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MODELS OF THE INTERNATIONAL INVESTMENT POSITION IN VISEGRAD COUNTRIES AND UKRAINE: A COMPARATIVE ANALYSIS

Purpose. To classify the models of assets and liabilities of the Visegrad Group and compare them with similar indicators of Ukraine's international investment position.

Methodology. The separation of models is carried out by three criteria: the formation of the structure, the degree of risk and the activity of the state. The asset model of Ukraine's international investment position is defined as dynamic, with low risk and moderate government intervention. The liability model is also dynamic, but with high risk and increased government activity. Ukrainian economic models are not similar to any of the studied European models and are irrational by most criteria.

Finding. Based on the comparison of the models of assets and liabilities formed in Ukraine with similar indicators of the Visegrad Group countries, a number of hypotheses about the strategy of improving the international investment position of Ukraine have been expressed. The basis for solving these problems should be activities aimed primarily at solving the internal problems of Ukraine, which can improve the mechanisms of direct and portfolio investment.

Originality. An original methodology for classifying the models of assets and liabilities of the country's international investment position has been developed. Its approbation by the example of Visegrad countries and Ukraine allowed finding the strengths and threats of different models and predict future scenarios of changes in the international investment position.

Practical value. The developed methods for assessing the models of international investment position of the country can be used in other studies, which will allow developing countries to choose a certain international model to develop their own strategy for managing international financial flows.

Keywords: *assets, liabilities, models of international investment position, Visegrad Group, Ukraine*

Introduction. Today the influence of the foreign economic activity on the economic development of the country is generally accepted. Much research has focused on the dependence of economic dynamics on foreign trade, direct foreign investment, the balance of payments, and so on. The history of such research is more than one hundred years old. At the same time, the development of society, the emergence of new forms of cooperation, the transition to a post-industrial society and digitalization not only lead to new factors of economic growth, but also change the perception of seemingly long-studied and even quantitatively measured connections.

In the last few decades, along with the traditional balance of payments, which describes the ratio of inflows and outflows of foreign currency over a period of time, the country's international investment position has become the focus of special attention. A special impetus for the intensification of research on this system of indicators was the adoption by the International Monetary Fund of Guidelines "Balance of payments and international investment position manual" (BPM6) [1], in the name of which appears for the first time an international investment position.

The international investment position and balance of payments accumulate a whole range of factors, both internal and external. Internal factors include the rate of economic growth, internal inflation, the investment climate in the country, and the exchange rate. The situation in the world market, international competition, the dynamics of world prices, the situation in the world financial market are all external factors.

Of course, this list is not exhaustive. In addition, it contains some complex factors, which in some way include others. For example, the investment climate in the country can be considered as a separate factor and as a whole system of factors. Quite often it includes both GDP growth and exchange rate dynamics. It would seem fair to remove these factors from the general list, as they are part of the investment climate. However, such a decision, in our opinion, would not be justified. For example, the exchange rate affects not only invest-

ment flows, but also the current account, stimulating or restraining the export and import of goods and services.

The same can be said about external factors. For example, a change in market conditions may be reflected in a change in the level of world market prices, so it partially absorbs this factor. But really, only "partially". The situation can change without changing the price level (for example, the structure of demand changes: the demand for the products of the country's specialization decreases and the demand for imported products increases). On the other hand, it is possible to change the price even without changing the market situation under the influence of political factors.

However, our research shows that there is no strong link between the action of these factors and the net international investment position of a particular country. It is also difficult to identify the impact of the country's level of development on the net international investment position. For example, Norway and Ireland, according to the World Bank, have approximately the same level of GDP per capita (respectively, 75.42 and 78.66 thousand dollars in 2019), but they are at completely opposite poles in terms of net international investment position in the country's GDP (hyperactive investor and hyperactive recipient, respectively). Therefore, there is every reason to believe that one or another model of international investment position is chosen by the country itself, based on a certain strategy in this area.

Today, the Ukrainian economy should be considered as the one that has not yet clearly chosen a model of its development. Too often it changes not only the tactics, but the strategy of its management by the state. There is no sequence of actions in the transfer of power from one party to another. Therefore, it is important to study existing macroeconomic models and compare them with Ukrainian realities.

In this regard, the history and current state of the Visegrad Group (the Czech Republic, Hungary, Poland and Slovakia) can be a very valuable experience for the development of macroeconomic guidelines for Ukraine's strategy. The choice of these countries is due to a number of reasons. First, they are Ukraine's closest neighbors-EU members, and three of these

countries (Poland, Slovakia, Hungary) share a border with Ukraine. Secondly, in 1997, when negotiations began on the accession of ten new members to the EU (including members of the Visegrad Group), their economic situation largely resembled the current state of Ukraine's economy. Third, on the way to reforming Ukraine's economy, it is necessary to solve almost the same tasks that were formulated by the members of this group in the Visegrad Declaration in 1991.

