

Andrii A. Gutorov

NSC "Institute of Agrarian Economics" of NAAS of Ukraine

Oleksii O. Yermolenko

Simon Kuznets Kharkiv National University of Economics

TRANSNATIONAL INTEGRATION OF THE AGRARIAN SECTOR OF THE ECONOMY OF UKRAINE

Abstract. *The article is dedicated to investigation of the essence and theoretical basis of transnational integration of the agrarian sector of the economy. The main motives of transnationalization of the agrarian sector of the economy of Ukraine are generalized. The principles of implementation of transnational integration, its organizational and economic bases of construction and development are defined. The technique for estimation level and global efficiency of sectorial economy transnationalization is shown. Dynamics of the international ratings of Ukraine is analyzed, the condition and tendencies of foreign direct investment of the agrarian sector of the economy are estimated. It is shown that influence of transnational integration on national development is mostly destructive, menaces for national security of Ukraine. Actions for effective public-private partnership, regulation of excessive expansive transnationalization and increasing the global competitiveness level of Ukraine are outlined.*

Introduction. The agrarian sector of the economy is one of strategic backbone segments of the national economy of Ukraine, which forms a considerable part of the income of the state budget, defines bases of food security and provides preservation of rural way and mentality. Further development of the agrarian sector demands the high-quality system transformations aimed at providing its sustainable development in the conditions of globalization. Increasing in efficiency of an economic mechanism, its intensification is possible by creation of favorable investment climate and business environment for socially oriented transnational integration.

The problem of internationalization of agro-industrial production became aggravated in Ukraine with declaration of independence. By then, production cyclicity increased considerably, disproportions in development of separate branches of the economy and the interindustry relations amplified. Constant violation of reproduction processes, ideology of submission of village to industry, planned character of all spheres of the economic relations was the cornerstone of it.

In other countries of the world, since 50th of the XX century, the economy developed based on monopoly or state-monopoly capitalism that integrally led to

appearance of several superlarge operators in the branch commodity markets. Their further growth was impossible in national scales without production diversification. At the same time, vertical concentration of the capital and extension of the nomenclature of the made production demanded active development of new segments of the market, which were already occupied with the same monopolies. The unique exit from such situation in condition of preservation advantages of specialized agro-industrial production is transferring of its part on the territory of the countries with less developed system of economic mechanisms.

Thus, the process of internationalization of agro-industrial production means establishment of such relations between the enterprises of the different countries at which production of one certain state becomes a part of world production [1, p. 142]. Implementation of internationalization in the form of transnational corporations (TNC) represents transnationalization or transnational integration of the agrarian sector of the economy.

Despite a set of researches, the theory of transnationalization allocated only in the mid-sixties of the XX century. Considerable volumes of the foreign direct investments generated by TNCs and their influence on economies of developing countries became a push to it. Hitherto, such companies were called the enterprises with foreign investment, the multinational enterprises or multiterritorial firms.

Representatives of school on industrial organization of the firm as P. Buckley, M. Casson and R. Caves saw the essence of the TNC's mechanism in replacement of market transactions by intraeconomic ones. At the same time, internalization gives the chance to reduce transaction costs, to optimize streams of the company [2, p. 1-24]. The scientist R. Caves, in addition, divided TNCs into horizontally integrated, vertically integrated and diversified. It gave him the chance to establish, that the organizational strategy of integration defines the course of information streams, which internalization creates competitive advantages in the market [3, p. 68-85]. Having been united views of researchers on the concept of foreign direct investments and the strategy of internalization, K. Kojima concluded, that all international capital investments are of two types: the trade directed and anti-trade

¹ Maksimova, M. M., Shenaev, V. N. & Yudanov Yu. I. (ed.). (1983). *Mirovoy kapitalisticheskiy rynek i problemy internatcionalizatsii khoziaystvennoy zhizni* [World Capitalistic Market and Problems of Internationalization of the Business Life]. Moscow : Mysl ; Frankfurt am Main : Marksistishe bletter.

² Buckley, P. J. & Casson M. (2010). *The Multinational Enterprise Revisited. The Essential Buckley and Casson*. New York : Palgrave Macmillan.

³ Caves, R. E. (2007). *Multinational Enterprise and Economic Analysis* [3rd ed.]. Cambridge : Cambridge University Press.

investments [4]. The first of them significantly increase the export potential of the recipient country; promote change of production structure in it on the basis of the international division of labor. The second one contrary limits this potential, turning the country in dependence on import or a raw appendage of developed countries.

In the 80th of the XX century J. Dunning formulated an eclectic paradigm of transnational integration. Advantages of property, internalization and placement of production were its basis. Besides the decision to open a branch in this or that country is made by the ultimate company of TNC, considering the natural and resource potential, labor cost, a condition of social, economic and political development in the state, etc. [5, p. 39-58]. As O. Rohach notes, adherents of the theory of global value chains critically appreciated the TNC's concept of J. Dunning as not all dispersions of production invest in logic of the strategic choice of corporations [6, p. 27]. At the same time, the separate ideas of the scientist gained further development in the resource theory of TNC.

With the advent of the network theory of transnational integration not only the resource strategy of TNC were explained, but also the place of outsourcing and insourcing operations, nonstock and subcontract relations are defined. The overall aim of the activity of TNCs is to maximize synergies across the network structure. These researches became a basis for development of the new economic geography concept by P. Krugman [7, 8]. The scientist divided all countries into industrial advanced ("center") and also developing and underdeveloped ("periphery"). In view of transportation costs and the movement of labor between regions P. Krugman proved that agglomeration forces generate concentration of the capital and production, however in the advanced countries it also results in glut of the resource markets then processes of an aggravation of the competition and dispersion become more active. As a result, if benefits from use of cheap labor and natural resources exceed transportation costs, production will move from "center" to the "peripheral" country. However making decision on relocation is based on elasticity

⁴ Kojima, K. (2013). *Direct Foreign Investment: A Japanese Model of Multinational Business Operation*. London : Routledge.

⁵ Dunning, J. H. (1998). The Theory of International Production. *The International Trade Journal*, vol. III, no. 1, 21-66.

⁶ Rohach, O. & Kosmina, V. (2016). *Transnatsionalni korporatsii ta eksport novykh industrialnykh krain Azii* [Transnational Corporations and Export doing by New Industrial Asian Countries]. Kyiv : Tsentr uchbovoi literatury.

⁷ Krugman, P. (1991). Increasing Returns and Economic Geography. *Journal of Political Economy*, vol. 99, no. 3, 483-499.

⁸ Krugman, P. & Venables, A. J. (1995). Globalization and the Inequality of Nations. *The Quarterly Journal of Economics*, vol. CX, issue 4, 857-880.

of goods substitutes and is mainly positive at its low level and vice versa.

Except called, heretofore the scientists have created the theories of regional TNCs, exchange of concentration for proximity, the international fragmentation of production, the concept of intra-corporate centralization, a paradigm of “the flying geese”, etc. However, they are not a subject of our research and therefore will not analyze in details.

In view of versatility of transnational integration forms, now the criteria of reference companies to transnational are debatable. We agree with Yu. Umantsiv's conclusion that contrary to a large number of very contradictory theories about the reasons and essence of a TNC's phenomenon, there is no unity of signs and definition for transnational corporation, steady terminology, which needs to describe such international integrated structures; the national legislation of all countries in the world doesn't contain accurate signs of TNC [9, p. 133]. The most widespread and authoritative is the practice of the United Nations Conference on Trade and Development (UNCTAD) where transnational corporations are those companies that have branches or the affiliated enterprises with high sales level and a share of the corporate rights over 10 % more than in six countries of the world.

