IMPACT OF INTERNATIONAL INVESTMENT POSITION FOR THE EU ВПЛИВ МІЖНАРОДНОЇ ІНВЕСТИЦІЙНОЇ ПОЗИЦІЇ ДЛЯ КРАЇН ЄС

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The article reviews the impact of international investment position for the EU countries. The following results are obtained: To consider the IIP of the European Union in greater detail, three countries with different economies and territorial location have been selected: Germany (central Europe), Poland (eastern Europe), Italy (southern Europe). Germany's net international investment position from 2015 to 2019 is positive. With regard to the accumulated investments of Italy and Poland, the net international investment position of the countries displays a negative indicator. Portfolio investments take the first place in the structure of financial assets and liabilities for Germany and Italy. Reserve assets prevail in the structure of Polish financial assets, while foreign direct investments dominate in liabilities. Granger causality test shows that in the EU there is a dependence of net international investment position on the current account.

Key words: direct foreign investments, portfolio investments, other types of investments, the EU countries, international investment position.

В статье рассматривается влияние международной инвестиционной позиции на страны ЕС. Для более детального рас-

смотрения МИП Европейского Союза были выбраны три страны с разной экономикой и территориальным расположением: Германия (центральная Европа), Польша (восточная Европа), Италия (южная Европа). Чистая международная инвестиционная позиция Германии с 2015 по 2019 год является положительной. Что касается накопленных инвестиций Италии и Польши, то чистая международная инвестиционная позиция этих стран имеет отрицательный показатель. Портфельные инвестиции занимают первое место в структуре финансовых активов и пассивов Германии и Италии. В структуре финансовых активов Польши преобладают резервные активы, в то время как в пассивах преобладают прямые иностранные инвестиции. Причинность по Грэнджеру показывает, что в ЕС существует зависимость чистой международной инвестиционной позиции от текушего счета.

Ключевые слова: прямые иностранные инвестиции, портфельные инвестиции, другие виды инвестиций, страны ЕС, международная инвестиционная позиция.

У статті розглядається вплив міжнародної інвестиційної позиції на країни ЄС. Предметом дослідження є економічні процеси трансформації міжнародних інвестиційних позицій країн ЄС. Метою є обґрунтування особливостей трансформації міжнародної інвестиційної позиції для країн ЄС. Завдання полягає в тому, щоб більш детально розглянути структуру активів та пасивів міжнародної інвестиційної позиції країн ЄС. Використовуються загальнонаукові методи: наукова абстракція, метод аналізу та синтезу, систематизація та узагальнення, тест Грейнджера на причинність. Отримані наступні результати: міжнародна інвестиційна позиція показує вартість та склад зовнішніх фінансових активів та зобов'язань економіки країни на певний момент часу, відображаючи тим самим корисну інформацію для оцінки економічних відносин країни з рештою світу. Для більш детального розгляду МІП Європейського Союзу було обрано три країни з різною економікою та територіальним розташуванням: Німеччина (Центральна Європа), Польща (Східна Європа), Італія (Південна Європа). Чиста міжнародна інвестиційна позиція Німеччини з 2015 по 2019 рік є позитивною. Що стосується накопичених інвестицій Італії та Польщі, то чиста міжнародна інвестиційна позиція країн відображає негативний показник. Портфельні інвестиції посідають перше місце в структурі фінансових активів та пасивів Німеччини та Італії. Резервні активи переважають у структурі польських фінансових активів, тоді як прямі іноземні інвестиції домінують у пасивах. Важливим впливом на ефективність інвестиційної діяльності країни є державна політика щодо залучення іноземних та національних інвестицій, участь країни в системі міжнародних угод та традицій їх дотримання, ступінь та методи державного втручання в економіку тощо. Причинність за Грейнджером показує, що в ЄС існує залежність чистої міжнародної інвестиційної позиції від поточного рахунку. Висновки: эменшення або збільшення чистої міжнародної інвестиційної позиції може бути пов'язане із змінами в поточному рахунку. Існує пряма залежність чистої міжнародної інвестиційної позиції Німеччини та Італії від поточного рахунку, а також обернена залежність ЧМІП Польщі від поточного рахунку.