Literature review. The study on international settlements has a long history. It began with the concept of "trade balance", which was introduced into scientific circulation and practical use by representatives of mercantilism. It is believed that the first to do so was the English mercantilist Edward Misselden, who in his book 'The Circle of Commerce; or, The Balance of Trade', first published in 1623, not only gave his definition of the trade balance, but also attempted to calculate it for England in 1621.

The theory of trade balance was further developed in Thomas Mun's 'England's Wealth in Foreign Trade, or the Balance of our Foreign Trade as a Regulator of our Wealth', first published in 1664. It should be noted that the methodological foundations of the overall trade balance, laid by Th. Mun, are still used in the statistics of foreign economic activity.

In the seventeenth and eighteenth centuries there is another source of income from abroad: international investment. This necessitated supplementing the trade balance with other indicators. As a result, the concept of balance of payments appears. It is believed that the term was first proposed by James Steuart in his work 'Study of the principles of political economy' (1767). However, the stable use and calculation of this indicator begins only after World War I. The method for calculating the balance of payments was developed and approved in 1928 by the League of Nations.

After World War II, most of the economic functions of the League of Nations were transferred to the International Monetary Fund. Today, the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) is in force. Although the text of the fifth edition (1993) also described the mechanism for calculating the international investment position, the inclusion of this problem in the general title of the sixth edition indicates an increase in the value of this indicator for assessing the situation with international settlements.

This was the impetus for the active study on the problems of the international investment position. Studies on changes in the investment position of individual countries have been conducted. In particular, the team of the authors (Pana Alves, Esther López, César Martín, Irene Roibás) analyzed the relationship between the balance of payments and net international investment position using the example of Spain [2]. Paweł Śliwiński carried out a similar study for the countries of the European Monetary Union [3]. Ye. M. Petrikova, based on the use of statistical analysis methods, discovered new trends in the dynamics of Russia's net international investment position [4]. A team of authors consisting of N. F. Sivtsova, Ye. N. Kamyshanchenko, Yu. V. Boltenkova developed a forecast for the dynamics of Russia's net international investment position for the coming years [5].

Iwona Maciejczyk-Bujnowicz's studies, which are devoted to the analysis of the investment position of Poland in comparison with other countries of the European Union, are very interesting [6, 7]. Some authors ((I. Lomachynska, S. Yakubovskiy, I. Plets)) analyze the impact of certain components of the international investment position on economic dynamics [8]. A. V. Navoy tries to establish a link between the balance of payments, international investment position and the system of national accounts [9]. It is quite interesting to compare the net international investment position of the United States, which has the world's largest negative balance of foreign assets and liabilities to foreign partners, with the world's largest net investors (Germany, China, Japan), performed by Mobasher Kazmi [10].

A lot of interesting research has been conducted to analyze the development of Eastern and Central Europe in recent years. These include, in particular, the article by Michael Fidora and Martin Schmitz, who conducted a factor analysis of the improvement in the international investment position of the eurozone countries in recent years [11]. Particular attention was paid to the peculiarities of the economic crisis in the region.

For many publications, Visegrad countries have become a special object of research. G. Antošová, M. Vogl b M. Schraud analyze the new challenges posed by the pandemic [12]. The article by E. Ivanova, J. Masárová contains an assessment of the current state of the economy of the Visegrad Group and a forecast of their development in the future [13]. The study by M. Keese [14] is devoted to the development of the labor market in the countries of the Visegrad Four.

At the same time, there are no comparisons of the international investment position and its structure in these countries with similar indicators for Ukraine, which can be very useful for determining the strategy of economic transformation in our country.

The purpose of our study is to analyze and classify the models of assets and liabilities of the international investment position of the Visegrad Group in comparison with similar indicators of Ukraine and to develop a proposal for Ukraine's strategy in this area.

Data and methodology. In previous studies, we proposed to group countries by the ratio of net international investment position to GDP. According to these criteria, we can identify hyperactive recipients (<-100%), active recipients (-60--100%), moderate recipients (-20--60%), countries with a balanced position (-20--20%), moderate investors (20--60%), active investors (60--100%) and hyperactive investors (>100%) [15].

According to this classification, Ukraine belongs to the countries with a balanced position, the Czech Republic and Hungary – to moderate recipients, and Slovakia – to active recipients. All members of the Visegrad Group have models different from the Ukrainian one. On the other hand, all countries have recipient-oriented models: the negative value of a net investment position.