Transnational integration is carried out on global (megalevel), national (macrolevel), branch (mesolevel) and corporate (microlevel) levels. The system of all hierarchical levels is interconnected and complementary. Transnationalization of production cannot exist only on a particular level, because in the basis of the dialectic of TNCs lies the manufacturing process, which is inextricably linked to the enterprise and the spatial basis of productive forces. Exceptions are concepts that consider transregional national organizations, illegally identifying them with TNC.

Economic activity of transnational corporation is estimated on such indicators: the general assets of TNC (*TA*); TNC's assets in foreign countries (*FA*); the total sales of TNC (*TS*); TNC's sales in foreign countries (*FS*); the number of employees of TNC (*TE*), including occupied in its foreign branches and representative offices (*FE*); number of branches and representative offices of TNC (*TAF*), including them in the foreign countries (*FAF*). On its basis scientists estimate TNC's activity in the world, counting indexes of corporate transnationalization (*TNI*), internationalization (*II*) and scale of affiliation network (*NSI*) [10, p. 21]:

⁹ Umantsiv, Yu. M. (2012). *Korporatyvni struktury u hlobalnomu konkurentnomu prostori* [Corporate Organizations in Global Competitive Space]. Kyiv : NSC “Institute of Agrarian Economics”.

¹⁰ *Transnational Corporations*. (1998). Geneva : United Nations Conference on Trade and Development, vol. 7, no. 1.

$$TNI = \frac{\left(\frac{FA}{TA} + \frac{FS}{TS} + \frac{FE}{TE} \right)}{3} \times 100\%,$$

$$II = \frac{FAF}{TAF} \times 100\%, \quad (1)$$

$$NSI = \frac{N_{FDI}}{N_{TNC} - 1} \times 100\%,$$

where N_{FDI} – is the number of the countries in the world that have foreign direct investments in economy; N_{TNC} – the number of the countries in the world, in which there are affiliated enterprises of TNC.

The national economy transnationalization level ($ETNI$) is determined as:

$$ETNI = \frac{\left(\frac{FDI}{CI} + \frac{FDI}{GDP} + \frac{TO_{TNC}}{GDP} + \frac{FE_{TNC}}{NE} \right)}{4} \times 100\%, \quad (2)$$

where FDI – is the volume of foreign direct investments in the country; CI – the total amount of capital investments in the country; GDP – a gross domestic product of the country; TO_{TNC} – the total output of the TNC's affiliated enterprises placed in the recipient country; FE_{TNC} – the number of employees of the TNC, which occupied at the affiliated enterprises in the recipient country; NE – total amount of man-power employed in the country.

By the formula (2) it is also possible to estimate transnationalization level at the branch level, in view of the fact that GDP will be estimated as gross value added.

The studies of I. Kelaru convincingly demonstrate that in a year 2013 the level of transnationalization of Ukraine's economy was on 10.0 % and exceeded similar values of the most developed countries in the world as USA, Japan, Italy, Germany, etc. [11, p. 7-8]. Its reasons are covered in the strategy of Ukraine's export orientation, the high and constantly increasing level of dependence of the main sectors of the economy on import raw materials, materials and technologies.

Considering fluctuations of corporate internationalization level for 2007-2013 within 23.6-29.8%, the domestic enterprises have a considerable reserve for integration into the world production, using those opportunities, which are available after signing of the Association agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part.

¹¹ Kelaru, I. O. (2014). *Transnatsionalizatsiia i konkurentospromozhnyi rozvytok ekonomiky Ukrainy* [Transnationalization and Competitive Development of the Ukrainian Economy]. *Extended Abstract of Candidate's Thesis*. Kyiv : Kyiv National Economics University named after Vadym Hetman.

The main motives for transnationalization of the agrarian sector of the economy of Ukraine are:

1. Marketing development by the TNCs. Increasing in efficiency of TNC's activity is reached by growth of global competitiveness and further concentration of the capital that is possible only because of the international economic relations and cross-border cooperation.

2. Lower labor cost in the recipient countries. With other equal conditions, TNC's profit maximizing is reached due to optimization of labor cost and capital inputs. So, in 2015 the average annual nominal salary of the workers occupied in agricultural production in Ukraine was more than 15 times lower than average one in Europe, and with such countries as Germany, France, Netherlands and Luxembourg almost thirtyfold gap is observed. Whereby, we proved that compensation of hired workers in Ukraine is much lower than its productivity by comparison of an organic capital structure of the German agro-industrial holding BayWa AG and native Kernel Holding S.A. [12, p. 124]. Thus, the objective conditions for receiving additional super-profit by TNC's owners due to assignment of an unpaid part of newly made production value are created.

3. Lower land value and other natural resources cost in the recipient countries. It is known that in agriculture the land is the main means of production and spatial basis for productive forces placement. Agrarian policy of the vast majority of the developed countries in the world is directed to prevention of inappropriate land using and quick change of their owners or tenants. Because of cumulative influence of economic factors, the agricultural lands value remains high. So, according to the Eurostat, in a year 2009 (year of the last inspection of land values) the one hectare of arable land in Denmark costs of 27.0 thsd. EUR, in Spain – 12.5 thsd. EUR, in Netherlands – over 47.6 thsd. EUR. The rent for this type of lands respectively costs of 534.77, 189.00 and 496.53 EUR per hectare. As in 2016, January 1, the average rent for land shares in Ukraine costs of 862.00 UAH/ha or 35.58 EUR/ha; the standard monetary value of 1 hectare of an arable land respectively equaled on 30927.77 UAH/ha or 1276.50 EUR/ha. It is completely obvious that the Ukrainian indicators, despite a time lag, it is more than ten times less, than European ones.

4. TNC's transaction costs minimization. Increase in scales of agro-industrial

¹² Gutorov, A. O. (2011). Vertykalno intehrovani struktury u silskomu hospodarstvi : ekonomichni zasady formuvannia ta rozvytku [Vertically Integrated Entities in Agriculture: Economic Principles of Organization and Laws of Development]. *Ekonomika i prohnozuvannia* [Economy and Forecasting], 1, 120-130.

formations' activity involves the proportional growth of number of the different agreements and expenses connected with their service. Expenses on execution of lease agreements for land plots make particularly a considerable part of transaction costs. As the parceling level in Ukraine is much lower, than in those countries where family farms and small farms are the cornerstone of the agrarian system, formation of necessary land size of the enterprise costs cheaper. Besides, there are options to affiliate or rent the complete property complexes (farms) sized over 3 thsd. ha.

5. Decreasing in transportation costs and customs payments. Moving a part of production to the recipient countries allows TNC to reduce considerably transportation costs of goods to consumers. Distinctions in systems of the customs legislation create opportunities for minimization the corresponding collecting and payments, overcoming embargo or standards of the antitrust law, etc.

6. Receiving access to programs of the state support for agriculture development. Placing the production capacities in Ukraine, through subsidiaries TNCs have the right for preferential financing of acquisition agricultural machinery or construction new farms and complexes, planting down of permanent crops, VAT refund, receipt of state support funds for production of separate types of crops and livestock products, etc.

7. Tax optimization. Differentiation of tax types and their rates over the countries in the world gives TNC the chance to choose that territory, where the tax burden will be the smallest for production placement, and the tax law is more liberal. The most widespread mechanisms of decreasing a tax burden is using the transfer pricing, offshore zones and zones of special jurisdiction, the preferential modes of the taxation for agricultural producers (the fixed agricultural tax), existence of tax benefits and tax holidays for foreign investors. It is separately necessary to mention a priority of the choice of those countries where the cost of subsoil use and penalties for environment pollution are the lowest.

8. Diversification of risks. Internationalization of production acts as a peculiar instrument of decreasing natural, production, market, currency and other types of risks of economic activity. At the same time, the political situation and level of civil society formation are powerful sources of receiving a political rent and preferences for transnational corporation.

The transnational integration, in our opinion, has to take into account such basic principles:

- profitability – the activity of TNC and all its divisions submits to the common economic targets, providing development of association based on the expanded reproduction;

- complexity and rational-sized – TNC’s formation has to be based on optimization of sizes of all affiliated enterprises and their production capacities for ensuring the highest productivity of all economical mechanism;
- balance – the TNC’s structure has to be the additional cost balanced throughout all stages of value chain;
- systemacity – for reaching synergies of integration the TNC activity has to be provided systemically, considering the latest developments of science and practice of administration, corporate and financial management;
- controllability – all structure of TNC has to be constructed and optimized by criterion of management rationality without creating obstacles for quick making of reasonable managerial decisions;
- corporate social responsibility – for corporate image and brand formation the TNC has to meet the highest standards of corporate management and social responsibility of business;
- transparency of property – the structure of TNC’s property has to be not affiliated from the national legislation and not give the chance to track its hierarchy in the direction “from bottom to top”, at the same time remaining transparent and flexible for management and association of various spheres of business, providing solid reputation, giving the chance to optimize financial streams, to promote a uniform brand or a trademark onto the market.

Rent-seeking behavior and the law of vertical integration as zero profitability of all intermediate production represent the basis of the economic mechanism of TNC’s activity in the agrarian sector of the economy of Ukraine.

Due to large scale of activity and a stock of financial and economic durability, transnational corporations significantly influence on the development of rural territories, economy of the recipient countries, and also can form an agrarian lobby in the government. Despite a significant amount of researches on TNC’s activity, there is no definite answer about the nature of their influence on the agrarian sector of the economy till nowadays. Therefore, agro-industrial production major in developing countries versus developed ones is characterized by the lower level of technical and technological support, is investment unattractive. Production technologies and methods of managing update and quality of agricultural production increases to the level of the international standards because of transnational integration. Finished sales of goods out of recipient country’s borders is an export in national measurement, which growth on volumes leads to increasing the international position of the country, receipt of funds from payment of customs

duties and outgoings. On the other hand, occurrence of such powerful player as TNC increases the offer by the national agrarian market, strengthens the competition on is mute, forcing out small and average agricultural producers. The rent-seeking economic behavior of TNC is often directed to maximizing benefits in the short term that leads to impoverishment of soil, excessive chemicalization of agriculture, drop in production of low-profitable types of agricultural products, causes damage to the environment and rural territories, leads to capital outflow abroad.

As it was shown in the scientific researches of the NSC “Institute of Agrarian Economics”, in the agrarian sector of developing countries separate economic actions and operations of transnational corporations are the subject for obligatory government regulation. So, at a horizontal integration the negative impact of TNC is shown through specific segmentation of the market, break with production deliveries and breach of the foreign trade contracts, overpricing on import and, respectively, their undercutting on export. At a vertical integration, the refusal to cooperate, speculative and discrimination pricing, dumping, abuse of the transfer prices, etc. are possible [13, p. 29]. For neutralizing of these influences, the national government directs the actions to establishment of export restrictions, antimonopoly and anti-dumping regulation, limits currency transactions by TNCs, obliges them to carry out continuous production, to use domestic raw materials and to realize a part of production in the domestic market.

According to the UNCTAD in the world in a year 2009 there were about 82 thsd. transnational corporations, which united 810 thsd. affiliated enterprises, providing with jobs over 77 mln. people. The export volume of TNC accounts for about a third of the total cost of goods, works and services, which are exported in the world [14]. In the agrarian sector of the economy the TNC began the vigorous activity at the end of XIX century, but certain researchers claim that the first agrarian international corporations existed at the time of the Great Silk Road. Nowadays according to the different estimates under control of TNCs there are from 75 to 90 % of the agricultural commodities market, on about 78 % of patents for new agricultural machinery. The main kind of TNC is consolidation in one legal entity of all stages of the agro-food value chain.

Realization of the transnational integration relations has bilateral and

¹³ Dukhnytskyi, B. V., Pugachov, M. I. & Sabluk, V. P. (2013). *Transnatsionalni kompanii v ahrarnomu sektori ekonomiky* [Transnational Corporations in the Agrarian Sector of the Economy]. Kyiv : NSC “Institute of Agrarian Economics”.

¹⁴ *World Investment Report 2009* : Transnational Corporations, Agricultural Production and Development. (2009). Geneva : United Nations Publications.

interdependent influence on the economy of Ukraine in general, and particularly on the agrarian sector. The choice of the country for TNC's capacities placement is carried out by taking into account geopolitical and macroeconomic situation. Every year these factors fully estimate the different international organizations. The most authoritative are the ratings of the World Economic Forum, the World Bank and conservative non-governmental organization, which provides a research of political problems, "The Heritage Foundation".

Therefore, experts of the World Bank estimate doing business level by ten groups of factors. In absolute value the rank represents a frontier measure of national economy from the most effective value (front) accepted on 100. Rather the best conditions for doing business in a year 2016 were in New Zealand, Denmark, Singapore, the Republic of Korea and Hong Kong.

The business climate in Ukraine in general improved over 2006-2016 (tab. 1).

Table 1. Rank of Doing Business in Ukraine

Rank Components	Years							
	2006	2008	2010	2012	2013	2014	2015	2016
Starting a business	58.2	66.4	69.8	81.7	85.6	87.3	87.4	93.9
Dealing with Construction Permits	4.0	11.8	4.0	14.7	16.8	62.9	61.3	61.4
Getting Electricity	N/A	N/A	32.3	32.4	32.5	52.0	54.6	54.8
Registering Property	44.8	49.9	51.3	47.9	55.9	68.2	69.0	69.4
Getting Credit	56.3	56.3	56.3	81.3	81.3	87.5	75.0	75.0
Protecting Minority Investors	33.3	33.3	40.0	40.0	40.0	40.0	50.0	50.0
Paying Taxes	18.0	18.3	18.0	20.1	49.1	54.9	70.6	73.0
Trading Across Borders	29.7	40.1	48.3	48.8	51.0	53.4	65.2	65.2
Enforcing Contracts	68.7	66.9	67.2	67.2	67.2	66.3	57.1	57.1
Resolving Insolvency	9.1	9.8	9.9	9.6	9.4	27.8	28.1	27.9
Doing Business Global Ukraine's Rank	<u>124</u> 155	<u>139</u> 178	<u>142</u> 183	<u>152</u> 185	<u>137</u> 185	<u>112</u> 189	<u>96</u> 189	<u>83</u> 189

Notes. Estimates of rank components are given in absolute value. According to the methodology of their calculations, the highest value answers the best state of affairs. Evaluation of the general rank of Ukraine among the countries in the world is relative. It is constructed based on ranking. The numerator is the place of Ukraine in the ranked array; the denominator is the number of countries in the world, which were ranked.

Legend. N/A – not available or not calculated by the World Bank.

Source: it is made by the authors on the World Bank's data [15].

However, from 2014 onwards the procedures of obtaining construction licenses, property registration and customs clearance of cargoes steel more bureaucratized, a tax burden on businessmen considerably increased. The simplified tax system in agriculture was transformed, and since 2017, January 1, is completely abolished. By the rank component "Dealing with Construction Permits", Ukraine in a

¹⁵ *Doing Business.* The World Bank. Available at : <http://www.doingbusiness.org/data/exploreconomies/ukraine>.

year 2016 took the 137th place, leaving behind such countries as Niger, Libya, Liberia, Cambodia, Afghanistan, etc. Still the situation was the worst on a rank of opportunities of getting electricity, by which Ukraine placed on the 140th place. Low points also characterize national system of protecting minority investors' interests and a condition of trading across borders. The last one relatively worsened owing to the conflict with the Russian Federation.

A few different methodology of integrated assessment of economy is used by non-governmental organization "The Heritage Foundation". The basic difference is in application of the closed 100-mark ranking scale, where taking the worst state by zero, and the best one on 100 points. In a year 2016 Hong Kong, Singapore, New Zealand, Switzerland and Australia had the highest level of economic freedom, but Cuba and North Korea had the lowest one.

In general, the dynamics of Ukraine's economic freedom ranks confirms and specifies results of doing business rating (tab. 2).

Table 2. Rank of Economic Freedom of Ukraine

Rank Components	Years							
	1995	2000	2005	2010	2013	2014	2015	2016
<i>Rule of Law</i>								
Property Rights	30.0	30.0	30.0	30.0	30.0	30.0	20.0	25.0
Freedom from Corruption	10.0	28.0	23.0	25.0	23.0	21.9	25.0	26.0
<i>Limited Government</i>								
Fiscal Freedom	61.8	62.3	83.0	77.9	78.2	79.1	78.7	78.6
Government Spending	47.1	41.9	78.6	41.1	29.4	37.5	28.0	30.6
<i>Regulatory Efficiency</i>								
Business Freedom	55.0	55.0	55.0	38.7	47.6	59.8	59.3	56.8
Labor Freedom	N/A	N/A	55.8	57.7	49.9	49.8	48.2	47.9
Monetary Freedom	0.0	63.0	76.2	61.2	71.0	78.7	78.6	66.9
<i>Open Markets</i>								
Trade Freedom	55.0	70.0	76.2	82.6	84.4	86.2	85.8	85.8
Investment Freedom	50.0	50.0	30.0	20.0	20.0	20.0	15.0	20.0
Financial Freedom	50.0	30.0	50.0	30.0	30.0	30.0	30.0	30.0
Economic Freedom Global	<u>96</u>	<u>129</u>	<u>88</u>	<u>162</u>	<u>161</u>	<u>155</u>	<u>162</u>	<u>162</u>
Ukraine's Rank	101	160	161	179	177	178	178	178

Notes. Estimates of rank components are given in absolute value. According to the methodology of their calculations, the highest value answers the best state of affairs. Evaluation of the general rank of Ukraine among the countries in the world is relative. It is constructed based on ranking. The numerator is the place of Ukraine in the ranked array; the denominator is the number of countries in the world, which were ranked.

Legend: N/A – not available or not calculated by the Heritage Foundation.

Source: it is made by the authors on the Heritage Foundation's data [16].

¹⁶ *Index of Economic Freedom.* The Heritage Foundation. Available at : <http://www.heritage.org/index/country/ukraine>.

On the scale accepted by “The Heritage Foundation”, native economic freedom is characterized as a repressed. The worst situation is observed only in 16 countries in the world, among which there are Chad, Zimbabwe, the Republic of Congo, Equatorial Guinea, North Korea, etc. It is remarkable that the condition of the property right sphere in Ukraine worsened in 2014-2016 even by 1995. In addition, the level of investment freedom decreased and financial dependence increased. Positive shifts, which promote improvement investment and business climate in Ukraine is a high trade freedom, monetary freedom, and a transparency of the fiscal system.

Analysts of the World Economic Forum calculate the global competitiveness level of national economy based on 104 indicators of socioeconomic development, which are united in 12 pillars: institutions; infrastructure; macroeconomic environment; health and primary education; higher education and training; goods market efficiency; labor market efficiency; financial market development; technological readiness; market size; business sophistication; innovation. By each of these groups experts determine a rank on a 7-mark scale, which is averaged then by using a statistical scales system and reduce to the general rating of the country. After that, all countries of the universal set are ranging in a decreasing order with defining the place of each state in the ranged array.

The economy of Ukraine in a year 2000 was on the 57th place from 59 countries by the global competitiveness level. Until 2015, the situation improved as evidenced by shift of our country upon the 79th place from 140 [17]. The high level of corruption, the sophisticated access to financial resources, high inflation, instability of regulatory and tax policy, etc. remain the most problem aspects now.

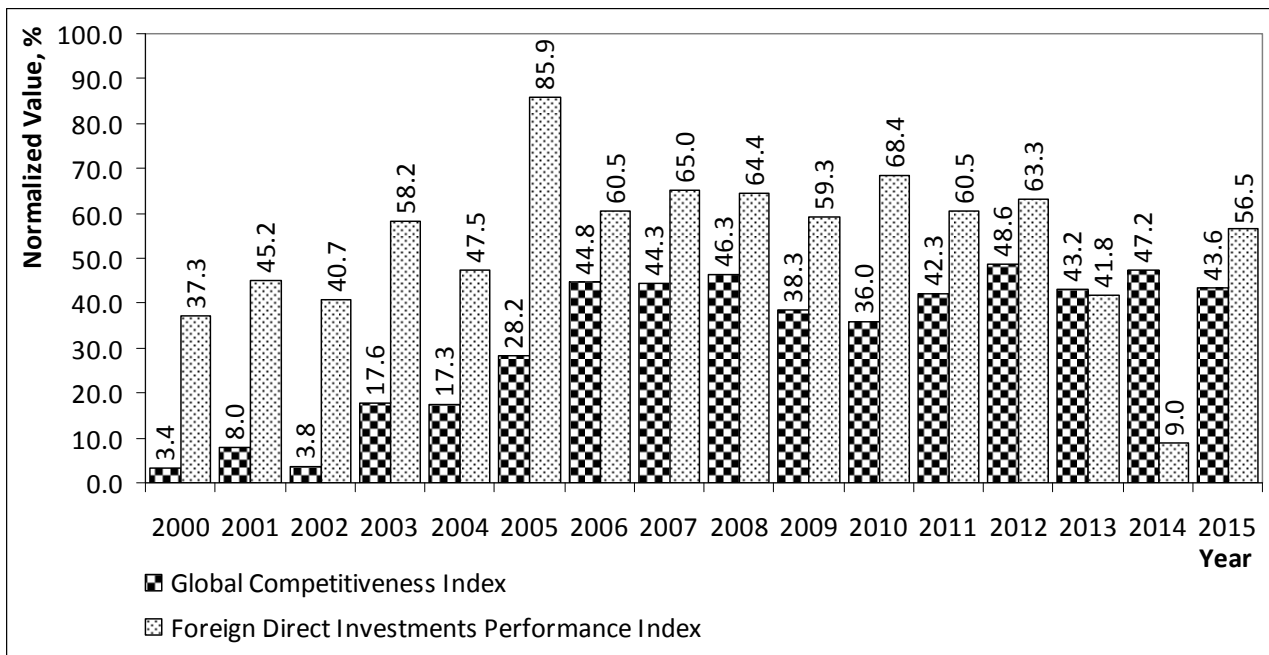
Because of the global competitiveness index is annually defined for the different number of the countries in the world, for inter-temporal comparisons of the Ukraine’s ranks we carried out normalizing of source data by the formula (3). These results are shown in the figure 1.

$$GCI_s = \left(1 - \frac{R}{\max R}\right) \times 100\%, \quad (3)$$

where GCI_s – normalized value of a global competitiveness rank of Ukraine, %; R – a rank of Ukraine by the global competitiveness index among the countries of the world; $\max R$ – the number of the countries in the world, which were ranked (the maximum value of a rank).

¹⁷ *Global Competitiveness Index*. World Economic Forum. Available at : <http://reports.weforum.org/global-competitiveness-report-2015-2016/economies/#indexId=GCI&economy=UKR>.

Figure 1. Dynamics of Global Competitiveness Index and Foreign Direct Investments Performance Index of Ukraine



Source: it is calculated by the authors on the data of the World Economic Forum and the UNCTAD.

The represented data demonstrate that dynamics of Ukraine’s global competitiveness has no accurate trend. Until 2002, it was extremely low; in 2003-2006 the undertaken institutional reforms considerably improved the state international position, which remained stable for three years. Influence of a world economic crisis, and a political situation destabilization over time were affected on the general rating of the country in the world in any case.

One of the main indicators of economy appeal for TNC is the investment climate. Besides, the capital internationalization level estimates on dynamics of foreign direct investments.

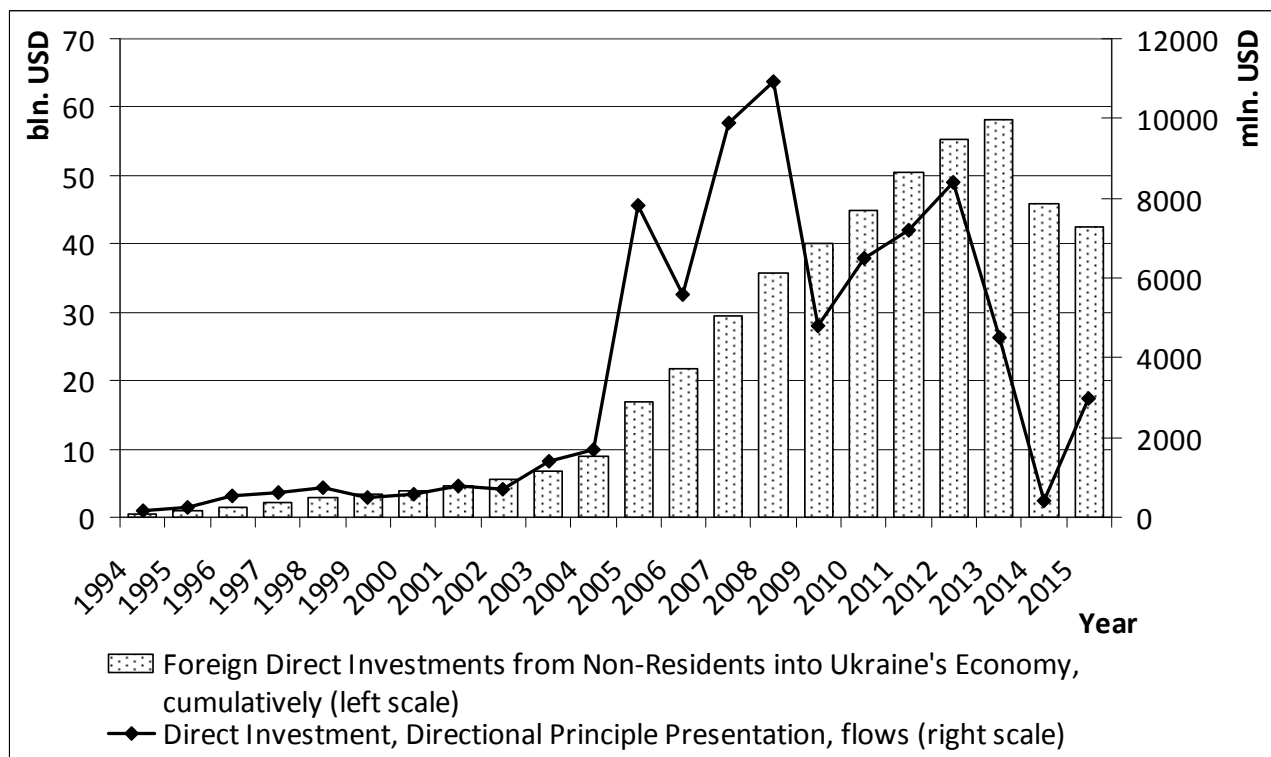
According to the current version of the “Balance of Payments and International Investment Position Manual”, the direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. All other transactions between a direct investor and a direct investment enterprise are classified as direct investment. Immediate direct investment relationships arise when a direct investor directly owns equity that entitles it to 10 % or more of the voting power in the direct investment enterprise. Control is determined to exist if the direct investor owns more than 50 % of the voting power in the direct investment enterprise. A significant degree of influence is determined to exist if the direct investor owns from 10 to 50 % of the voting power

in the direct investment enterprise [18, p. 14-15].

The account of foreign direct investments is kept by the National Bank of Ukraine according to the methodology of the International Monetary Fund, and by the State Statistics Service of Ukraine cumulatively since 1994. The technique of the State Statistics Service of Ukraine also varies in difference between the market capitalization and stocks at par of the direct investors.

During 1994-2015 over 77.0 bln. USD of foreign direct investments inward the economy of Ukraine were totally mobilized, which makes 80.2 % of GDP in a year 2015 (fig. 2).

Figure 2. Volumes of Foreign Direct Investments into the Economy of Ukraine



Note. The information for 2014-2015 excludes the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of the zone where anti-terrorist operation is taken place.

Source: it is made by the authors on the data of the State Statistics Service of Ukraine and the National Bank of Ukraine.

However, because of decapitalization of the national enterprises, which began in 2006 and accelerated in 2014-2015 the direct investments from nonresidents calculated cumulatively was only of 42.5 bln. USD or 44.3 % of GDP.

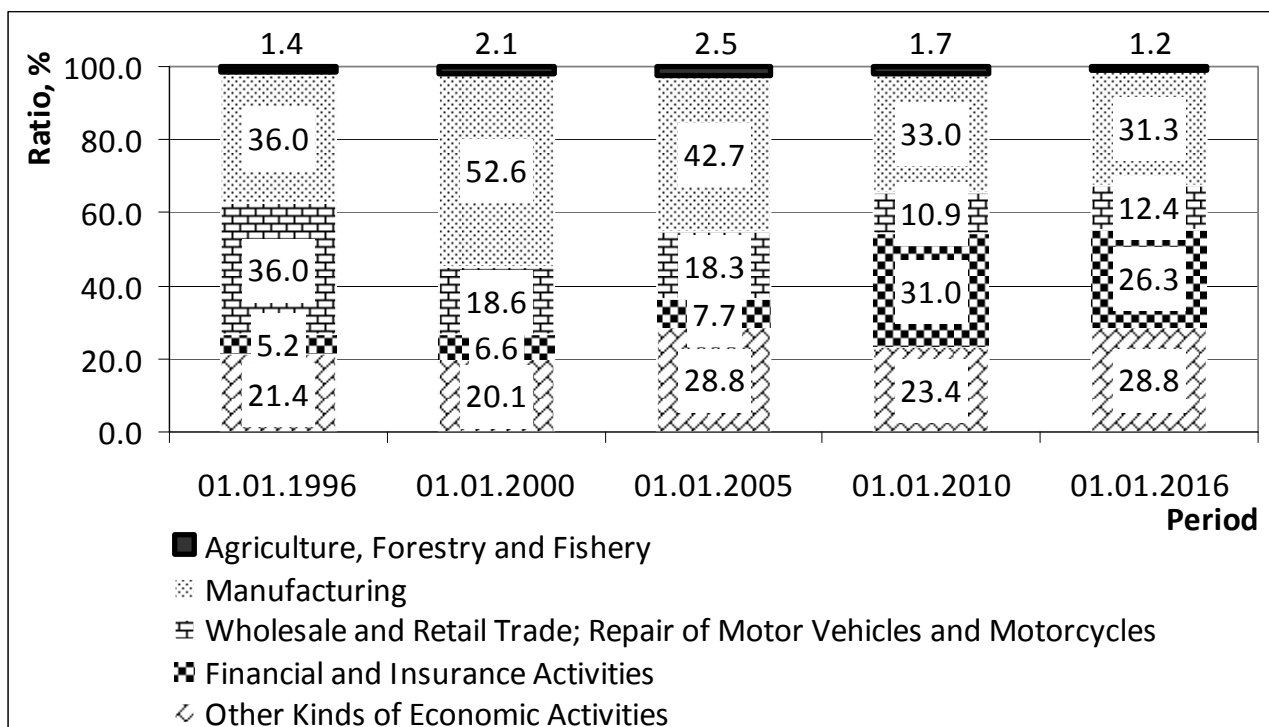
Dynamics of direct investment into the economy of Ukraine has accurately expressed time lag, which objective reason is term of public-private partnership

¹⁸ Methodological Commentary on External Sector Of Ukraine Statistics (according to the Sixth Edition of the Balance of Payments and International Investment Position Manual). National Bank of Ukraine. Available at : <https://bank.gov.ua/doccatalog/document?id=20004345>.

agreements, investment projects implementation period and a frequency of fixed capital updating in the enterprises as the recipients of funds. The average annual accession rate of inward foreign direct investments in 1995-2015 was of 21.3 %, including in the agrarian sector of the economy – 17.8 %, in the overworking and food industry – 16.5 %. The equity capital value of nonresidents for the studied period increased by 56.9 times and was in a year 2015 of 994.72 USD per capita of actual population in Ukraine. Such increasing in agriculture is less considerable (by 33.4 times) as well as investment-labor ratio of actual rural population – 38.12 USD per capita.

The structure of inward foreign direct investments also varies considerably for this time (fig. 3).

Figure 3. Structural Changes of Foreign Direct Investments (Equity Capital) into the Economy of Ukraine by Types of Economic Activity



Note. The information on 2016, January 1 excludes the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of the zone where anti-terrorist operation is taken place.

Source: it is calculated by the authors on the data of the State Statistics Service of Ukraine.

Therefore, in 1995 on 73.4 % of the nonresidents' capital were in the real sector of the economy, then in 2015 its structural ratio was 44.9 %. Change of priorities of foreign investors led to redistribution of funds from agriculture, forestry and fishery, manufacturing, wholesale and retail trade into the financial, insurance and banking activities.

The source of foreign capital origin considerably are offshore zones and zones of special jurisdiction, which list in Ukraine is approved by the Cabinet of Ministers

of Ukraine in execution of the subparagraph 39.2.1.2 of the Tax Code of Ukraine. Offshore zones and zones of special jurisdiction include states (territories), which have a corporate tax rate on 5 and more percentage points lower, than in Ukraine; the states without Ukraine's signed international agreements on information exchange; the states, which competent authorities don't provide a timely and global exchange with tax and financial information on inquiries of the central executive authority of Ukraine on the state tax and customs policy [19]. The called criteria in a year 2015 were answered by 65 countries (territories) of the world [20].

Over a period of 2009-2015 about 30-40 % of foreign direct investments came to the economy of Ukraine from offshore zones (fig. 4). Foreign investment of producers in the agrarian sector of the economy is even more off-shored because of activity of transnational corporations and national agriholdings.

Special jurisdiction gives the chance to the integrated organizations to apply a few of legal and semi-legal schemes of goods and funds turnover. According to the State Service of the Financial Monitoring of Ukraine, there are schemes of artificial overstating the tax credit in consequence of what the companies have the right for VAT refund on carried out export operation, etc.

The Russian Federation, USA and Germany, which shares in total amount is of 75.8 %, were the main countries of origin of the foreign capital inward the agrarian sector of the economy of Ukraine in 1995 (fig. 5).

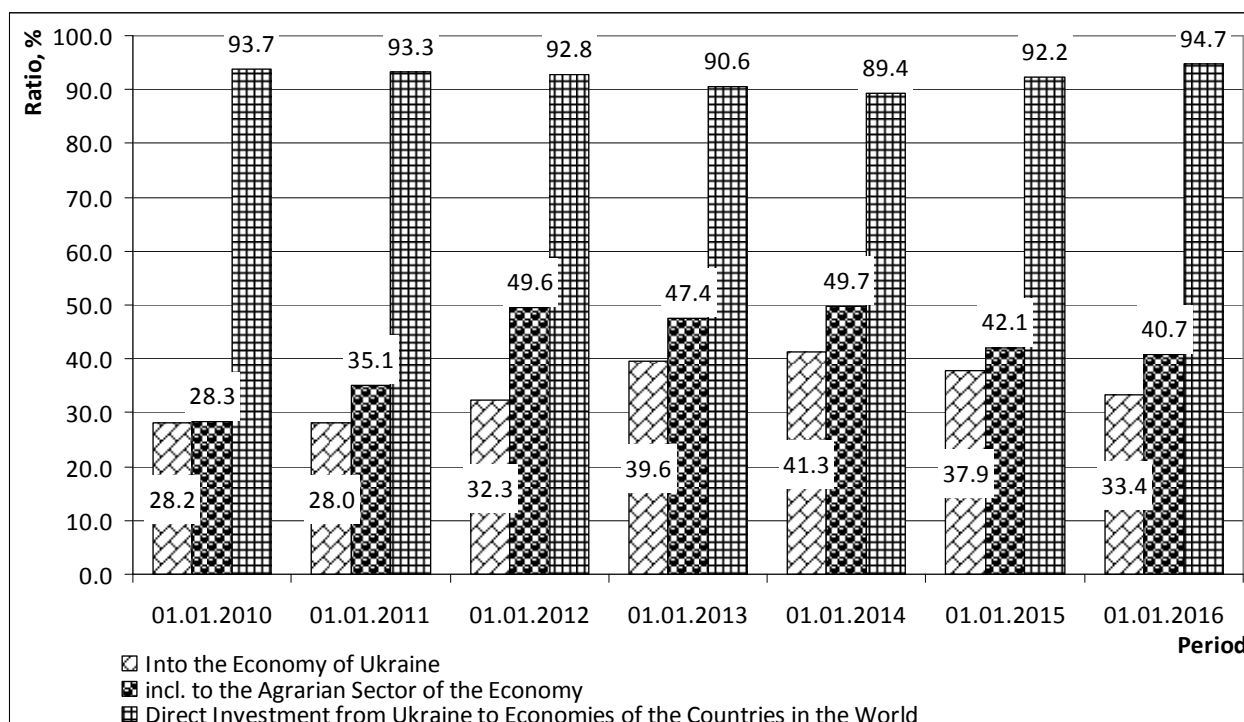
For 1995-2015, there were considerable transformations of a geopolitical situation and priorities of TNCs that consequence changes in territorial structure of foreign direct investments turned out to be. Cyprus, Denmark and Great Britain, which share in total amount in a year 2015 is of 55.7 %, became the main donor countries at the same time.

Volumes of direct investments from Ukraine to economies of the countries in the world are insignificant throughout all studied period. As in 2016, January 1 the native enterprises invested 6208.6 mln. USD, of which in the agrarian sector of other states – 16.7 mln. USD.

¹⁹ *Podatkovyi kodeks Ukrainy : Kodeks Ukrainy № 2755-VI vid 02.12.2010 r. (zi zminamy)* [The Tax Code of Ukraine]. (2010, December 2). Available at: <http://zakon.rada.gov.ua/laws/show/2755-17>.

²⁰ *Pro zatverdzhennia pereliku derzhav (terytorii), yaki vidpovidaiut kryteriiam, ustanovlenym pidpunktom 39.2.1.2 pidpunktu 39.2.1 punktu 39.2 statti 39 Podatkovoho kodeksu Ukrainy : Rozporiadzhennia Kabinetu Ministriv Ukrainy № 977-r vid 16.09.2015 r.* [The Ordinance of the Cabinet of Ministers of Ukraine on Approval of the Countries (Territories) List that Match Criteria of the Subparagraph no. 39.2.1.2 of the Subparagraph no. 39.2.1 of the Paragraph no. 39.2 of the Article no. 39 of the Tax Code of Ukraine]. (2015, September 16). Available at : <http://sfs.gov.ua/diyalnist-/mijnarodne-/normativno-pravovi-atty/224139.html>.

Figure 4. Structure of the Foreign Direct Investment into the Ukraine's economy through Offshore Zones and Zones of Special Jurisdiction



Notes The information on 2015-2016, January 1 excludes the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of the zone where anti-terrorist operation. Offshore zones and zones of special jurisdiction are determined by the list approved by the Cabinet of Ministers of Ukraine. The data on the agrarian sector of the economy corresponds to the type of economic activity "Agriculture, forestry and fishery".

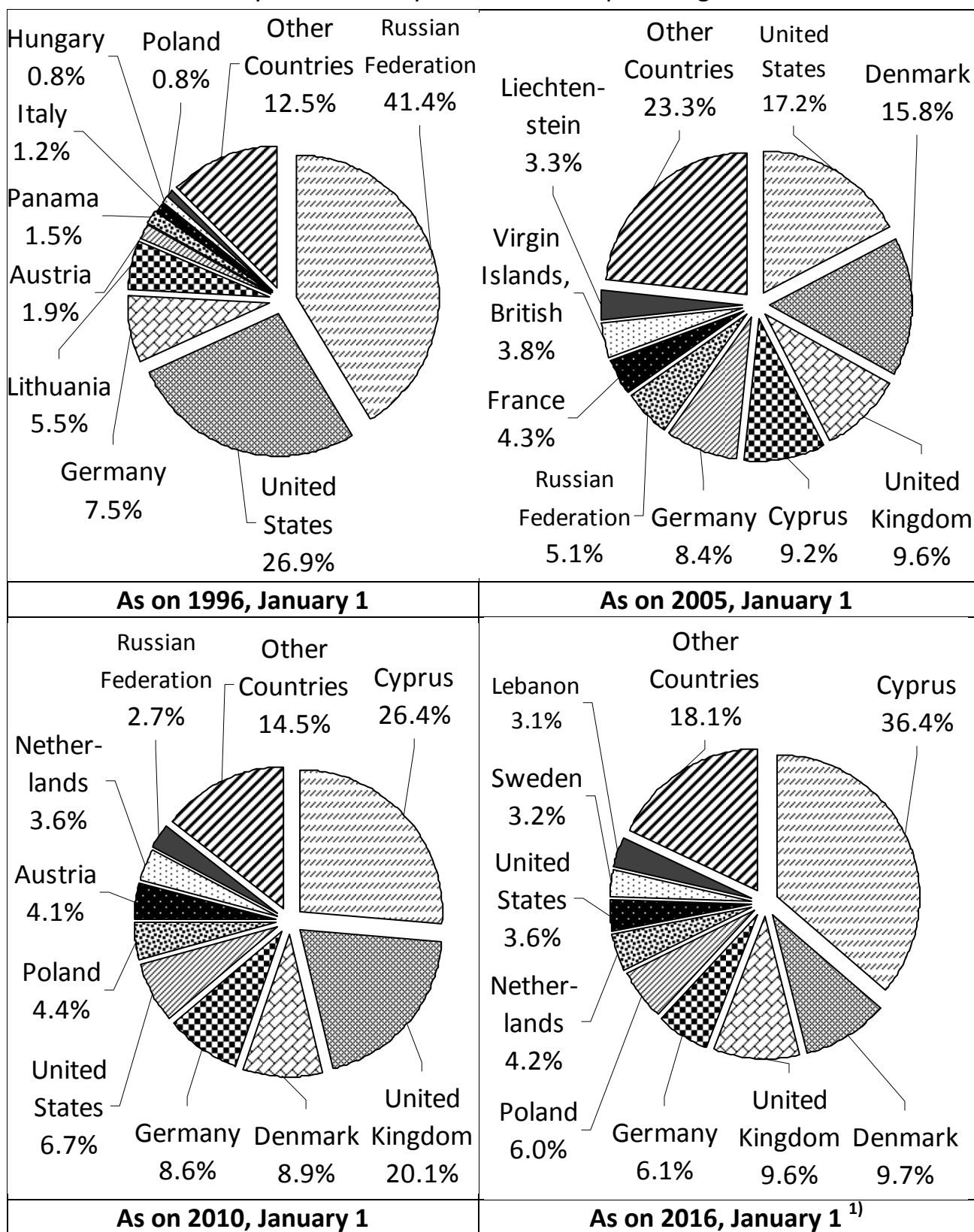
Source: it is calculated by the authors on the data of the State Statistics Service of Ukraine.

At the same time, in 1996, 1998, 2002, 2006 and 2015 years on the methodology of the International Monetary Fund we can observe capital reinvestment process. The choice of the recipient country until 2005 was caused by strategic partnership of Ukraine with other countries, but over time changed on an offshore vector under the influence of TNCs and the economy became shadow. By our estimates about 94.7 % of direct investments from Ukraine in economies of the countries in the world are the share of offshore zones (see fig. 4), 93.7 % of which are invested into Cyprus.

