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# DEVELOPMENT OF THE WORLD MARKET OF INFORMATION TECHNOLOGIES IN THE CONDITIONS OF TRANSNATIONALIZATION OF INTERNATIONAL BUSINESS

The research, conducted in the article, is devoted to the study of the leading companies, which operate in the world market of information technologies, in the context of the transnationalization of international business. Based on the data analysis the current trends of the international production development are defined. The ratings of the largest technology companies in the world on assets, profits and revenues are considered. The most attractive for the investments companies in the information technology industry are identified. **Key words:** information technologies, world market, transnationalization, foreign direct investments, foreign affiliates, technology industry, assets, profits, revenues, Fortune Global 500.

Formation of the problem. At present, the world economy is characterized by such processes as: globalization, internationalization and transnationalization. Transnationalization is a more mature stage of the process of internationalization of economic activity characterized by the movement of capital across the borders of the country of origin. The main vehicle for transnationalization are TNCs, which, through the implementation of various strategies, try to extract both national and international income.

TNC is a special form of organization of the economic activity of a firm based on the cooperation of labor of workers of enterprises located in different countries of the world and united by a single title of ownership of the means of production.

In the modern world economy transnational corporations are the major source of the foreign direct investments that stimulate the development of international production. According to the UNC-TAD experts estimations, in the end of 2017 the value of the foreign inward direct investments stock at current price was 31524 billion of the US dollars, the sales of foreign affiliates of transnational corporations – 30823 billion of the US dollars, employment by foreign affiliates of transnational corporations – more than 73 million people [1].

From another side, the world market of information technology has been growing even more rapidly since the end of the 20th century. Nowadays, information technologies provide a new model for the introduction of business, new types of trade, changes in the format of production and provision of information. According to the Business Wire research the global information technologies market is expected to grow from over 950 billion of the US dollars in 2016 to over 1160 billion of the US dollars in 2020 [2].

Analysis of recent research and publications. Theoretical aspects of studying the development of the world market of information technologies in the context of the transnationalization of international business have been studied by many domestic and foreign scientists.

The most famous in Ukraine are the following: O. Rogach "International Investment: Theory and Practice of Transnational Corporation Business", S. Yakubovsky, Y. Kozak, O. Savchuk "Multinational Corporations: the Characteristics of Investment Activity", I. Lomachynska "FDI and Financial Development as Determinants of Economic Growth for V4 Countries".

The current trends of the international investment and business activity in European Union are analyzed in the article of S. Yakubovskiy and Z. Sydorova. "Development Prospects of London as the World's Financial Center in the Conditions of Brexit".

In addition, we should mention the significant contribution of such scientists as: R. Griffin, M. Paste, A. Golikov [7], O. Dovgal, A. Maistrenko A., V. Pogorletsky, A. Sukhomlin and others.

Separation of previously unresolved parts of the common problem. There is a large amount of literature devoted to modern strokes of transnationalization and information technologies market development. However, there is a need to analyze the current trends (for 2016-2017 years) of the international investment activity and its influence on the national economies in the conditions of rapid development of the global information technology market.

The purpose of the article is to analyze the current state of the international investment activity, to identify its influence on national economies, to find the main competitive advantages of the world leading companies of the global information technology market.

**Presentation of the main material of the study.** The development of information technologies positively affects not only the profitability of individual enterprises, they also increase the welfare of the economy as a whole, make the market more open to the introduction of innovations in the future. Information technology in international business, to date, is the most priority sector for investment.

The relevance of the development of the global IT market shows that information technologies in business have recently become the most popular topic not only among big businessmen. The most economically active agents of the domestic space saw in the IT field a potentially profitable project, which led to the emergence of a number of organizations that fully exist in the information space, and with the help of which they receive their own profit.

Information technology for business has become a kind of impetus that the economic sphere needed and not to use it means to lose an advantageous opportunity. Information technologies enable unlimited business expansion, as well as automate the management process as a whole.

Information technology significantly reduces the time for conducting transactions, the collection and processing of information, as well as the introduction of IT into the business allows the most rational use of production resources. Today, thanks to IT systems, traditional products become interactive. As for new technologies, they can simplify life in almost all spheres of human activity [8].

Competition is the main content of the functioning of international business, which is based on market mechanisms. The modern world market is a complex system that changes under the influence of supply and demand for goods and services. These processes are influenced by the emergence of new needs, new technologies, new organizational forms of cooperation, new methods of competition.

But at the present time, the international producing is slowing down, the reason is that foreign affiliates is still growing but assets is growing slower, it can make in future problems with foreign direct investments growing for the developing economies [1].

Because of international competition and its constant development, the search for new ways to develop the competitiveness of the product, as well as the search for new markets, is intensifying. Information technology and scientific and technological progress accelerated the development of competition and gave it a qualitatively new character. Since the competition on the international market, especially IT market, is very high, it is more difficult for companies to retain their positions in the international market [8].

Often in a competitive struggle, the one who possesses information will win. Information in international business is of great importance, since a company that has information on the market situation, following the actions of competitors, behind the strategies of promotion to the markets, and behind the price policy, have an advantage over competitors [4].

Information technology gives a lot of opportunities for companies to promote their products to the market, outrunning competitors.

Information technologies open up a lot of both communication solutions and solutions for business optimization to companies operating on international markets [9]. At the present time, the problem of improving the human resources potential is acute, in order to achieve the goals of long-term development of companies operating in all spheres of business. As the previous authors note, "the economic efficiency of an organization directly depends on the quality of service, which is determined by the level of professional competence, the qualifications of the staff."

The introduction of information systems by companies to control the level of training of personnel will improve the quality of goods and services, thereby increasing the company's competitiveness, both on the domestic and foreign markets [9].

Taking into account the fact that at present information technologies are in demand, and more will be demanded over time, companies need to implement IT solutions not only in the business management process, but also in products and services. This is necessary in order to maintain its competitive position in the market [4; 5]. The scale of the international production and its influence on national and global economy could be seen from the table 1.

According to the UNCTAD experts estimations the average annual growth rates over the past two years (2016-2017) of the sales of foreign affiliates of transnational corporations was 5.9 percent, of the value added (product) of foreign affiliates of transnational corporations was 6.7 percent, of employment by foreign affiliates of transnational corporations was 2.5 percent.

Nowadays, statistics show that global foreign direct investment (FDI) in 2017 fell by 23%, the reason was that there was the accelerated growth in trade and GDP [1].

In 2017 FDI declined by 27%, it is the second lowest level since 2005, in 2014 situation was nearly the same FDI fell by 15%. From statistics we can see that FDI also fell in developed economies but in developing economies FDI grew by 47% in 2017 (in last year growing was by 35%). Researches assume that projections for FDI in 2018 will not change situation globally, the growing will be only by 10% [1].

The growth of globalization, the emergence of close economic interdependence of states has caused the expansion of the geographic scope of cooperative ties, and their intertwining. As the aggregate of surplus capital and its exportation of economic entities grew, they merged more and more, becoming a combination of corporations. In the process of forming multi-page alliances between corporations, large integrated complexes and conglomerates emerged, international not only in scope but also in composition of capital. The transnationalization of production and capital from conceptual ideas has become an objective and necessary condition for the effective management of corporations [10-11].

Modern corporations have undergone a complex development path from primitive forms based on personal connections and the full responsibility of participants to global highly integrated corporations. The integrated giant corporations, on the one hand, are the product of rapidly developing international economic relations, and on the other hand, they themselves represent a powerful mechanism of influence, they have a huge scientific and production and market potential that ensure a high dynamism of development [12].

But from statistics international production is still expanding, but the rate of expansion is slowing [13].

Their activities cover all areas of the national economy, and their sphere of interest includes an increasing number of countries in all regions of the world. In the conditions of the formation of a specific transnational economy, modern international, integrated corporations are an important element

Table 1

Main indicators of international production, at current prices, billions of the US dollars

Years			
2015	2016	2017	
1921	1868	1430	
25665	27663	31524	
1461	1564	1581	
6.8	7.0	6.7	
735	887	694	
6457	6950	7317	
94781	98758	103429	
69.7	71.2	73.2	
	1921   25665   1461   6.8   735   6457   94781	2015 2016   1921 1868   25665 27663   1461 1564   6.8 7.0   735 887   6457 6950   94781 98758	

Source: [1]

Table 2

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	Company	Rank in the	Profits	Revenues	Assets	
		Global 500	millions of the US dollars			
1.	Apple	11	48,351	229,234	375,319	
2.	Samsung Electronics	12	36,575	211,940	281,906	
3.	Microsoft	71	21,204	89,950	241,086	
4.	Facebook	274	15,934	40,653	84,524	
5.	Alphabet	52	12,662	110,855	197,295	
6.	Taiwan Semiconductor Manufacturing	368	11,339	32,126	66,949	
7.	Tencent Holdings	331	10,581	35,126	85,177	
8.	Alibaba Group Holding	300	9,673	37,771	113,979	
9.	Cisco Systems	212	9,609	48,005	129,818	
10.	Intel	146	9,601	62,761	123,249	
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Profits, revenues and assets of the leading companies in the technology industry in 2017

Source: [14]

in the development of the world economy, becoming the independent force of global influence.