It is advisable to further detail the models of the international investment position based on the analysis of the structure of assets and liabilities. Using the data of the International Monetary Fund, we calculated the structure of assets and liabilities of all surveyed countries for 2014–2019.

In analyzing the structure of assets, in our opinion, first of all we should pay attention to the following aspects:

- *formation of the structure.* If the structure does not undergo significant changes within five years, it can be considered as formed. If such changes occur, it is important to determine the directions of change and consider such a structure in dynamics;

- *the degree of risk of the structure.* The riskiest element of assets is direct investment. At the same time, their large size testifies to the active role of investors who intend not only to receive income from their investments, but also to influence the functioning of investment objects. This indicates not only the degree of riskiness of the asset structure, but also its profitability. Portfolio investments are much less risky, although they have a lower rate of return. In essence, other investments are low risk (especially when deposits and currency have a significant share among them);

- *the degree of state participation in assets.* It can be measured by the proportion of reserve assets. Although the state (through the central bank) may be present in other components of assets, the main element of its influence on assets are reserves.

Some of these criteria for classifying models of assets of the international investment position can be attributed to liabilities, in particular, the formation or dynamism. However, other

approaches are needed here. As for the riskiness of liabilities, here it is completely opposite to assets. The least risky are attracted direct investments, because here the risk is assumed by the foreign investor. Government borrowings and state-guaranteed borrowings have the greatest risk. They can be issued in the form of securities (then it will be an element of portfolio investment) or take the form of loans (then it will be other investments). Traditionally, most of the debt is in the form of loans, so in our further research, we will consider other investments riskier than portfolio.

Results. Country's models of international investment position. Czech Republic. Among the studied countries, the Czech Republic has the highest GDP per capita. In 2019, it amounted to 23.1 thousand dollars [16]. The total amount of assets in the international investment position of the Czech Republic in the same year reached 312.1 billion dollars or 127 % of GDP. Compared to 2014, assets increased by 71 %, outpacing the growth of liabilities, which increased by 45 %. As a result, the situation with a clean international investment position has improved: its negative value has changed from \$ 69.1 to \$ 51.6 billion [17].

However, the most interesting are the changes in the structure of assets (Table 1). The only component of assets, the share of which remains virtually unchanged throughout the period (with some slight fluctuations), is direct investment. Within the period (2016–2017), this figure decreased slightly to 20.5–20.9 %. In other years, it remained stable at 23.5 %. Reserve assets show a stable upward trend: in 2019 compared to 2014, they increased 2.7 times, and their share increased from 29.9 to 47.9 %. This growth was mainly due to a decrease in the share of portfolio and other investments.

Thus, the asset model of the international investment position that is being built in the Czech Republic should be considered dynamic (i.e., one that is not formed and is changing). It is moderately risky, as direct investment does not exceed 25 % with an accentuated and growing role of the state. Achieving almost 50 % of the share of reserve assets indicates that the role of the state is great. Reserves serve as a kind of stabilizer to ensure the stability of the national currency and can be used to manipulate to influence the exchange rate of the krona. As the Czech Republic is not a member of the euro zone but uses the national currency, such a significant share of reserves among assets is justified.

Analysis of the liabilities structure of the Czech Republic in the international investment position (Table 1) indicates its formation. During the study period, the structure has not undergone significant changes. There are some fluctuations, but they are more caused by changes in global financial markets than by purposeful actions of the state. Thus, in 2017–2018 there was a certain redistribution of liabilities in favor of other investments through direct, but in 2019 the structure almost recovered.

The Czech Republic attracts significant foreign direct investment. Their share in liabilities is more than 50 %. This fact

can be regarded as positive. 25 % of other investments make the structure of liabilities moderately risky. If we compare the amounts of portfolio and other investments in liabilities and the amount of reserve assets (in 2019, respectively, 159.7 and 149.6 billion dollars), we can see actually 100 % coverage of these liabilities by reserve assets. And that is not counting other types of assets that can also be used to cover liabilities. Therefore, there is reason to believe that the situation with the structure of the Czech Republic's international investment position is quite stable and not a matter of concern in the short term. The only thing that can pose a threat is the significant amount of foreign direct investment per capita. In 2019, this figure amounted to 18.5 thousand dollars. There are some reservations about the transfer of control over much of the national economy to foreign capital.

Slovakia. In recent years Slovakia is on the second position in terms of GDP per capita among the surveyed countries (19.3 thousand dollars in 2019) (The World Bank). Its assets from 2014 to 2019 increased by 52 %, and liabilities – by 36 %. This relatively reduced the negative value of the net international investment position, but increased its absolute value: from –58.8 billion dollars in 2014 to –69.9 billion dollars in 2019 (International Monetary Fund).