It should be noted that according to the calculations of the American scientists, in developing countries volumes of proceeding cash flows considerably are underestimated in connection with imperfection of social, political and legal institutes, and also under the influence of TNCs. Particularly, illicit financial flows from Ukraine due to trade misinvoicing for 2004-2013 was about 115.6 bln. USD, including in a year 2013 – of 13.3 bln. USD or 7.0 % of GDP [21].

²¹ Kar, D. & Spanjers, J. (2015). *Illicit Financial Flows from Developing Countries: 2004-2013*. Washington : Global Financial Integrity.

Figure 5. Structure of Foreign Direct Investments (Equity Capital) into the Agrarian Sector of the Economy of Ukraine by Countries of Capital Origin



Notes. The data on the agrarian sector of the economy corresponds to the type of economic activity "Agriculture, forestry and fishery". ¹⁾ – the information excludes the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of the zone where anti-terrorist operation is taken place.

Source: it is calculated by the authors on the data of the State Statistics Service of Ukraine.

Effectiveness of transnational integration in a global case study is often estimated through relative efficiency of foreign direct investments. So, the foreign direct investments performance index (FDI_{PI}) can be calculated by formula [22, p. 4]:

$$FDI_{PI} = \frac{FDI_i}{FDI_w} \bigg/ \frac{GDP_i}{GDP_w}, \quad (4)$$

where FDI_i , FDI_w – the volume of foreign direct investments inward the economy of country “ i ” and in economies of the countries in the world totally, “ w ”; GDP_i , GDP_w – a gross domestic product of the country “ i ” and the total one of all the countries in the world, “ w ”.

This indicator allows to approach a transnationalization problem in complex, estimating as the level of economy internationalization (a ratio of foreign direct investments in GDP of a country), and involvement of the country in the international capital flow’ system. We calculated foreign direct investments performance index of Ukraine’s economy for 2000-2015 and estimated its place among 177 countries of the world, using the UNCTAD statistical database. Normalization of data was carried out by analogy with the formula (3).

The results of calculations demonstrate that growth rates of capital transnationalization in Ukraine were the highest till 2005 when it reached the maximum absolute level in 4.45 units and relative of 85.9 %, having replaced the country on the 25th place in the global rating (see fig. 1). The gradual TNC’s economic activity decreasing that caused by the world economic crisis in 2008-2009 was replaced by the short-term recession in 2010-2012. However, owing to destabilization of a situation in Ukraine, the processes of deinternationalization began in 2014, which scale many times exceeded the period of reforms in the 90th of the XX century (for example, the absolute level of relative transnationalization in 2014 was 1.6 times less than in crisis 1994 year). In a year 2015 the confidence level of foreign investors was a little restored, but Ukraine remains on the 77th place among the countries of the world in any case.

In general, the foreign direct investments performance index quite correctly reflects not only the level of transnationalization, but also estimates results of the made decisions by the highest management of TNCs concerning expediency of production relocation at one or another country.

Over 1995-2015 years the essential changes happened in structure of agro-industrial production, which was completely displaced towards high-marginal types of production under the influence of transnationalization and globalization.

²² *FDI Potential and FDI Performance of the OIC Countries*. (2014). Ankara : SESRIC.

Therefore, in the structure of agricultural production of all types of agricultural holdings in 2015 the part of crop production was on 70.3 %, of which 47.5% is grain, leguminous and commercial crops. In comparison with attained levels in 1995, these indicators increased on 12.5 and 16.2 percentage points respectively, thereby having testified transformation of specialization type from the good-tempered to crop-growing type with poor development of livestock production.

As a result, the structure of foreign trade of agriculture products and its processing changed cardinally. For the studied period grain export (including products of grain processing counted as grain) in natural units increased by 47.1 times; of fruits, berries and grapes (including canned and dried products counted as fresh) – by 10.5 times; of eggs (including egg products) – by 31.5 times. At that the import of meat and meat products in natural units increased more than by 8.3 times; of potatoes, vegetables, melons and gourds increased by 1.3 times, and in some years by 6-9 times, etc. The export prices in all years were many times lower than world ones, that is formally explained by a lack of production certification and discrepancy between the native quality standards and the world and European analogues.

The total volume of export of goods and services for 1996-2015 increased by 2.4 times, of import – by 2.3 times. These indicators had the greatest value in 2012-2013, however decreased in a year 2015 by more than twice because of effect of social, economic and geopolitical factors. The ratio of export of goods and services in the GDP of Ukraine for the studied period increased by 3.2 times, of import – by 3.1 times and equaled in 2015 of 52.8 and 54.8 % respectively.

It should be separately noted that the volume of import of goods made on commission in 20 years increased only twice, and its export was reduced by 3.5 times. At the same time, the rate of value added on production made from the imported goods made on commission was of 43.5 % that by three times exceeds similar data on reexport operations. Unfortunately, volumes of a foreign trade turnover of agro-food goods made on commission remain extremely small (in a year 2015 the volume of imported goods made on commission on 1-24 groups of goods of the Ukrainian Classification of Goods for Foreign Economic Activity was only 71.6 mln. USD) and do not exceed 3 % in the total volume.

Conclusions. Having summarized theoretical and analytical considerations, we notice that the economy of Ukraine in general and the agrarian sector in particular, turn into a raw appendage of other countries of the world under such circumstances and tendencies. The last has been already posing an essential threat for the national security. In such aspect transnational integration turns into expansion, and foreign

direct investments are “low-quality”, directed to deepening of debt crisis and dependence. Transnational corporations provide here a role of unfair players in the market, whose purpose is not a movement of high-tech production, but monopolization of the local markets, access to cheap resources, etc. For keeping of its positions, TNCs actively use an institute of political rent, without giving the chance to undertake effective reforms and regulatory measures. Finally, it leads to increasing of poverty and unemployment level in the country, to degradation of rural territories, to destruction of national identity.

Paradoxically, but, as scientists with a world name note, transnationalization has effect of “illusive wellbeing”. It is shown that the governments of the countries seek to create favorable conditions for TNC’s involvement, fixing of their positions in the state for a long time, to guarantee the property right and free activity just when the economy remains in chronic critical condition with considerable branch disproportions. Certainly, TNC’s activities have the positive sides about which we spoke at the beginning of the research, but their effect in this case will be rather local, not focused on a long-term outlook.

On our belief, a transnational integration can be effective and constructive in the long term only under conditions of development and deployment accurate standards of activity of transnational corporation and foreign investors in Ukraine, especially in the agrarian sector of the economy. As the analysis of world tendencies of sectoral development testifies, one of the most rational measures is the course on state and corporate capitalism, when the state and corporate organizations act as the main subjects of property, and their association in the uniform mechanism forms system of the economic relations as qualitatively new form of productive forces development. The priority in so doing has to be provided to mainly state form of ownership on means of production, especially on land resources, which economic circulation will be based by-turn on their rent.

The system of regulatory actions has to be based on the principle of restriction the rent-seeking behavior, when a part of rental and quasi rental super profits of corporations are withdrawn in favor of society. The selective policy concerning transnational corporation needs to be pursued proceeding from strategic priorities of Ukraine’s development, its national security and global competitiveness. The effective mechanism of cooperation between transnational corporate organizations and the state seems us in public-private partnership. Guaranteeing of the food security of Ukraine has to be provided by creation of the state transnational corporations as it is done by the most developed countries of the world.