The average annual growth rates for the past five years of royalties and licensing fee receipts of transnational corporations (almost 5 percent) compared to international trade in goods and FDI (less than 1 percent) [1] show how the international production is shifting from the tangible cross-border production networks to intangible value chains through the use of modern information technologies.

The data, presented in the table 2, show the features of the activity of the 10 leading companies in the global information technologies industry from the Fortune Global 500 list.

In the whole 41 companies in the Fortune list of Global 500 belong to the information technology industry [14].

In 2018 based on the amount of profit, revenue and the assets value "Apple" holds the first rank in the Fortune Global 500 list among the companies in the technology industry. "Apple" dropped two spots on 2018 Global 500, despite a 6% gain in annual sales, but it led the way in profits with more than 48 billion US dollars. The "Apple" juggernaut continues at tremendous scale and despite the overall saturation of smartphones, which make up the vast majority of the company's sales and profits [14].

"Samsung Electronics" is the second in the Fortune Global 500 list among the companies in the technology industry and in 2017 has increased revenue for 21.8% and profit for 89.3% – that is one of the best results in the world economy [14].

In spite the company faced increasingly tough competition from Chinese smartphone makers like Xiaomi and Huawei in Asia, Samsung's computer chip business, which is less known but still giant, helped boost its overall revenue growth and profits [14].

In 2017 among the most profitable companies in the information technology industry "Facebook" and "Taiwan Semiconductor Manufacturing" occupied the leading positions. So, in 2017 return on assets for "Facebook" was 19 cents for 1 dollar of assets; return on assets for "Taiwan Semiconductor Manufacturing" was 17 cents.

**Conclusions.** Information technologies for business have become a kind of impetus that accelerated the process of transnationalization, made the economy more dynamic, accelerated the process of obtaining and increasing profits. At present, information technologies are in demand, and more will be demanded over time, companies need to implement IT solutions not only in the business management process, but also in products and services.

This is necessary in order to maintain its competitive position in the market, and also make the market more open to the introduction of innovations in the future.

Results of the analysis of the activity of the leading technology companies show the high profitability of assets in the whole information technology industry. That's why information technology business, to date, is one of the most priority sector for the investments.

Based on the results of the research, presented in the article, "Facebook" and "Taiwan Semiconductor Manufacturing" are the most attractive for the investments companies in the information technology industry, as well as in all sectors of the world economy.

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## РАЗВИТИЕ МИРОВОГО РЫНКА ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В УСЛОВИЯХ ТРАНСНАЦИОНАЛИЗАЦИИ МЕЖДУНАРОДНОГО БИЗНЕСА

### Резюме

Исследование, проведенное в статье, посвящено изучению деятельности ведущих компаний, работающих на мировом рынке информационных технологий, в контексте транснационализации международного бизнеса. На основе анализа данных определены текущие тенденции развития международного производства. Рассмотрены рейтинги крупнейших технологических компаний в мире по активам, прибыли и продажам. Выявлены наиболее привлекательные для инвестиций компании в отрасли информационных технологий.

Ключевые слова: информационные технологии, мировой рынок, транснационализация, прямые иностранные инвестиции, иностранные филиалы, технологическая индустрия, активы, прибыль, доходы, Рейтинг Глобал 500.

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## РОЗВИТОК СВІТОВОГО РИНКУ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ В УМОВАХ ТРАНСНАЦІОНАЛІЗАЦІЇ МІЖНАРОДНОГО БІЗНЕСУ

#### Резюме

Дослідження, проведене в статті, присвячено вивченню діяльності провідних компаній, що працюють на світовому ринку інформаційних технологій, в контексті транснаціоналізації міжнародного бізнесу. На основі аналізу даних визначено поточні тенденції розвитку міжнародного виробництва. Розглянуто рейтинги найбільших технологічних компаній у світі за активами, доходами та обсягу продажу. Виявлено найбільш привабливі для інвестицій компанії у галузі інформаційних технологій.

Ключові слова: інформаційні технології, світовий ринок, транснаціоналізація, прямі іноземні інвестиції, іноземні філії, технологічна галузь, активи, прибутки, доходи, Рейтинг Глобал 500.