of the monopoly and trusts in the United States, as well as the adoption, in connection with this, of a package of bills, including the Sherman Act (Shpakovskij, & Potapchuk, 2017).

The next most frequently identified period by researchers is the second half of the 1940s (Okumura, 1986) until, according to various estimates, the end of 1970–1980. (Lobacheva, 2011; Kurochkina, 2016; Zhiltsov, 2009). This period is associated with the development of the phenomenon of corporate capitalism in terms of events in world history: firstly, with the restoration, after the defeat in World War II, of the Japanese economy, in which Japanese corporations played the main role; secondly, with the creation of international financial and trade organizations - the World Bank, the International Monetary Fund, the General Agreement on Tariffs and Trade (GATT) and, then, the World Trade Organization (1995), which, in the process of their transformation, among other things, made, in the words of M. J. Gordon, international capital mobility "a powerful tool for subordinating national governments to corporate capitalism" (Gordon, 2005, p. 168 – 169).

The beginning of the third period, associated with the current state of the activities of TNCs in the countries of the world, is considered to be the end of the 20th century. - the beginning of the XXI century. (Baynev, 2017; Sverdlikova, & Tagibova, 2017; Makeev, 2018). This period is determined primarily by the collapse of the USSR, in connection with which, on the one hand, processes took place in the countries of the former Soviet bloc, firstly, a change in the economic paradigm, and secondly, active entry (with the corresponding acceptance of conditions) in 1992-1993 gg. to international organizations, including those belonging to the World Bank Group - the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Settlement Center investment disputes (ICSID), on the other hand, foreign transnational companies came to the markets that opened in these countries. In addition, the period is also characterized by the growing interest of scientists from different countries in assessing the impact of TNCs on national socio-cultural and economic systems - only on the ScienceDirect

website (www.sciencedirect.com) over the past ten years (from 2010 to 2020) the number of publications on this topic increased by more than 2.5 times.

When characterizing the activities of TNCs in national economic systems, the following aspects are traditionally distinguished: socio-economic, political-economic, socio-cultural and evolutionary. Most researchers consider it as a socio-economic phenomenon of modern national development (Krasavin, 2012; Belyanova, 2010), characterized by the active monopolization of markets by corporations, the expansion of the range of their non-productive activities, including in the social sphere, traditionally in the area of state policy (Shpakovskij, & Potapchuk, 2017; Gordon, 2005; Livingston, 1986; Tinus, 2020).

At the same time, financial institutions play a key role here (Livingston, 1986). In the context of the political and economic system, the deployment of the activities of TNCs is defined as a model for the development of the country, based on the active participation of business in the activities of national governments (Smorgunov, 2009; Krasavin, 2012), or the actual subordination of the state to big business (Maksutov, 1999). The activity of TNCs, as a socio-cultural phenomenon (Tinus, 2020; Ogarkov, 2018), Gromov, 2004), implies a reflexive response of society, on the one hand, to the consequences of technological progress, and on the other hand, to values imposed by corporations through advertising and the formation of a consumer culture. For example, in a study by K. V. Kurochkina, it was found that the current increase in ruralization observed in Japan can be largely explained by the rethinking of the values of capitalist society by the country's youth (Kurochkina, 2016). Finally, the activity of TNCs, as a comprehensive description of the system of modern development of society, is a variant of reflecting the development of all fundamental spheres of society's life - politics, economics, culture under the influence of the actual domination of the corporation (Kartashev, 2014; Okumura, 1986; Kurochkina, 2016; Yakobson, 2011).

In the aspect of the evolution of social relations, the activation of the activities of TNCs is defined by scientists as a stage in the development of capitalism, after which, according to S.S. Gubanov, the stage of state capitalism will follow, which is the threshold of "a post-capitalist system, in which the share of non-market incomes and centralized forms of distribution of material goods in society will increase" (Belyanova, 2010, p. 75 – 76).