Although Slovakia is the Czech Republic's closest neighbor and has had a common economic history for a long time when it was part of Czechoslovakia, today the structure of the international investment position of these countries is the exact opposite (Table 2).

In contrast to the Czech Republic, the Slovak asset model of the international investment position can be considered as established: no significant changes in the structure have taken place over the last 6 years. The exception is only in 2016, when the share of direct investment increased at the expense of others. But, as we have already noted, this was due to changes in the global financial markets, as the structure actually recovered in the following years.

Unlike the Czech Republic, Slovakia prefers less risky investments, namely portfolio and others (41.8 and 33.8 respectively, in 2019). Direct investment is only about 17 %. Therefore, in general, such a model can be considered low risk.

Slovakia has a rather low share of reserve assets – 7.1 % (in previous years it was even lower). This is the lowest rate among the studied countries. Such limited activity of the state can be explained, in particular, by the fact that Slovakia is a member of the euro area and does not have a special need to form reserves for interventions to support the national currency. On the other hand, this may create certain risks for the fulfillment of the state's obligations, which are reflected in the liabilities (Table 2).

The structure of liabilities of Slovakia's international investment position is much closer to the structure of liabilities of the Czech Republic, although it has some differences. It cannot be considered formed yet, as significant structural changes have taken place over the last 6 years. The share of

Table 1
Structure of assets (A) and liabilities (L) of the Czech Republic (%) [17]

Years	Direct investment		Portfolio Investment		Derivatives		Other investment		Reserves
	A	L	A	L	A	L	A	L	
2014	23.5	58.1	15.3	17.5	2.4	1.7	28.8	22.7	29.9
2015	23.0	57.2	15.6	20.3	1.7	1.3	24.6	21.1	35.1
2016	20.9	56.6	14.3	20.4	1.3	1.3	22.0	21.8	41.4
2017	20.6	51.4	12.1	19.7	1.0	0.9	17.1	28.0	49.2
2018	22.3	52.9	10.7	18.1	2.1	1.8	17.5	27.1	47.5
2019	23.5	54.5	10.4	19.1	1.9	1.6	16.3	24.8	47.9

Table 2
Structure of assets (A) and liabilities (L) of Slovakia (%) [17]

Years	Direct investment		Portfolio Investment		Derivatives		Other investment		Reserves
	A	L	A	L	A	L	A	L	
2014	15.7	45.6	41.0	28.5	0.6	0.7	38.8	25.2	3.9
2015	19.0	48.0	40.5	26.2	1.0	0.5	34.5	25.3	5.0
2016	24.0	49.6	43.0	24.1	0.8	0.3	27.8	26.0	4.5
2017	18.9	44.7	39.3	22.2	0.3	0.3	37.6	32.7	3.9
2018	17.8	43.0	39.8	20.7	0.3	0.5	36.8	35.8	5.3
2019	16.8	42.7	41.8	22.0	0.5	0.5	33.8	34.9	7.1

portfolio investments decreased significantly (from 28.5 % in 2014 to 22.0 % in 2019) and the share of direct investments decreased slightly (from 45.6 % in 2014 to 42.7 % in 2019). All this was in favor of other investments, the share of which increased from 25.2 to 34.9 % during the study period.

As portfolio and other investments together account for more than 50 % of liabilities, such a structure should be considered risky. And more than a third of liabilities in the form of other investments, which often involve the state, gives grounds to classify the structure as one that involves a very active position of the state.

Threats to the country, in our opinion, may arise due to the significant number of other investments per capita. In 2019, it amounted to 11.1 thousand dollars. In the absence of reserves and a significant negative balance under this item (–25.5 billion dollars), Slovakia may have a problem with repayment of liabilities. This can only be done through new borrowings. Apparently, this structure of liabilities explains the fact that Slovakia, according to our classification, is a country with a model of an active recipient (although its level of development should not be there). In essence, it is drawn into a financial pyramid. And, as you know, the financial pyramid always has limitations due to the limited expansion of its base.

Hungary. Hungary and Poland are countries with roughly the same GDP per capita: in 2010 in constant dollar units, this figure is slightly higher for Hungary, and in terms of purchasing power parity, Poland is slightly ahead of Hungary. The comparison of their models of international investment position is more interesting.

Hungary, like Poland, according to our previous classification are classified as countries with a model of moderate recipients. In both countries, the negative net investment position is close to half of GDP.

In recent years, unlike other countries, