УДК 330.1(438)

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THE IMPACT OF FOREIGN DIRECT INVESTMENT ON THE TRENDS AND DYNAMICS OF THE DEVELOPMENT OF THE POLISH ECONOMY – AN OUTLINE OF THE PROBLEM

Nowadays, trade and capital flows in the form of foreign direct investment (FDI) are some of the most important forms of the international economic cooperation. In the theory of economy one may come across a number of concepts making an attempt to explain the mutual interdependence between these types of flows.

Undoubtedly, foreign capital has an impact on the development of innovation and the creation of technological solutions, new techniques, methods of management and marketing. The final result, provided that the countries absorbing this kind of capital lead a consistent economic policy, should be the increase of the competitive ability of these countries and their development dynamics.

Key words: foreign direct investments, export, import, capital, investments, development.

Introduction

At the turn of the 20th and 21st century, the creation of new quality of dependence and interdependence between the economic operators, especially the economies of countries at different levels of development and continents, took place in world economy. These dependencies and interdependencies are generated in an intensifying and increasingly common process of expanding relations of production, investments, technology, trade, finance and institution. Their dynamics and mutual interactions are the result of:

– internationalization of production processes and distribution of goods and factors of production;

– globalization and regionalization of the modern global economy;

– increasing scope of the liberalization of international flows of goods and services, workforce, capital, technology and technical knowledge, resulting from the concluded treaties and agreements, both multilateral and bilateral;

– transformation and the opening of many economies, whose purpose is to boost the development processes and to reduce the gap to the developed countries;

– intensification of the development of scientific and technical progress, in particular the ICT sector.

These processes also affect the intensity of dependence and interdependence in international economic relations. Not only their intensity in time and space, but also their character, which is determined by various forms of international links in which enter widely understood economic operators[1].

[1] B. Ślusarczyk, *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka,* Wyd. Fachowe CeDeWu, Warszawa 2011, p. 111.

Contemporarily, trade and capital flows in the form of foreign direct investment (FDI) are some of the most important forms of international economic cooperation. In the theory of economy one may come across a number of concepts making an attempt to explain the mutual interdependence between these types of flows. They concentrate both on the quantitative and qualitative nature of relationships between FDI and international trade.

1. Theoretical aspects of FDI

Traditional theories referring to the foreign direct investments (FDI) focus essentially on explaining the reasons for the expansion of business activities into foreign markets[2], identifying the factors determining the choice of country as the investment location[3], as well as on the analysis of the conditions which should be met by companies exporting capital to another country. Theories developed mostly in the seventies were the basis for the development of an eclectic theory of international production by JH Dunning's[4], which integrates the elements of the monopolistic theories, internalization of production and the theory of location factors.

The theory of J.H. Dunning is also known as the OLI paradigm (ownership-location -internalization).

According to it, it is impossible to explain the phenomenon of foreign direct investments with a formalized theory. This requires a synthesis of existing theoretical approaches indicating the motives for making foreign investments associated with the presence of three interdependent types of advantages (benefits sources) of the enterprises, that is to say:

1) the advantage resulting from the specificity of the company which is the result of, inter alia, the size and the position of the company, product diversification or the methods of producing better equipment in resources and their manufacture, greater access to resources and to the market for the product, management systems, the quality of management staff, centralization of research and development, marketing and financial potential, diversification of the risk, especially foreign exchange, better knowledge of the rules and trade practices on particular markets and regions;

2) the advantage related to the internalization of economic activity;

3) the location advantage, which is determined by, inter alia, spatial distribution of production and markets, centralization of distribution channels, level of development of broadly defined infrastructure, the scope of legal and economic regulation of the country.

J.H. Dunning, while discussing the sources of the advantages, points out the existence of a certain gap in the theory of the international economy. He states that «the gap in the literature of economics and business is the lack of a dynamic approach to its role in economic development. There are few systematic studies on the impact of TNC (Transnational Corporations) to dynamic comparative advantage»[5].

That gap is filled by T. Ozawa who formulates a complex theory taking into account the relationship between economic development and the evolution of competitive advantage of

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[2] Eg. The theory of monopolistic advantage by Ch.P. Kindleberger, the theory of international product life cycle by M.V. Posner, extended to the analysis of foreign investment by R. Vernon, transaction cost theory called the theory of internalization of production, developed, inter alia, by R. Coase and O.E. Williamson.

[3] Inter alia, theory of location factors by J.H. Dunning.

[4] J.H. Dunning, *Explaining Changing Patterns of International Production. In defence of the eclectic Theory,* Volume 41, November 1979, p. 269–280. It should be noted that, a number of concepts of eclectic essence emerged, whose authors are, inter alia: J.R. Markusem*, Explaining the Volume of Trade: An Eclectic Approach,* American Economic Reviev, 1986, Vol. 76; J.R. Markusen, A. J. Venables, D.E. Konan, K.H. Zhang, A. Unifled, *Treatment of Horizonatl Direct Inwestment, Vertical Direct Investment and the Pattern of Trade in Goods and Servises,* NBER Working Paper, 1996, No 5696.

[5] J.H. Dunning, *Explaining Changing...,* op. cit. and the theory of this author, *The Cometitive Advanlage of Countries and the Activities of Transnational Corporations,* Transnational Corporations 1992, No 2.

the foreign trade in terms of dynamics and the impact of foreign direct investments on these processes[6].

The basis of T. Ozawa's theory is the view of M. Porter, who believes that in spite of diversification of the economies of most countries, it is possible to determine the stage of economic development of the country. Its pattern of comparative advantage and its changes over time is examined[7]. Throughout this process, the symptoms of changes are the shifts in the pattern of comparative advantage from labour-intensive and material-consuming goods (characteristic to the first stage) to capital-intensive goods (e.g. in heavy industry, chemical industry associated with the phase of industrialization and construction of industrial infrastructure). At this stage, related to the productive and technological innovations, the country is now equipped with human capital with high qualifications and implements active work in R & D. Then comparative advantage in the export "moves to goods with a high degree of innovation and modern technology (so called technologically intensive goods). According to M. Porter, the majority of the developing countries is on the first stage of the development gaining comparative advantage in a range of labour- and material-intensive goods. Some of them, thanks to the investments in the capital-intensive areas, have reached the second stage of development.

The basic assumption of the theory T. Ozawa referring to the theory of M. Porter is the fact that the economic growth and the transformation of the economy are connected to the changes in the model of the comparative advantage. Just as K.A. Kojima, he indicates the active role of foreign investments. He believes that the pattern and the directions of inflow and outflow of foreign capital vary with the stages of structural transformation of the economy [8]. For example, for the first stage, which the production of labour- and material intensive goods is characteristic to, the inflow of foreign direct investment is also a notable phenomenon. Whereas, for the fourth stage of development, in which the decisive role is played by innovation and technology, the inflow of investments into production sectors with a high proportion of qualified labour and technology is an indispensable process.

The result of the analysis of relationships and interdependencies is a following thesis, formulated by T. Ozawa, connected to the stages of economic development: the higher the GDP per capita, the greater the effort of physical and human capital per capita in relation to raw materials and the greater the effort of human capital in relation to physical capital[9].

The stage of economic development are connected to the evolution of the pattern of comparative advantages by «shifting» the advantage from the areas less technologically advanced and with low productivity to more diversified products with a higher share of human capital and technology. This thesis finds its justification in the dynamic model of comparative advantage taking into account foreign investment.

The model developed by T. Ozawa assumes the possibility of transplantation of the intangible assets (knowledge, management, *know-how)* between the countries and the investment capital flowing mostly from the sectors which do not have a comparative advantage in the country investing into sectors with comparative advantage (current or anticipatory) in a country receiving direct investments. The final result of these processes, as K.A. Kojima and T. Ozawa emphasize, is the intensification of trade and the increase of the pace of economic development. At the same time they add, that the condition of the acceleration of economic growth is not only the preparation, but also the implementation of the strategy of the export support development and conducting a policy of economy openness, in particular the creation

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[6] T. Ozawa, *Foreign Direct Investment and Economic Development,* Transnational Corporations, 1992, No 1.

[7] M. Porter, *The Competitive Advantage of Nations*, New York 1990, p. 545–546.

[8] T. Ozawa, *Foreign….,* op. cit., p. 35–36.

[9] Ibidem, p. 16.

of attractive conditions for foreign direct investment. Many economists, including B. Balas, drew attention to this kind of interdependence and their effects[10].

The aim of the discussion T. Ozawa is to present a sequence of events (phenomena and processes) of a cause-and-effect nature, the ultimate result of which is the *super growth.*

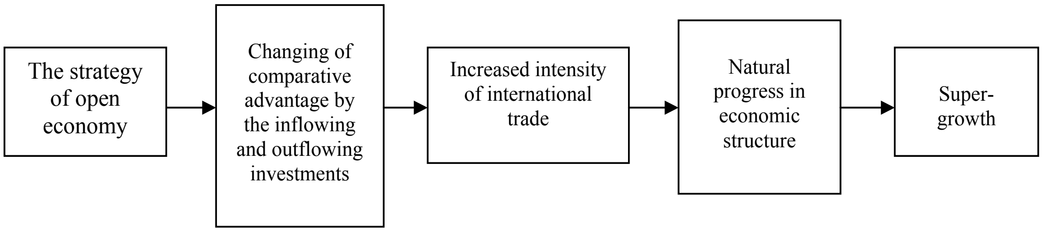

Fig. 1. The intensification of trade, whose impulse is the foreign direct investments
Source: own authoring based on T. Ozawa, *Foreign….,* op. cit., p. 45.

The analysis of the course of phenomena and development processes may be carried out on the example of a developing country, which undertakes the implementation of the process of industrialization. The country has abundant labour resources and in addition to that is characterized by a low level of wages and income *per capita.* The implemented development strategy creates attractive conditions for foreign capital and dynamic development with its participation, in particular the companies in sectors with comparative advantage, that is to say labour-intensive industrial sectors. The result of that is a further increase advantage and price competitiveness of exports, on the condition of forming wages at the current low level and absorbing free workforce. However, after the exhaustion of the reserves of workforce there will be wage pressure, the consequence of which will be the disappearance of a given country's comparative advantage in labour-intensive sectors and the deterioration of the competitiveness of these sectors. This will cause a shift of own resources for the production of higher value-added in domestic industry, while foreign investors who engaged capital in labour-insensitive sectors will move it to more capital-insensitive sectors in the current country or move their capital to other developing countries, where there is abundant and cheaper workforce. Therefore, the country implementing the process of industrialization and owning large reserves of workforce can in a relatively short time becomes an active foreign investor, looking in other developing countries for cheap labour resources[11].

The location of capital in sectors employing workforce with low skills allows you to achieve comparative advantage in this respect[12], but also other advantages resulting from the learning process on the imported technology, the improvement of technical and organizational solutions as well as know-how and gradual creation of own innovative capacity. This process is described by J.A. Cantwalla and P.E. Tolentio as localized learning and technological accumulation and is a key determinant of foreign direct investment from developing countries[13].

Summing up the current discussion on the relationship between the evolution of a dynamic pattern of comparative advantage and the influence of foreign direct investment on the process a pro-export strategy and the stages of economic development of a developing country, the importance of the active role of the state should be emphasized. Effective eco-

[10] B. Balasa, *New Directions in the Word Economy,* New York, 1989.

[11] In fact, these processes are much more complex than shown here. See T. Ozawa, *Foreign….,* op. cit., p. 46 and B. Balasa, *New Directions…,* op. cit.

[12] Zob. F. Masataka, *TNCs from Developing Countries,* The CTC Reporter, 1990, no. 30, p. 42–45.

[13] J.A. Cantwell, E.T. Paz Estella, *Technological Accumulation and Third World Multinationals*, Discussion Paper 1989, nr 139, cyt. za: T. Ozawa, *Foreign….,* op. cit., p. 38–44.

nomic policy of the government, according to J. H. Dunninga, M. Portera and T. Ozawy plays an important role in the process of transformation boosting the economic growth rate. Providing investment in infrastructure, education and research and development sphere, above all, generates the base of the dynamic comparative advantage and has the influence on the availability of the markets, thus intensifying the turnover of international trade. Therefore, there is no doubt that M. Porter's theory and based on it T. Ozawa's theory form one of the most comprehensive theories characterized by a dynamic approach taking into account the interrelationships and the relationships between the theory of international trade, foreign direct investment theory and the theory of economic development and this is its theoretical value and practical utility.

2. Foreign direct investments and the effects of their impact

Among the developing countries, a group can be distinguished, for which FDI has become an important part of strategy accelerating economic growth and structural changes enabling the reduction of the distance existing towards highly developed countries. Many economies from the area of Latin America and Eastern and Southeast Asia may be included in this group, as well as countries from East-Central Europe, including Poland. However, it should be stated that not all of them were, in a long time, able to maintain a high rate of FDI inflows, initiated especially in the eighties and the nineties of the last century.

Empirical studies on the impact of FDI on economic growth focus largely on identifying the trends of influence of foreign capital on the level of GDP. The positive impact of FDI on economic growth through increased trade was pointed out by K. Kojima[14], J. H. Dunning[15] and T. Ozawa[16]. An example confirming the positive correlation of FDI with exports there are many countries, including especially Taiwan and Poland, where intensive inflow of capital in the form of foreign investment was accompanied by a rise in exports generated largely by the participation of foreign enterprises.

On the other hand, E. Borenstein, J. De Gregorio and J. W. Lee[17] emphasise the fact that FDI may also positively affect the growth by making expenditures on education of the national workforce and promoting spending on research and development (R & D). In some countries, expenditure on R & D performed by companies with foreign capital accounted for approx. 50% of the expenditure incurred for this purpose by all companies[18].

Significant way of FDI impact on the growth is associated with the *spill over* effect based on the diffusion of higher productivity by local companies as a result of functioning on the foreign companies market. This effect is explained by the fact of strengthening the competition from foreign entities, which having the advantage in productivity of production factors will reduce the local monopolistic structures and force local companies to adapt to the new conditions.

Higher productivity of companies with foreign capital has been confirmed in many countries, both in terms of investments in highly developed countries and developing countries. This is undoubtedly the result of cost reduction, increased investment, implementation of new technologies and management methods and organization of production, which are taken over by foreign companies[19].

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[14] K. Kojima, *Direct Forcign Investment. A Japonse Model of Multinational Business Operations, Croom Helm* London, 1987.

[15] J.H. Dunning, *The Role of Forming Direct Investment in Globalizing Economy*, BNL Quartely Reviev, No 2, 1995.

[16] T. Ozawa, *Foreign....,* op. cit.

[17] E. Borenstein, J. De Gregorio, J. W. Lee, *How Does Foreign Investment Affect Economic Growth, NBER,* Working Paper, No 5057, 1995.

[18] The share of companies with foreign capital in the total expenditure on research and development accounted i.e. in Singapore to 58%, in Brazil to 48%, UNCTAD 2015.

[19] Szerzej: B. Sowa, *Finansowanie przedsiębiorstwa kapitałem wewnętrznym* [in:] A. Olak, R. Kozioł, E. Wierzbicka, *Integracja, Samorząd, Przedsiębiorstwo. Komunikacja i zmiana*, Wyd. Multiprint s.r.o Košice, 2015, p. 164–189.

What is more, another direction of impact of *spill over* effect should be indicated, namely domestic companies with a large share of foreign capital showed a stronger growth in export activity. Greater propensity to export may be due to the effect of imitation, as well as the loss of part of the domestic market as a result of increasing competition.

In addition, the results of foreign investment inflow are: new products placed on the domestic market, development of new sectors, for example electronic industry, new workplaces, the creation of vertical structures of production, i.e. through sub-contracting. Nevertheless, cooperation with foreign partners in countries receiving investments requires making market regulation, i.e. increasing labour market efficiency, reducing market entry costs and facilitating the administrative procedures for running a business. It is important, in many countries, to limit high-level corruption, which can result in the inhibition of FDI inflows in the future. And therefore a prerequisite to keep exist and attract new investors to provide that the solutions introduced are reliable and durable and create attractive conditions, otherwise, the achievement of higher and stable development dynamics can become impossible[20].

Analysing the literature on the subject it is difficult to determine unambiguously how foreign direct investment affect the country which receives it. Most frequently discussed issues are connected with capital and financial market, balance of payments, labour market and employment. Many authors dealing with issues related to international capital flow highlights that they may cause both positive and negative consequences for individual countries. They may be presented in a concise and comprehensive way in a tabular arrangement (see table 1).

Table 1

Positive and negative effects of foreign direct investments

Affected area	Positive effects	Negative effects
Resources	Additional capital resources. The increase of the funds for investments. The transfer of new technology. The transfer of skills and knowledge connected with the manager. The improvement of management skills and know-how. Entering new selling markets	Domestic companies deprivation of access to foreign markets. Withdrawal from local products to foreign. Too much FDI or their improperly adjusted form may not meet local demand
Enterprises	The introduction of new working culture and entrepreneurship. Different ways of competing. The improvement of productivity	Too high density on the market. Improper alignment of foreign management to local structures The slowdown in local businesses through specialization in highly processed products
Taxes	Additional tax revenues	Reduction of the tax income by transfer pricing
Balance of payment	The improving the balance of payments by replacing imports with investment. The increase in export value	The deterioration of the balance of payments by an increase in imports and decrease in exports caused by the expulsion of local exporters
International integration	Better links with the international market. The inclusion to international structures	Forcing out the businesses of exporters. Decrease in exports and increase in imports
Social policy and cultural situation	Direct transport of economic and political system to the host countries. New, good work practices. Providing new standards of behaviour and culture	Funding of social, cultural and political unrest. The introduction of unacceptable values (bad labour practices). The direct involvement of foreign enterprises in the political events

Source: own authoring based on: M. Jaworek, *Bezpośrednie inwestycje zagraniczne w prywatyzacji polskiej gospodarki,* Wyd. Dom Organizatora, Toruń 2006; K. Puchalska, A. Barwińska-Małajowicz, *Międzynarodowe przepływy kapitału i siły roboczej,* Wyd. UR, Rzeszów 2010; A. K. Rysik-Uryszek, *Bezpośrednie inwestycje zagraniczne. Teoria i praktyka*, Wyd. CeDeWu, Warszawa 2010; W. Zysk, *Obcy kapitał a handel zagraniczny w Polsce*, Wyd. CeDeWu, Warszawa 2012.

[20] T. Ozawa, T. Ozawa, *Foreign….,* op. cit. and R. Lipsey, *Home and Host Country effects of FDI, NBER,* Working Paper, No 9293, 2000.

It is difficult to determine unambiguously, whether foreign direct investment bring more opportunities or risks for the economy of the host country. However, the majority of economists believe that their results for the economic operators involved in the processes of international exchange of capital are generally beneficial. There is no doubt that interference of FDI in various areas of economic life is evident and, despite all, inevitable in a globalizing world. It is important to ensure the conditions for the adoption of foreign direct investment appropriate enough to enhance their advantages and reduce the negative aspects of their development. It is a challenge for modern economic policy of the government of each country accepting FDI[21].

3. Foreign direct investment in Poland – the analysis of statistical data

Poland belongs to the group of East-Central Europe countries, to which the FDI inflow initiated in the eighties and the nineties of the twentieth century is still continued. Nevertheless, the scale of influx and its rate decreased significantly in the years 2010–2014 (see table 2).

Table 2

The size and form of foreign direct investment in Poland in 2010–2014 (in billion EUR)

Year	Shares and other forms of equity interests.	Reinvestment of profits	Debt instruments	Total
2010	3 181	5 627	1 699	10 507
2011	2 424	5 177	7 232	14 832
2012	– 2 637	4 440	2 913	4 716
2013	– 5 482	3 510	4 031	2 059
2014	1 652	6 039	1 304	8 995

Source: own authoring based on Polish National Bank data.

In 2010 the total value of Polish FDI inflow amounted to 10 507 million Euro, including: reinvested profits accounted to 5 627 million Euro, equity investments of Polish companies – 3 181 million Euro, positive balance of credit – 1 699 million Euro.

In 2011 inflow to the Polish capital from foreign direct investment amounted to 14 832 million Euro, of which: 2 424 million Euro – contribution of capital shares; 5 177 million Euro – reinvested profits and 7 232 million Euro – remaining capital, especially credits. In comparison to the previous year the value of the inflow increased by 4 325 million Euro, in other words by 30%. However, the balance of the contributed shares and profits reinvested by direct investors decreased. In contrast, there was a significant increase in remaining capital, including loans.

In 2012 there was a decline of FDI inflows into Poland, their total value amounted to 4 716 million Euro, including reinvested profits – 4 440 million Euro, remaining capital – 2 913 million Euro, termination of capital shares – 2 637 million Euro. So the value of the inflow was lower by 10 116 million Euro, in other words by over 68%.

The largest decreases were recorded in the inflow of remaining capital and capital shares. This was in particular due to the withdrawal of the investors involved in the capital in transit. Capital transactions in transit have had an impact on both the size of capital inflows and the geographical structure and the division of investment into economic activities.

[21] More: B. Ślusarczyk, B. Sowa, *Determinanty zmian w biznesie w wybranych krajach Europy Środkowo – Wschodniej w dobie globalizacji* [w:] Детермінанти сталого розвитку організацій в умовах глобалізацій: матеріали ІІ Міжнародної науково-практичної інтернет-конференції 25–27 листопада 2015 р, Міністерство освіти і науки України, Державний вищий навчальний заклад «Національний Гірничий Університет». – Дніпропетровськ: НГУ, 2015. – С. 300–309.

In 2013 the value of FDI inflow into Poland amounted to 2 059 million Euro, of which reinvested profits – 3 510 million Euro, the remaining capital that is different debt instruments – 4 031 million Euro net, termination of capital shares – 5 482 million Euro, which was associated with the capital in transit and the negative balance of mergers and acquisitions. The outflow of capital was a result of the liquidation special purpose entities belonging to non-residents established in Poland, which also occurred in 2014.

In 2014 FDI inflow to Poland increased significantly and amounted to 8 995 million Euro, including reinvested profits – 6 039 million Euro, capital in the form of shares and other equity – 1 652 million Euro and capital in the form of various debt instruments – 1 304 million Euro.

It should be emphasized that Polish net liabilities in respect of foreign direct investment in the years 2010–2014 showed an increasing trend. In 2010 they amounted to 579 212 million zlotys, and in 2014 amounted already to 731 727 million zlotys, so they increased by 26%. These liabilities consisted of liabilities arising from shares and other forms of equity shares and debt instruments. In 2010 shares and other forms of equity interests amounted to 476 610 million zlotys, and in 2014 – 566 663 million zlotys, so it was higher by almost 19%. A similar upward trend related to debt instruments whose value was 165 065 million zlotys in 2014 and was higher by 60% than in the base year (see table 3).

Table 3

Liabilities arising from foreign direct investment in Poland at the end of the year in 2010–2014 (in million zlotys)

Year	Shares and other forms of equity interests	Debt instruments	Total
2010	476 610	102 602	579 212
2011	472 415	124 472	596 887
2012	499 743	130 510	630 252
2013	548 838	149 989	698 827
2014	566 663	165 965	731 727

Source: own authoring based on: *Zagraniczne inwestycje bezpośrednie w Polsce w 2014 r.,* p.1 (http://www.nbp.pl/publikacje/zib/zib_2014_n.pdf, access: January 4th 2016) Polskie i zagraniczne inwestycje bezpośrednie w 2013, Narodowy Bank Polski, Warszawa 2015, p. 9–21 (http://www.nbp.pl/publikacje/ib_raporty/raport_ib_2013.pdf, access: January 4th 2016).

For several years, the largest direct foreign investor in Poland has been the Netherlands. A lot of funds is also invested in Poland by Germany, France, Luxembourg, Sweden and Cyprus. The list of the 10 largest foreign investors in Poland in the years 2010–2014 is presented in table 4.

Table 4

The largest foreign investors in Poland in 2010–2014

Year 2011	Year 2012	Year 2013	Year 2014
The Netherlands	The Netherlands	The Netherlands	The Netherlands
Germany	France	France	Germany
France	Germany	Germany	France
Luxembourg	Luxembourg	Luxembourg	Luxembourg
Spain	Cyprus	Sweden	Sweden
Cyprus	Spain	The United States of America	Cyprus
Sweden	Belgium	Cyprus	The United States of America
Great Britain	Great Britain	Spain	Spain
Denmark	Sweden	Belgium	Great Britain
Italy	Italy	Italy	Italy

Source: own authoring based on: *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2011*, GUS, Warszawa 2012, p. 68; *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2012,* GUS, Warszawa 2013, p.67; *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2014*, GUS, Warszawa 2015, p. 68.

The inflow of foreign direct investments to Poland in the analyzed period contributed to the creation of new economic operators and indirectly shaped the situation on the labour market.

When analyzing the growth of the number of economic operators and the number of employees you can draw the following conclusions:

– firstly, a positive phenomenon is the growing number of workplaces created in the in the subsequent years;

– most jobs are created by large and medium-sized enterprises. Small companies with foreign capital, although numerically in 2014 accounted to 84,4% of all economic entities, were characterized by low participation in total employment – only 7,8%;

– investments flowing into entities with foreign capital have a positive impact on the labour market, because with the increase in the number of enterprises with foreign capital the number of people employed there has also increased. This is confirmed by the calculated Pearson's correlation coefficient ratio which amounts to 0,803, which indicates a high dependency of analysed multiplicity (see table 5).

Table 5

The size of the number of economic operators with foreign capital and the number of employees and the relationship between them expressed by Pearson's correlation coefficient

Year	Number of economic operators	Number of employees
2007	18 515	1 453 733
2008	21 092	1 531 668
2009	22 176	1 460 650
2010	23 078	1 518 398
2011	24 910	1 566 533
2012	25 914	1 571 235
2013	26 128	1 628 516
2014	26 464	1 747 811

Pearson's correlation coefficient **0,803**

Source: own authoring based on data from General Statistics Office, *Działalność gospodarcza podmiotów z kapitałem zagranicznym w latach: 2007–2014.*

Generally speaking it should be stated that the positive effects, of quantitative essence, of the direct influence of FDI on the Polish market outweigh the negative effects. Whether the positive or negative effects outweigh in a given economy depends on many factors, inter alia, whether business of created entities on the basis of FDI is complementary or competitive, sphere of activity, capital investment as well as the form of introducing investments on the market of a given country (see Fig. 2).

In the analysed years the share of economic operators with greenfields investments each year exceeded 80% of the total value of the investment placed on the Polish market. From the point of view of the influence of FDI on the labour market such structure was beneficial, because these are the greenfields type investments which generally cause employment growth. In case of remaining investments, as a result of transformations – privatization or admissions, investors usually seek job rationalization through layoffs. This situation was especially evident in the years 2010, 2011 and 2014, in which the share of economic operators as a result of transformation was 19% of all companies with foreign capital.

Considering employment in companies with foreign capital according to the type of activity it can be observed that most – almost half (46%) of the employees of those companies – are employed in industry. Production activity is one of the key areas of economic activity, which the capital of foreign direct investment in Poland is focused. This sector has a positive effect on the number of jobs created, for as a rule most people work there. Lower unit labour costs – relatively cheap workforce causes the fact that the majority of labour-intensive investments is located in the country. The second place is occupied by companies that created jobs in trade and repairs (23,3%), and the following are information and communication (5,8%) and transport and warehouse management (5,7%)[22].

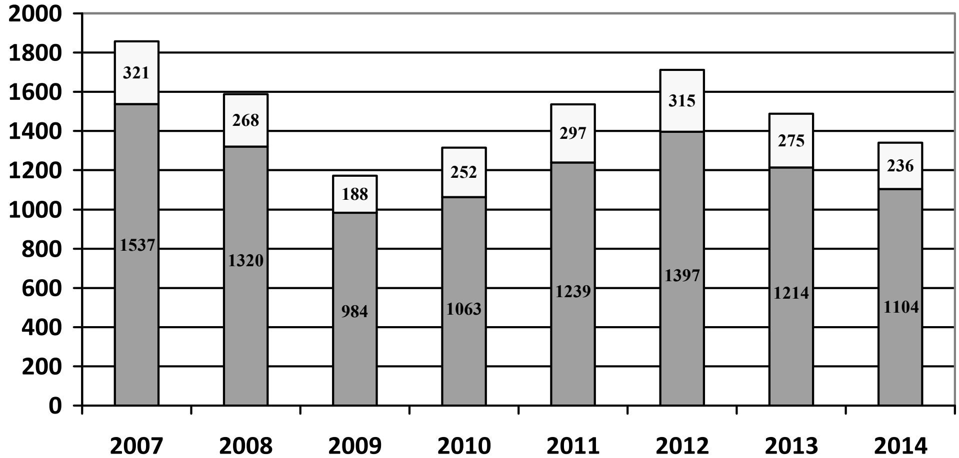

Fig. 2. The number of economic operators with foreign capital shares according to the forms of introducing investment on the Polish market in the years 2007–2014

Source: own authoring based on data from General Statistics Office, *Działalność gospodarcze podmiotów zagranicznych w 2007–2014.*

The transfer of foreign capital in the form of direct investments had a significant influence on the sizes, dynamics and structure of Polish foreign trade (see table 6).

Table 6

The size, dynamics and structure of economic turnover of economic operators with foreign capital (in million USD, share in %)

Specification	Total exports	Export of foreign economic operators	Share of foreign economic operators in export (in %)	Total imports	Import of foreign economic operators	Share of foreign economic operators in import (in %)
2010	159 758	97 311,4	60,9	178 063	107 666,6	60,5
2011	190 247	115 335,9	60,6	212 331	126 133,8	59,4
2012	184 661	109 748,6	59,4	198 463	115 498,9	58,2
2013	206 138	119 509,9	58,0	208 780	120 697,8	57,8
2014	222 339	127 845,2	57,5	225 898	127 858,6	56,6

Source: own authoring based on data: *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2010 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2011 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2012 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2013 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2014 roku*, GUS, www.stat.gov.pl, *Rocznik statystyczny handlu zagranicznego 2010, Rocznik statystyczny handlu zagranicznego 2011, Rocznik statystyczny handlu zagranicznego 2012, Rocznik statystyczny handlu zagranicznego 2013, Rocznik statystyczny handlu zagranicznego 2014,*GUS, www.stat.gov.pl.

[22] *Działalność gospodarcza podmiotów z kapitałem zagranicznym w latach 2007-2014*, GUS, Warszawa, 2016, p. 43.

The data in table 6 indicates that the share of economic operators with foreign capital was high, but showed a downward trend both in exports and imports. However, it should be emphasized that in the analysed years the share of foreign economic operators was higher in exports than in total imports, which undoubtedly had an influence on the development of foreign trade balance (see table 7).

Table 7

The balance of Polish foreign trade in 2010-2014 (in million USD)

Year	Exports	Imports	Balance
2010	159 758	178 063	– 18 306
2011	190 247	212 331	– 22 084
2012	184 661	198 463	– 13 802
2013	206 138	208 780	– 2 642
2014	165 774	168 435	– 2 661

Source: Statistical yearbooks of foreign trade for the period: 2011–2015, GUS, Warszawa.

Almost sevenfold decrease in the foreign trade balance was the consequence of many factors – not only the companies with foreign capital, but most importantly because of high dynamics of structural changes in Polish economy, the growth of share of high-tech products in exports (from 5,7% in 2009 to 7,7% in 2014) and growing tendency to exports of the enterprises functioning in Polish economy[23].

Table 8

The tendency to export of enterprises with foreign capital and companies with purely national capital

Specification	Tendency to export of enterprises with purely national capital (in %)	Tendency to export of enterprises with foreign capital (in %)
2010	7,1	23,4
2011	8,2	24,2
2012	8,7	24,6
2013	9,1	25,7
2014	9,4	26,4

Source: own authoring based on: *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2010 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2011 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2012 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2013 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2014 roku*, GUS, www.stat.gov.pl.

Obviously the tendency to export of the enterprises with foreign capital in comparison to the companies with purely national capital is almost three times higher, whereas their preference showed a growing tendency, which indicates Polish increasing involvement in the international division of labour and in the orbit of globalization.

Higher preference of exports of companies with foreign capital was caused by their higher level of international competitiveness both in the terms of quality and the modernity of products as well as the access to global distribution channels.

What is more, development of the shares of individual commodity groups distinguished due to the absorption of factors of production in both exports and imports is the confirmation of J. H. Dunning's theory and especially T. Ozawa's theory (see table 9).

[23] B. Ślusarczyk, *Międzynarodowa pozycja konkurencyjna Polski….,* op. cit., p.167.

Table 9

The structure of Polish foreign trade turnover according to the absorbency of the factors of production of specified goods in 2010–2014 (in %, according to current prices)

Specification	2010	2011	2012	2013	2014
Export (in % of total value of exports)					
Material-intensive goods	15,8	16,6	17,9	18,3	17,7
Labour-intensive goods	20,2	23,9	23,8	24,1	25,1
Capital-intensive goods	25,2	26,0	24,4	22,9	22,0
Technologically intensive goods, easy to imitate	13,8	11,6	11,8	11,7	12,5
Technologically intensive goods, difficult to imitate	21,0	21,7	21,6	22,7	22,5
Unclassified goods	0,1	0,2	0,2	0,3	0,2
Import (in % of total value of imports)					
Material-intensive goods	20,4	22,9	23,9	22,5	21,2
Labour-intensive goods	16,6	17,3	16,6	17,1	18,6
Capital-intensive goods	18,7	19,0	18,2	18,3	18,5
Technologically intensive goods, easy to imitate	17,1	14,9	15,2	15,9	15,7
Technologically intensive goods, difficult to imitate	23,8	23,5	23,1	23,6	24,2
Unclassified goods	2,2	2,4	2,5	2,6	1,8
Balance (in million USD)					
Material-intensive goods	– 11 096	– 16 977	– 14 391	– 9 239	– 8 432
Labour-intensive goods	2 712	8 757	11 002	13 916	13 760
Capital-intensive goods	6 973	9 141	8 813	8 962	7 283
Technologically intensive goods, easy to imitate	– 8 460	– 9 606	– 8 460	– 9 132	– 7 525
Technologically intensive goods, difficult to imitate	– 8 966	– 8 519	– 5 895	– 2 550	– 4 848
Unclassified goods	– 3 739	– 4 882	– 4 666	– 4 599	– 3 793

Source: own authoring.

The data in table 9 shows that the companies with foreign capital focused their activity in labour-intensive and capital-intensive sectors to optimize the use of existing comparative advantages of Poland. To a much lesser extent, their strategy was focused on generating comparative advantages in the fields of high technology, because the relative share of technologically intensive goods, easy to imitate in exports of companies with foreign capital was lower than in global export of Poland, but at the same time, what should be emphasised, the companies exported relatively more technologically intensive goods, difficult to imitate.

Summary

In conclusion it should be highlighted that the new challenges issued to the economic operators – the participants of international relations – by the external environment, result from the way of functioning of the modern market economy, whose fundamental changes are associated with the globalization of the economy and intensified flows of capital and labour.

There is no doubt that countries, which will create favourable conditions for foreign direct investment (FDI) have the biggest chances. These investments are an important carrier of advanced technology and they facilitate the processes of restructuring and modernization of the economies of countries where there has been influx. They also accelerate the processes of consolidation and merger of individual companies into large ones, having a settled position in terms of capital resources and the share of sales volume in the total sales of a given product. Foreign investors thanks to the access to the state-of-the-art technology and the usage of widely understood international know-how as well as production base of the location countries may promptly react to the transformations happening on the global and national market, as well as make production of goods corresponding to the requirements posed by customers.

A dominant role in this regard is played by investments of large transnational corporations, which not only invest in the sphere of production and distribution, but also in the sphere of research and development.

Foreign capital undoubtedly has an influence on the development of innovation and the emergence of technological solutions, new techniques, management and marketing methods. The final result, provided that the countries absorbing this kind of capital lead a consistent economic policy, should be the increase of the competitive ability of these countries and their development dynamics.

References

1. Balasa B., *New Directions in the Word Economy,* New York, 1989.

2. Borenstein E., De Gregorio J., Lee J.W., *How Does Foreign Investment Affect Economic Growth, NBER,* Working Paper, 1995, no 5057.

3. Cantwell J.A., Paz Estella E.T., *Technological Accumulation and Third World Multinationals*, Discussion Paper 1989, nr 139.

4. *Działalność gospodarcza podmiotów z kapitałem zagranicznym w latach 2007-2014*, GUS, Warszawa 2016.

5. *Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2010 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2011 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2012 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2013 roku, Działalność gospodarcza podmiotów z kapitałem zagranicznym w 2014 roku*, GUS, www.stat.gov.pl,

6. Dunning J.H., *The Cometitive Advanlage of Countries and the Activities of Transnational Corporations,* Transnational Corporations 1992, no 2.

7. Dunning J.H., *Explaining Changing Patterns of International Production. In defence of the eclectic Theory,* vol. 41, no 1979.

8. Dunning J.H., *The Role of Forming Direct Investment in Globalizing Economy*, BNL Quartely Reviev, no 2, 1995.

9. Jaworek M., *Bezpośrednie inwestycje zagraniczne w prywatyzacji polskiej gospodarki,* Wyd. Dom Organizatora, Toruń 2006.

10. Kojima K., *Direct* Forcign Investment. A Japonse Model of Multinational Business Operations, Croom Helm London 1987.

11. Lipsey R., *Home and Host Country effects of FDI, NBER,* Working Paper, No 9293, 2000.

12. Markusem J.R., *Explaining the Volume of Trade: An Eclectic Approach,* American Economic Reviev, 1986, vol. 76.

13. Markusen J.R., Venables A.J., Konan D.E., Zhang K.H., Unifled A., *Treatment of Horizonatl Direct Inwestment,* Vertical Direct Investment and the Pattern of Trade in Goods and Servises, NBER Working Paper, 1996, no 5696.

14. Masataka F., *TNCs from Developing Countries,* The CTC Reporter, 1990, nr 30.

15. Ozawa T., *Foreign Direct Investment and Economic Development,* Transnational Corporations, 1992, No 1.

16. *Polskie i zagraniczne inwestycje bezpośrednie w 2013,* Narodowy Bank Polski, Warszawa 2015 (http://www.nbp.pl/publikacje/ib_raporty/raport_ib_2013.pdf, dostęp 4 stycznia 2016 r.).

17. Porter M., *The Competitive Advantage of Nations*, New York 1990.

18. Puchalska K., Barwińska-Małajowicz A., *Międzynarodowe przepływy kapitału i siły roboczej,* Wyd. UR, Rzeszów 2010.

19. *Rocznik statystyczny handlu zagranicznego 2010, Rocznik statystyczny handlu zagranicznego 2011, Rocznik statystyczny handlu zagranicznego 2012, Rocznik statystyczny handlu zagranicznego 2013, Rocznik statystyczny handlu zagranicznego 2014,* GUS, www.stat.gov.pl, dostęp 4 stycznia 2016 r.

20. Rysik-Uryszek A.K., *Bezpośrednie inwestycje zagraniczne. Teoria i praktyka*, Wyd. CeDeWu, Warszawa 2010.

21. Sowa B., *Finansowanie przedsiębiorstwa kapitałem wewnętrznym* [w:] A. Olak, R. Kozioł, E. Wierzbicka, *Integracja, Samorząd, Przedsiębiorstwo. Komunikacja i zmiana,* Wyd. Multiprint s.r.o, Košice, 2015.

22. Ślusarczyk B., *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka,* Wyd. Fachowe CeDeWu, Warszawa 2011.

23. Ślusarczyk B., Sowa B., *Determinanty zmian w biznesie w wybranych krajach Europy Środkowo – Wschodniej w dobie globalizacji* [Determinants of sustainable development organizations under globalization]. *Materialy II Mizhnarodnoji naukovo-praktichnoji internet-konferencii 25-27 lystopada 2015 r.; Ministerstvo osvity i nauky Ukrainy, Derzhavnyj vishhyj navchalnyj zaklad "Nacionalnyj girnichyj universitet"* [Materials II International scientific and practical Internet-conference 25-27 November 2015; Ministry of Education and Nauкy Uкrayiny State Supreme National Institute "National Mining University"]. Dnipropetrovsk, National Mining University, 2015.

24. *Zagraniczne inwestycje bezpośrednie w Polsce w 2014 r.* (http://www.nbp.pl/publikacje/zib/zib_2014_n.pdf, dostęp: 4 stycznia 2016 r.).

25. Zysk W., *Obcy kapitał a handel zagraniczny w Polsce*, Wyd. CeDeWu, Warszawa 2012.

Нині торгівля та рух капіталу у формі прямих іноземних інвестицій (ПІІ) є найважливішими формами міжнародної економічної співпраці. В економічній теорії можна зустріти багато понять, за допомогою яких намагаються пояснити взаємозалежність між цими типами потоків.

Без сумнівів, іноземний капітал чинить вплив на розвиток інновацій та створення технологічних рішень, нових методів управління та маркетингу. Кінцевим результатом, за умови, що країни, які поглинають цей вид капіталу, проводять послідовну економічну політику, повинно бути зростання конкурентоспроможності цих країн та динаміки їх розвитку.

Ключові слова**: **прямі іноземні інвестиції, експорт, імпорт, капітал, інвестиції, розвиток.

В наше время торговля и движение капитала в форме прямых иностранных инвестиций (ПИИ) являются самыми важными формами международного экономического сотрудничества. В экономической теории можно встретить много понятий, пытающихся объяснить взаимозависимость между этими типами потоков.

Несомненно, иностранный капитал оказывает влияние на развитие инноваций и создание технологических решений, новых методов управления и маркетинга. Конечным результатом, при условии, что страны, поглощающие этот вид капитала, проводят последовательную экономическую политику, должно быть увеличение конкурентоспособности этих стран и динамики их развития.

Ключевые слова**: **прямые иностранные инвестиции, экспорт, импорт, капитал, инвестиции, развитие.

Одержано 7.07.2016.