Ключові слова: прямі іноземні інвестиції, портфельні інвестиції, інші види інвестицій, країни ЄС, міжнародна інвестиційна позиція.

Problem statement. The globalization of the economy, which has affected the spread of the crisis, has led to a significant increase in demand for investment, increased competition for investment resources. The EU is one of the economic centers and donors of investment in the modern world. In recent years, the EU has sought to overcome the effects of the global financial crisis. In this regard, an important scientific and practical task is to study the post-crisis trends in investment processes in the EU. The problem of investment is relevant in most countries. Given the acute shortage of own economic resources, especially financial, necessary for the restoration of national production after financial crisis, stable economic development of the country. However, to ensure sustainable economic growth, it is necessary not just to increase the amount of investment capital, but to ensure a continuous

and increasingly broad investment process, which covers the areas of innovation breakthrough and the imperatives of social development. This involves a special policy, which has been observed in the last decade in the developed world. The investment policy of the EU is of great interest in this regard, which is one of the economic centers and a donor of investment in the modern world. In recent years, the EU has not only sought to overcome the effects of the global financial crisis, but also consciously transformed the model of economic growth, defining its prospects for several decades to come. In this regard, an important scientific and practical task is to study the trends of investment processes in the EU and policies to stimulate and regulate investment.

Analysis of recent research and publications. Having reviewed the work of domestic and foreign researchers, it is possible to come to the conclusion

that the government's policy with respect to attracting foreign and national investments plays a crucial role in determining the country's investment activity. In a study by Geetika Madaan and Dr. Sanjeet Singh [1], it says that every country is unique in terms of its type of investors, instructions and laws. The publication examines investor behavior and states that understanding their behavior is essential for financial institutions, corporations, policymakers, and regulators.

Sobański K. assessed the significance of the valuation effect for determining the dynamics of the net international investment position of the economies of Central and Eastern Europe. To this end, a balance of payments time series analysis was performed for the four largest economies in Central and Eastern Europe (Poland, the Czech Republic, Hungary, and Romania). The study showed that the effect of valuation (VE) in the short term is a key factor defining the net changes in international investment inflows (for most observed years). However, in the long term, its impact diminishes as valuation gains and losses tend to balance each other. Since valuations of both short-term and long-term investments have a significant effect on the change in the net IIP, the effect of valuation for determining the dynamics of the net international investment position does not depend on the type of investment. The resemblance of the dynamics of venture capital in CEE countries demonstrate that venture capital largely depends on the common fluctuations of prices in financial markets, which currently show a strong correlation between countries [2].

Iwona Maciejczyk-Bujnowicz identifies two groups of the EU member states: the members of the Eurozone and those outside it. In this article [3] the main theoretical concepts that provide grounds for further reasoning are considered. Along with the progressive financial integration of the EU member states, the total volume of financial flows, measured by the net investment flow, is increasing. The research method used in this particular study includes a review of theoretical concepts, a review of the literature, and a comparative analysis based on statistics. Significant differences were found in capital flows and in the structure of IIP between developed and developing countries. The analysis of financial and trade integration of the Eurozone countries compared to the EU member states from outside of the single currency area demonstrated that the two groups are at opposite extremes. Over the period 2004-2011, financial integration in countries using the single currency was on average twice as high compared to the CEECs.

There is also a large number of studies contributed to identifying the influence of different financial and social-economic factors on the development of international economic positions of

the countries. Among them there are the studies of A. Kyfak [6], I. Lomachynska [7; 8], T. Rodionova [9], S. Yakubovskiy [10; 11].

Formulation of the problem. The goal is substantiation of international investment positions transformation peculiarities for the EU countries. The objective is to consider in more detail the structure of assets and liabilities of the international investment position of the EU countries. General scientific methods are used: scientific abstraction, method of analysis and synthesis, systematization and generalization, regression analysis.