The review allows us to conclude that the description and understanding of the nature of the TNC phenomenon, despite its more than a century of history, is still largely debatable. At the same time, in our opinion, in a

broad sense, the activities of large diversified organizations in the modern world play a leading role, which may be due to the stage of evolution of social development (most developed countries can be cited as examples). Thus, we can conclude that at present, the activity of TNCs is expressed, on the one hand (epistemological), in the deployment of GVCs, on the other (ontological) - in the formation of development models on the territory of individual countries - transnational corporate capitalism. Below we consider the level of participation of transnational companies in the production of goods and services in individual countries.

Results

Evaluation of the analysis of the development of the high value chain system in the dynamics of the transformation of the national economy of the countries of the world

According to the results of the analysis carried out on the basis of data from the analytical AMNE (analytical database AMNE), the massive contribution to the production of goods for the analyzed activities as a result of the domestic subsequent fourteen countries (Fig. 1), of which six countries observed in Europe - Germany, Greece, Denmark, Italy, France, Cyprus; one Middle Eastern state, Israel; seven countries - Asia-Pacific - USA, Russian Federation, Indonesia, India, China, Korea, Japan. In connection with the delay, more increased production of sexual products (according to the intended type of activity) falls on domestic enterprises, therefore, it is possible to reduce the level of risk of infection of the GVC countries. At the same time, a significant contribution to the total (global) volume of production in 2016 was only a part of consumption - China (from 20% (cars) to 46% (electrical equipment)), the USA (from 7% (electrical equipment) to 19% (cars)), Japan (from 6% (chemistry, pharmaceuticals and electronics) to 13% (cars)), Germany (from 3% (electronics) to 12% (cars)) and Korea (from 3% (chemistry, pharmaceuticals) up to 8% (electronics)), India (from 1% (electronics)) to 4% (chemistry, pharmaceuticals)). The remaining countries (Greece, Denmark, Indonesia, Italy, Cyprus, Russia, France) do not affect all foreign production on their own territory, and do not limit themselves to the distribution of products considered in full (due to the large volume of possible productions), due to which they become dependent from the import of finished products.

Less than 50% of the share of domestic producers in the total goods produced in the country for one or the analyzed type of economic activity was typical for 33 countries in 2016, of which: 15 European countries -

within the European Union - Austria, Belgium, Bulgaria, Spain, Finland , United Kingdom (until 01/31/2020), Croatia, Lithuania, Luxembourg, Latvia, Malta, the Netherlands, Poland, Slovenia, Sweden and three states of Europe, non-European Union - Switzerland, Norway and Iceland; 10 countries in the Asia-Pacific region - Canada, Chile, Colombia, Costa Rica, Mexico, Malaysia, Philippines, Thailand, Vietnam, New Zealand; two Middle Eastern states - Saudi Arabia and Turkey; the country of South America - Brazil is one; two African countries - Morocco and South Africa.

At the same time, in the field of chemical and pharmaceutical products, up to 50% of products were produced in 2016 by foreign enterprises in Luxembourg (up to 1% of domestic products), Sweden (up to 20%), Canada and the Netherlands (up to 25%), Estonia and Costa - Rica (up to 30%, separately for each country), New Zealand (up to 45%). At the same time, in Costa Rica, until 2006, the share of products that can be created by producers prevailed in the total volume of the target species, but after 2006, this trend changed. Up to 50% of chemical and pharmaceutical products were produced by foreign enterprises during 2010-2015. in the UK, however, by 2016, their share was controlled to 49%.

In the field of computer, electronic and optical products, up to 50% of output was observed by foreign companies in the following nine countries: the Netherlands, Costa Rica, Thailand, South Africa (domestic manufacturers produced up to 10% of products, separately for each country), Poland and Chile (up to 25 % of domestic producers), Saudi Arabia and New Zealand (up to 30%), Colombia (up to 35%), United Kingdom, Canada, Croatia, Bulgaria, Vietnam (up to 50%).

At the same time, in the UK, the share of domestic production was registered eleven times (Great Britain, Canada, Poland, Croatia, Saudi Arabia, Chile, Colombia, Vietnam, Costa Rica, Thailand, South Africa) for the entire period presented in the database (from 2005 to 2016) the share of all manufactured products did not exceed, while in three countries - the Netherlands, Bulgaria and New Zealand, the share of domestic producers in 2015 was more than 50%, but then it steadily decreased.

The share of foreign companies in the total volume of manufactured products is occupied to the greatest extent in the sphere of automobile production. In 33 countries out of 58 analyzed, more than 50% of production is carried out by foreign companies. So in Switzerland, Romania, Australia and Singapore, up to 99% of cars are produced by companies with foreign affiliation; in Iceland, Malta, Hungary, Bulgaria, Poland, Chile, Costa Rica, and South Africa - more than 90%; in the UK, Czech Republic, Spain, Ireland, Portugal, Slovakia - more than 80%; in

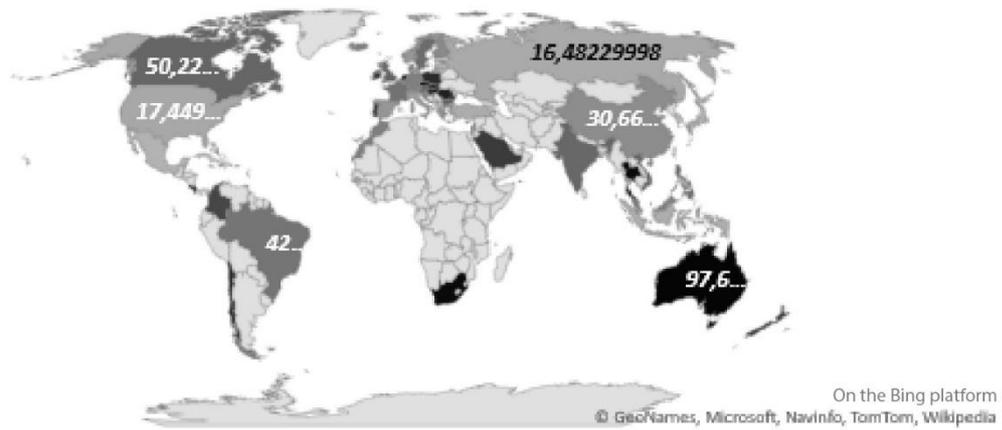
Austria, the Netherlands, Luxembourg, Lithuania, Latvia, Canada, Colombia, Brazil - more than 70%; in Slovenia, Sweden, Estonia, Morocco, Malaysia, Thailand, Mexico - more than 60%. At the same time, Romania (until 2006), Bulgaria, Estonia, Slovenia (each until 2007), Sweden (until 2008) and Thailand (until 2011) previously had a significant share (more than 50%) of their own production of the product in question. Further, more than 50% of the share in the total volume of goods produced in all analyzed types of economic activity is produced by foreign companies in nine countries, seven of which are members of the European Union - Ireland, Portugal, the Czech Republic, Slovakia, Estonia, Romania, Hungary, and two –Asia-Pacific - Singapore and Australia. In Singapore and Australia, within each type of activity, the share of foreign companies producing relevant products in 2016 reached 99.9%; in Hungary, Slovakia and the Czech Republic - more than 70%; Romania, Ireland, Portugal and Estonia - more than 55% (Table 1).



Share of foreign companies in the total volume of chemical and pharmaceutical products manufactured in the country, %



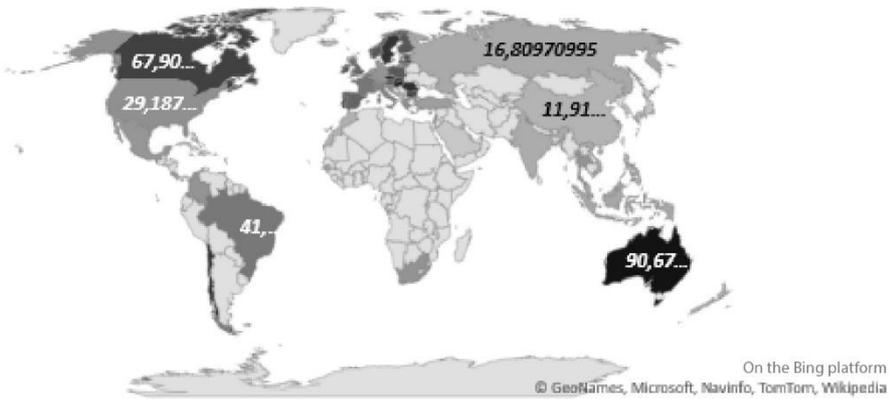
a) C20T21 - Chemical and Pharmaceutical products



Share of foreign companies in the total volume of computer, electronic and optical products manufactured in the country, %

0 100

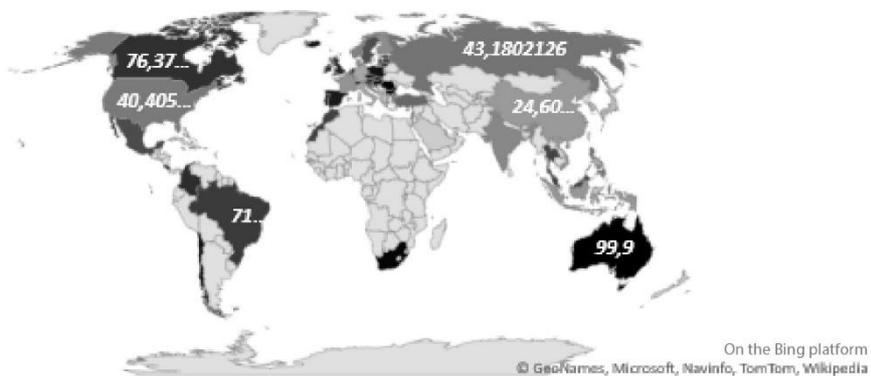
b) C26 – Computer, electronic and optical products



Share of foreign companies in the total volume of electrical equipment produced in the country, %

0 100

c) C27- electrical equipment



Share of foreign companies in the total volume of cars, trailers and semi-trailers produced in the country, %

0 100

d) C29 – Cars, trailers and semi-trailers

Figure 1 (a, b, c, d) - The share of domestic producers in the total volume of goods produced in the country by type of economic activity (ISIC Rev. 4).

Compiled by the authors according to the Analytical AMNE database: The Analytical AMNE database - Multinational enterprises and global value chains. O CP
<https://www.oecd.org/sti/ind/analytical-AMNE-database.htm#database>

Among the countries listed in Table 1, there are countries in which the volume of production of domestic companies in the total volume of output for the year exceeded 50% at the beginning of the analyzed period (2005). In terms of the volume of chemical and pharmaceutical products, these are Slovakia (57% of products manufactured in 2005 by domestic companies), Hungary (on average, over the period from 2005 to 2010, the volume of Hungarian companies in this form of economic activity was more than 55%), Romania (on average for the period from 2005 to 2009, the volume of domestic companies - more than 65%), Portugal (on average in 2005 and 2007 - domestic companies produced more than 53% of the total by-product).

For electrical equipment, these are Romania (on average in 2005 and 2008 - domestic companies produced more than 53% of the total volume by type of product) and Portugal (in 2005 - domestic companies made more than 51% of the total volume by type of product).

In the automotive industry, these are Romania and Estonia (the share of domestic companies in the country's total production is presented in the text above).

Table 1. Countries in which foreign companies produce more than 50% of the share in the total volume of goods produced for all analyzed types of economic activity*

Country	The share of products manufactured by foreign companies in the total volume of products manufactured in 2016 in the country, by type of economic activity (ISIC Rev. 4), %			
	Chemical and pharmaceutical products (C20T21)	Computer, electronic and optical products (C26)	Electrical equipment (C27)	Cars, trailers and semi-trailers (C29)
Singapore	98.96	99.9	97.17	99.9
Australia	96.65	97.67	90.68	99.9
Hungary	76.14	86.87	86.86	93.61
Slovakia	86.67	86.47	76.07	81.89
Czech	70.33	89.08	76.44	89.24
Romania	65.04	83.33	76.35	99.09
Ireland	57.81	80.26	62.99	84.88

Portugal	58.09	77.17	59.09	83.72
Estonia	62.22	24.88	69.46	60.58

*Compiled by the authors according to the Analytical AMNE database: The Analytical AMNE database - Multinational enterprises and global value chains. OЭCP
<https://www.oecd.org/sti/ind/analytical-AMNE-database.htm#database>

Discussion

The results obtained correspond to the theoretical and methodological provisions of the study formulated on the basis of the literature review, namely: on the interdependence of the processes of development of GVCs and the activities of TNCs, as well as on the impact of these processes on economic transformations in the economies of the countries of the world.

At the same time, it should be noted that the presented study, at the moment, is limited to assessing the influence of a given set of factors, however, the authors acknowledge that the processes and phenomena under study are also affected by many other, unaccounted for, determinants. The authors also recognize the importance of analyzing the state policy implemented by national governments, which contributes to the support of domestic production through institutional regulation of the activities of TNCs in certain territories. Accordingly, the conclusions obtained in this work, in our opinion, should serve as the basis for further research, in which, on the one hand, the activity of TNCs, limited by the economic, sociocultural, political, and other frameworks and borders of the countries of the world, is chosen as an object, on the other hand, the impact on the sustainability of the global development of the phenomenon of the new time, which can be designated as transnational corporate capitalism.

Thus, according to the presented results of the study (taking into account the indicated limitations), we can draw the following conclusions. Firstly, in the scientific literature more and more attention is paid to a critical analysis of the processes observed in many countries of the world and manifested, on the one hand, in the formation and active expansion of global value chains, on the other hand, in the establishment of a model of socio-economic development - transnational corporate capitalism. . Both processes are interconnected through the activities of transnational companies that unite the sectors of the economies of individual states into a single international network and exert significant influence in these states, both in social and political aspects. Secondly, a quantitative assessment of the ratio of production volumes of companies in the four types of economic activity most included in the GVCs - chemistry and pharmaceuticals, electronics, electrical equipment, and the automotive industry, allows us to conclude that the share of domestic producers in the countries of the world

is gradually decreasing. At the same time, they are being replaced by foreign transnational companies. This trend is most clearly manifested in the countries of the post-Soviet space, which previously had mainly their own industrial production, which, after the liberalization of national economies, lost its competitiveness. Thirdly, the industry of most countries of the world, with the exception of the economies of a number of states (USA, China, Japan, Germany, Italy, France, the Russian Federation, Israel, India, and Korea), is increasingly included in the GVCs, being more subject to the general dynamics of their development. At the same time, the states listed as an exception form a global socio-economic system - transnational corporate capitalism, which is a consequence of the development of global value chains.

References

Antràs, P. (2003). Firms, contracts, and trade structure. *The Quarterly Journal of Economics*, 118 (4), 1375-1418. Retrieved from <https://10.1162/003355303322552829>

Baldwin, R. (2022). Trade and industrialization after globalization's 2nd unbundling: how building and joining a supply chain are different and why it matters. *National bureau of economic research*, 17716, 1-39.

Banacloche, S., Cadarso, M. A., & Monsalve, F. (2020). Implications of measuring value added in exports with a regional input-output table. A case of study in South America. *Structural Change and Economic Dynamics*, 52, 130-140. Retrieved from <https://10.1016/j.strueco.2019.08.003>

Baynev, V. (2017). The fourth industrial revolution as a global innovative project. *Science and innovations*, 3(169), 38-41. (In Russ.).

Belousov, A.V. (2016). Import intensity of exports of the Republic of Belarus as a factor of participation in global value chains. *Belarusian Economic Journal*, 3, 63–80. (In Russ.).

Belyanova, A. M. (2010). The Russian Crisis: Origins and Players. *Bulletin of Moscow University*, 2, 72 – 80. (In Russ.).

Buckley, P. J., Craig, T. D., & Mudambi, R. (2019). Time to learn? Assignment duration in global value chain organization. *Journal of Business Research*, 103, 508-518. Retrieved from <https://10.1016/j.jbusres.2018.01.011>

Bush, S. R., Oosterveer, P., Bailey, M., & Mol A. P.J. (2015). Sustainability governance of chains and networks: a review and future outlook. *Journal of Cleaner Production*, 107, 8-19. Retrieved from <https://10.1016/j.jclepro.2014.10.019>

Chu, C.-Y., Park, K., & Kremera, G. E. (2020). A global supply chain risk management framework: An application of text-mining to identify region-specific supply chain risks. *Advanced Engineering Informatics*, 45, 1-17. Retrieved from <https://10.1016/j.aei.2020.110105>

Dementyev, V.E., Novikova, E.S., Ustyuzhanina, E.V. (2016). Global value chains and corporate interests of transnational corporations. *National interests: priorities and security*, 12 (1) (334), 17-30. (In Russ.).

Europe and Central Asia Economic Update, Spring 2021: Data, Digitalization, and Governance. Washington, DC: World Bank. World Bank. 2021. Retrieved from <https://openknowledge.worldbank.org/handle/10986/35273> License: CC BY 3.0 IGO. DOI: 10.1596/978-1-4648-1698-7

Fengru, C., & Guitang, L. (2019). *Global value chains and production networks*. Academic press. Retrieved from <https://10.1016/B978-0-12-814847-1.00022-1>

Fontagne, L., & Santoni, G. (2021). GVCs and the endogenous geography of RTAs. *European Economic Review*, 132, 1-21. Retrieved from <https://10.1016/j.eurocorev.2021.103656>

German, L. A., Bonanno, A. M., Foster, L. C., & Cotula, L. (2020). Inclusive business in agriculture: Evidence from the evolution of agricultural value chains. *World Development*, 134, 2-21. Retrieved from <https://10.1016/j.worlddev.2020.105018>

Gordon, M. J. (2005). Growth, uncertainty and the Third World in the rise and fall of capitalism. *Journal of Asian Economics*, 16 (2), 153–177. Retrieved from <https://10.1016/j.asieco.2005.02.004>

Gromov, A. V. (2004). Ideology and public administration in the conditions of the formation of Russian civil society. *Society and Power*, 1, 29-31. (In Russ.).

- Gudkova, T.V. (2020). Global value chains in the context of digitalization of the economy *The Journal of Economic Theory*. Vol. 17(1), 53-64. (In Russ.). Retrieved from <https://10.31063/2073-6517/2020.17-1.4>
- Gusev, M. S., Shirov, A. A., Polzikov, D. A., & Yantovsky, A. A. (2018). Global trends in the structure of production and income in the world and in Russia. *Problems of forecasting*, 6 (171), 28-50. (In Russ.).
- Henderson, J., Dicken, P., Hess, M., Coe, N., & Wai-Chung, Y. H. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy*, 9 (3), 436-464. Retrieved from <https://10.1080/09692290210150842>
- Hertwich, E. G. (2020). Carbon fueling complex global value chains tripled in the period 1995–2012. *Energy Economics*, 86, 1-12. Retrieved from <https://10.1016/j.eneco.2019.104651>
- Jones, R. W., & Kierzkowski, H. (1990). *The role of services in production and international trade*. In *The Political Economy of International Trade: essays in Honor of Robert E Baldwin*. Cambridge, Mass.: Blackwell, 31-48.
- Kaplinsky, R. (2013). Global value chains: where they came from, where they are going and why this is important. *Innovation, Knowledge, Development*, 68, 1-27.
- Kartashev, A. V. (2014). Theodore Roosevelt's New Nationalism as the Beginning of America's Ascension to a World Power. *Eurasian Union of Scientists*, 7(7), 127-128. (In Russ.).
- Kondrat'ev, V. B., Popov, V. V., & Kedrova, G. V. (2020). Transforming Global Value Chains: Experiences from Three Industries. *World Economy and International Relations*, 64(3), 68-79. (In Russ.).
- Konina, N. Yu. (2016). Major trends of big international companies' development in a changing world. *MGIMO Review of International Relations*, 1(46), 143-153. (In Russ.). Retrieved from <https://10.24833/2071-8160-2016-1-46-143-153>
- Kovalenko, B.B., Temnova, N.K., & Masyuk, N.N. (2020, 1-2 April). Digital transformation of a business model: evolution of a value chain to a network value space. Paper presented at the Proceedings of 35th International Business Information Management Association Conference

(IBIMA): *Education Excellence and Innovation Management: A 2025 Vision to Sustain Economic Development during Global Challenges. Conference Proceedings.* (pp. 12817-12822). Seville, Spain.

Krasavin, S. A. (2012). Problem of choosing a market economy model for Russia as a basis of a new type of development. *Theory and Practice of Social Development*, 6, 183-185. (In Russ.).

Kukushkina, Yu. M. (2016). Global value chains and corporate interests of transnational corporations. *Modern competition*, 2 (56), 107-117. (In Russ.).

Kurochkina, K. V. (2016). New farmers in modern Japan. *Anthropological forum*, 28, 260-275. (In Russ.).

Liu, C., & Zhao, G. (2021). Can global value chain participation affect embodied carbon emission intensity? *Journal of Cleaner Production*, 287, 2-14. Retrieved from <https://10.1016/j.jclepro.2020.125069>

Livingston, J. (1986). *Origins of the Federal Reserve System: money, class and corporate capitalism, 1890-1913.* Ithaca, NY: Cornell Univ. Press.

Lobacheva, E. A. (2011). Corporate capitalism and the evolution of tripartism: on the example of Germany: abstract of diss. political candidate. Sciences. St. Petersburg. (In Russ.)

Lukyanov, S., & Drapkin, I. (2017). Global Value Chains: Implications for an Integrating Economy. *World Economy and International Relations*, 61, (4), 16-25. (In Russ.). Retrieved from <https://10.20542 / 0131-2227-2017-61-4-16-25>

Machacek, E., & Hess, M. (2019). Whither «high-tech» labor? Codification and (de)skilling in automotive components value chains. *Geoforum*, 99, 287-295. <https://10.1016/j.geoforum.2017.11.023>

Makeev, A.V. (2018). Territory of priority development as the factor of implementation of «transnational law». Corporate Governance and Innovative Economic Development of the North. *Bulletin of Research Center of Corporate Law, Management and Venture Investment of Syktyvkar State University*, 3, 61-74. (In Russ.).

Maksutov, A. B. (1999). Corporatism: to the formulation of the question. *Antinomies*, 1, 100-126. (In Russ.).

Measuring and analyzing the impact of GVCs on economic development (2021). Washington, D.C.: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/440081499424129960/Measuring-and-analyzing-the-impact-of-GVCs-on-economic-development>

Melitz, M. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrics*, 71, (6), 1695-1725. Retrieved from <https://10.1111/1468-0262.00467/>

Meshkova, T. A., Moiseichev, E. Ja. (2015). World Trends in the Development of Global Value-Added Chains and Russia's Participation in Them. *Bulletin of the Financial University*, 1 (85), 83-96. (In Russ.).

Ogarkov, A. N. (2018). Crisis of European culture in works of cyberpunk. *Bulletin of St. Petersburg State University of Culture*, 4 (37), 102-106. (In Russ.). Retrieved from <https://10.30725/2619-0303-2018-4-102-106>

Okumura, H. (1986). *Corporate capitalism in Japan*. Moscow: Mysl. (In Russ.).

Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.

Parenti, M. (2006) *Democracy for the Chosen: a handbook on US political games*. Moscow: Pokolenie. (In Russ.).

Pisareva, S.S., Volgin, N.A. (2018). *Value chains in the automotive industry in Central and Eastern Europe: experience for Russia*. Moscow: Knorus. (In Russ.).

Qiang, C. Z., Liu, Y., Paganini, M., & Steenbergen, V. (2020). Foreign direct investment and global value chains in the wake of COVID-19. Retrieved from <https://blogs.worldbank.org/psd/foreign-direct-investment-and-global-value-chains-wake-covid-19>

Reijnders, L. S.M., & De Vries, G. J. (2018). Technology, offshoring and the rise of non-routine jobs. *Journal of Development Economics*, 135, 412 – 432. Retrieved from <https://10.1016/j.jdeveco.2018.08.009>

Samsonov, R. A., & Bocharov, S. N. (2018), Stakeholder Responsibility in the Formation of Global Value Chains, working paper. *Upravlenets (The*

Manager), 9 (4), 53–65. (In Russ.). Retrieved from <https://10.29141/2218-5003-2018-9-4-6>

Shepherd, B., & Stone, S. (2012, 4-5 December). Global production networks and employment: a developing country perspective. *Working Party of the Trade Committee*. Paris: The OECD Conference Centre.

Shpakovskij, Yu. G., & Potapchuk, I. V. (2017). Zakon Shermana. *Bulletin of the University named after O. E. Kutafin*, 9 (37), 168 – 170. (In Russ.).

Sidorova, E. (2018). Russia in global value chains. *World Economy and International Relations*, 62(9), 71-80. (In Russ.). Retrieved from <https://10.20542/0131-2227-2018-62-9-71-80>

Smirnov, E.N., & Lukyanov, S.A. (2019). Assessment of the transforming impact of global value chains on international trade, working paper. *Upravlenets (The Manager)*, 10(3), 36–46. (In Russ.). Retrieved from <https://10.29141/2218-5003-2019-10-3-4>

Smorgunov, L. V. (2009). Public administration in a post-global world. *Outlines of global transformation: politics, economics, law*, 2, 79-80. (In Russ.).

Streltsov, A. V., Yakovlev, G. I., & Bulavko, O. A. (2019). Improving methods for analyzing the involvement of industrial enterprises and business structures in global reproduction chains. *Bulletin of the Samara Municipal Institute of Management*, 1, 32-45. (In Russ.).

Sturgeon, T. J. (2008). *From Commodity Chains to Value Chains: Interdisciplinary Theory Building in an Age of Globalization*. *Frontiers of Commodity Chain Research*. Industry Studies Working Paper.

Sverdlikova, E.A., & Tagibova, A.A. (2017). Russian model of economics and business in comparison with Western and East Asian («Confucian») models. *Theoretical and applied economics*, 4, 1 – 19. (In Russ.). Retrieved from <https://10.25136/2409-8647.2017.4.24303>

Timberlake, R. (1986). Origins of the federal reserve system: money, class, and corporate capitalism, 1890–1913. By James Livingston. *Ithaca: Cornell University Press*, 250. *The Journal of Economic History*, 3-47(1), 279-281. Retrieved from <https://10.1017/S0022050700047914>

Tinus, N. N. (2020). Russia and the West: sociocultural and intellectual origins of libertarian socialism. *Bulletin of the Moscow State University of Culture*, 4(96), 24-34. (In Russ.). Retrieved from <https://10.24411/1997-0803-2020-10403>

Varnavskij, V.G. (2018). International trade in categories of added value: methodological issues. *World Economy and International Relations*, 62(1), 5-15. (In Russ.). Retrieved from <https://10.20542 / 0131-2227-2018-62-1-5-15>

Wallerstein, I. (2001). *Analysis of world systems and the situation in the modern world*. St. Petersburg: publishing house «University book». (In Russ.).

Wang, S., He, Y., & Song, M. (2021). Global value chains, technological progress, and environmental pollution: Inequality towards developing countries. *Journal of Environmental Management*, 277, 1-14. Retrieved from <https://10.1016/j.jenvman.2020.110999>

Yakobson, V. V. (2011). Sociological aspects of specific risks in system of financial security of modern RUSSIA. *Theory and Practice of Social Development*, 5, 103-106. (In Russ.).

Yan, Y., Wang, R., Zheng, X., & Zhao, Z. (2020). Carbon endowment and trade-embodied carbon emissions in global value chains: Evidence from China. *Applied Energy*, 277, 1-14. Retrieved from <https://10.1016/j.apenergy.2020.115592>

Zhiltsov, E. N. (2009). The relationship of social and financial policy at the present stage of economic reforms in Russia. *Economics of education*, 1(1), 36 – 39. (In Russ.).