Presentation of the main material of the study. The current level of global technological development and the growing destabilizing influence of large corporations, market levers cannot regulate the economy. That is why, given the innovative progress of the leading countries, the effective organizing role of the state becomes the key to the sustainable functioning of national economic systems. Accordingly, the government should redistribute revenues through the tax system, stimulate demand, and generously fund basic research, education, and continuing professional development.

The value volumes of commodity exports / imports play a significant role in the characterization of national economies as important indicators of foreign trade activity. The International Investment Position (IIP) provides useful information for assessing a country's economic relationship with the rest of the world. Let us move on to the analysis of the international investment position of the EU countries and the structure of its assets. For a more detailed analysis, three countries were taken – the most prominent representatives of the EU: Germany, Poland and Italy.

From 2015 to 2019 Germany's net international investment position is positive. The maximum value of NIIP is observed in 2019 due to the growth of assets and it is 2 776.971 trillion USD. Regarding the accumulated investments of Italy and Poland, it can be concluded that the net international investment position of the countries is reduced to a negative indicator. Thus there was a maximum deficit of NIIP with a value of -349.683 billion USD in Poland in 2017. Every year in Italy there is a dynamic of reducing the deficit of net international investment position and in 2019 it amounted to -30.431 billion USD.

For the last 5 years in Germany the maximum international investment position asset values for 2017 and 2019 should be noted. The increase of the assets of the accumulated investments primarily occurred due to portfolio and other investments. In Poland the highest asset volume was also recorded in 2017 and 2019 (274.058 and 291.163 billion USD respectively). In Italy the maximum value of assets of IIP was in 2019 and amounted to 3 311 403.9 trillion USD. There, as well as in Germany, the growth of assets was due to portfolio investments.

ІНФРАСТРУКТУРА РИНКУ

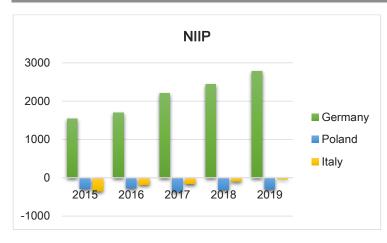


Figure 1. Net international investment position of Germany, Poland and Italy for 2015-2019, million USD [5]

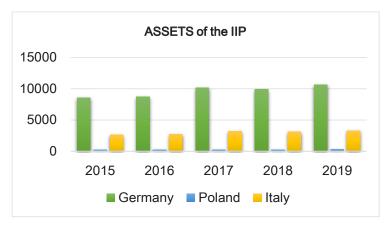


Figure 2. Assets of the international investment position of Germany, Poland and Italy for 2015-2019, million USD [5]

Let us look at the structure of Germany's assets. It should be noted that in 2015, FDI accounted for 23% of accumulated assets, portfolio investments accounted the largest share – 34%, other investments – 33%, financial derivatives – 8% and the smallest share - reserve assets - 2%. In 2019 FDI amounted to 23.8%, portfolio - 35.3%, others – 32%, financial derivatives – 6.7% and reserve assets – 2.2%. In general, in 2019 the assets of accumulated investments amounted to 276% of GDP.

After a more detailed analysis of the components of the assets of IIP of Germany we can draw several conclusions. FDI assets are divided into equity and debt instruments. German investors choose the first option mostly, while debt instruments are almost 3 times behind. Portfolio investments are also divided into equity investments and debt securities. In this case, debt securities predominate by 60%, the most popular areas of which are deposit-taking corporations and other financial corporations. For them, reserve and liquidity ratios are mandatory and are fulfilled by Eurobonds. Debt instruments of other investments are also dominated by deposit-taking corporations and central banks. As for the

composition of Germany's reserve assets, a significant share of monetary gold and other reserves should be noted.

In Poland the largest share in the assets of accumulated investments (Figure 4) is played by reserve assets (in 2019 – 44%). There portfolio investments account for 13.1%, direct investments – 23.8%, financial derivatives only 0.02%, and other investments – 17.2%. Accumulated investment assets account for 49% of Poland's GDP.

If in 2014 FDI accounted for 27.1%, in 2019 it was already 23.8%. The share of portfolio investments also decreased (from 13.5% to 13.1%), while the share of other investments and reserve assets, on the contrary, increased. The majority of FDI is invested in debt instruments, but equity investment is not far behind. It should also be noted that in Poland there is an outflow of debt capital to fellow enterprises. Polish portfolio investments are also mostly directed to equity and investment fund shares, namely to other financial corporations. Other investments are focused on debt securities with a predominant share of deposittaking corporations and other sectors. And reserve assets are represented primarily by monetary gold and other indicators of reserve assets.

Considering the assets of accumulated investments (Figure 5) in Italy, we can conclude that the largest share have

portfolio investments (average 50%). Foreign direct investment take second place – an average of 21.6%, other investments account for 19%, and reserve assets are about 5%. Accumulated investment assets account for 149% of Italy's GDP.

Italy's foreign direct investment assets are mainly directed to equity and investment fund shares, namely to investments in direct investment enterprises. The share of debt instruments in FDI is inferior to equity fund shares almost 4 times. Portfolio investments are directed almost equally to debt securities and equity. Italy's equity fund shares is dominated by the general government and financial corporations, while debt securities are dominated by deposit-taking corporations and other sectors. As for debt instruments of other investments, deposit-taking corporations are also of the greatest importance there. Reserve assets are focused on monetary gold.

Analyzing the liabilities of the international investment position, it can be noted that in Germany the maximum index for the last 5 years falls on 2017 and amounts to 7,941,946 trillion USD. In 2018 Germany's liabilities decreased by 6%. In Poland the highest index also falls on 2017 (623,742 billion USD), and

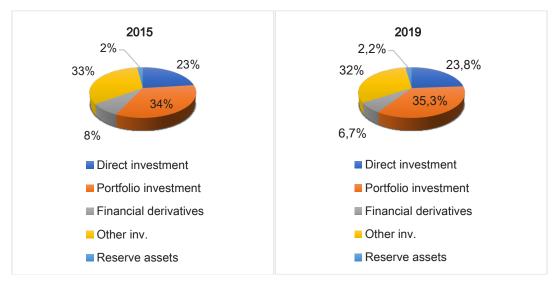


Figure 3. Comparison of the components of the assets of the international investment position of Germany for 2015 and 2019 [5]

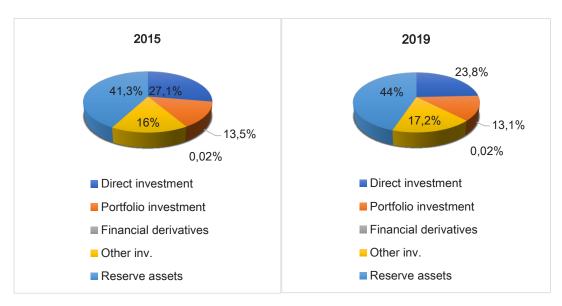


Figure 4. Comparison of the components of the assets of the international investment position of Poland for 2015 and 2019 [5]

in 2018 it decreased to 588,587 billion USD. In Italy during 2017–2019 the value of IIP liabilities was hardly changed and averaged 3,303 trillion USD.

Let us consider the components of the liabilities of Germany's international investment position. Here portfolio investments play the largest role in the liabilities of accumulated investments: on average they account for 38% of all liabilities, FDI accounts for 23%, other investments – 31%, and financial derivatives – 10%. In 2019 liabilities amounted to 203% of Germany's GDP.

Studies of Germany's foreign direct investment liabilities indicate that debt instruments predominate, namely investment in a direct investor. In debt instruments of portfolio investments, the largest share is occupied by the general government, and in other investments deposit-taking corporations prevail.

In Poland the largest share in the liabilities of IIP (Figure 8) is played by foreign direct investment (in 2019 – 47.4%). Comparing portfolio investments we see that since 2015 they have decreased by 3.3%. Other investments amounted to 25.5%, and financial derivatives amounted to 0.6% in 2019. Liabilities amounted to 99% of Poland's GDP.

Poland's foreign direct liabilities are mainly directed to equity shares, namely to investments in direct investment enterprises. The share of debt instruments in FDI is almost 2 times lower than the equity and investment fund shares. Portfolio investments are directed more to debt securities, mainly to the general government. As for other investments, they are dominated by debt instruments in which deposit-taking corporations and the general government are of the greatest importance.

ІНФРАСТРУКТУРА РИНКУ

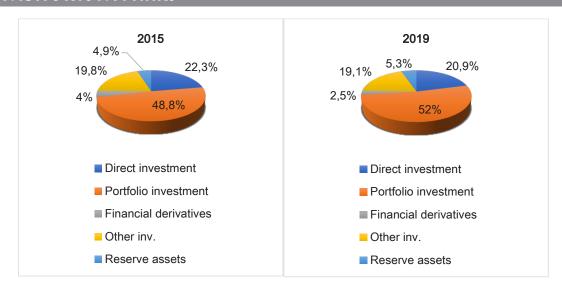


Figure 5. Comparison of the components of the assets of the international investment position of Italy for 2015 and 2019 [5]

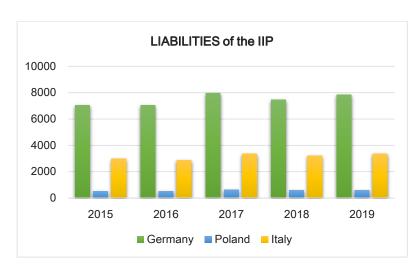


Figure 6. Liabilities of the international investment position of Germany, Poland and Italy for 2015–2019, million USD [5]

After analyzing the components of liabilities (Figure 9) of Italy, we can conclude that portfolio investments have the largest share there. In 2015 they amounted to 50.5%, and in 2019-45.7%. Foreign direct investment averaged 16%. Other investments took second place and in 2019 amounted to 32.8%, and reserve assets 3.9%. In 2018 liabilities amounted to 153% of Italy's GDP.

The predominant share of foreign direct investments of Italy is accounted by equity and investment fund shares, namely by investment in direct investment enterprises. It should also be noted that in FDI there is an outflow of debt capital to direct investors. Italian portfolio investments are mostly directed to debt securities. The leading position here is occupied by investments in the general government. Other investments are focused on debt instruments with a predominant share of deposit-taking corporations and central banks. One of the factors influencing the net international investment position is the current account.

The current account is a component of the balance of payments of a country. The current account reflects the general needs of the country in borrowing. Thus, a country's net international investment position changes with a change in its current account.

In order to study in more detail the net investment position (NIIP) and current account (CARA) of Germany, Poland, and Italy, it is necessary to conduct Granger causality test, as well as calculate the correlation between these variables. The presented model examines the impact of two indicators that are likely to affect each other. The model is estimated on the basis of statistical data for 1999–2019, indicators were obtained from the statistical base

of the Eurostat [4].

Table 1 Correlations between NIIP and current account

		CARA	NIIP
Germany	CARA	1	0.86492
	NIIP	0.86492	1
Poland	CARA	1	-0.211409
	NIIP	-0.211409	1
Italy	CARA	1	0.37815
	NIIP	0.37815	1

Correlation coefficients were estimated for NIIP and CARA. The correlation coefficient for Germany (0.86492) and Italy (0.37815) is positive, for Poland – negative and is -0.211409. Inverse relationship between current-account balance of Poland and net international investment position should be noted.

■ СВІТОВЕ ГОСПОДАРСТВО І МІЖНАРОДНІ ЕКОНОМІЧНІ ВІДНОСИНИ

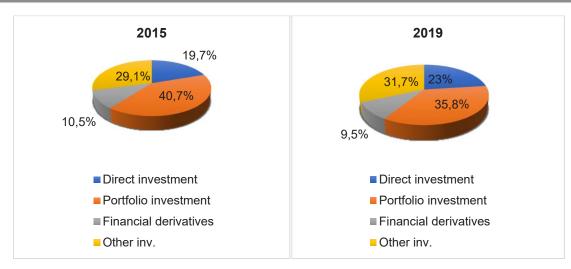


Figure 7. Comparison of the components of the liabilities of the international investment position of Germany for 2015 and 2019 [5]

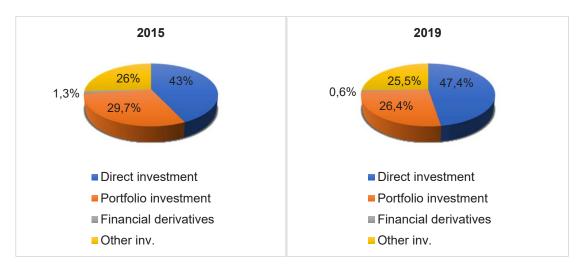


Figure 8. Comparison of the components of the liabilities of the international investment position of Poland for 2015 and 2019 [5]

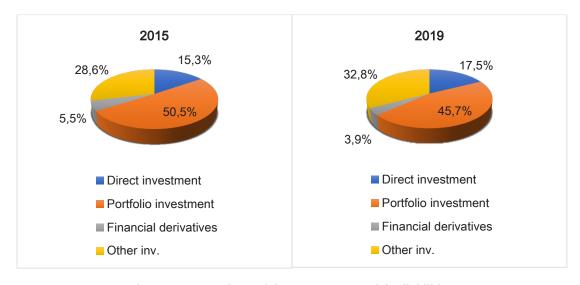


Figure 9. Comparison of the components of the liabilities of the international investment position of Italy for 2015 and 2019 [5].

Table 2
Granger's causality test for net international investment position and current account

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Country		CARA	NIIP
		P-value	
Germany	NIIP	0.4576	
	CARA		0.0690
Poland	NIIP	0.3485	
	CARA		0.0955
Italy	NIIP	0.2799	
	CARA		0.0006

The Granger test indicates that the net international investment position is dependent on the current account of Germany, because the probability of error is 6.9%, but CARA does not depend on the net international investment position, as the probability is 45.7%.

For Poland, the Granger test also shows a small inverse relationship between the net international investment position and the current account, as the probability of error is 9.5%. The current account of Poland does not depend on NIIP (probability of error 34.8%).

In Italy, there is the greatest dependence of the net international investment position on the current account balance, as Prob. = 0.0006%. The probability of error is very low, only 0.06%. The dependence of the current account on NIIP is not traceable.

Conclusions. Modern theoretical concepts of investment should respond to the challenges of economic development posed by the rapid globalization and internationalization of economic relations. An important influence on the efficiency of the country's investment activity is its state policy on attracting foreign and national investments, the country's participation in the system of international agreements and traditions of their observance, the degree and methods of state intervention in the economy, etc.

The International Investment Position (IIP) shows the value and composition of economy's external financial assets and liabilities at a point in time, thereby reflecting useful information for assessing a country's economic relationship with the rest of the world.

Germany's net international investment position from 2015 to 2019 is positive. With regard to the accumulated investments of Italy and Poland the net international investment position of the countries displays a negative indicator. Portfolio investments take the first place in the structure of assets and liabilities IIP in Germany and Italy. Reserve assets prevail in the structure of Polish IIP assets, while foreign direct investment dominates in liabilities.

Currently, the EU governments aim to attract international investment that promotes national sustainable development goals. The Granger's causality test suggests the dependence of net international investment position on the current account. In Ger-

many and Italy there is a direct relationship, while in Poland the relationship is inverse.

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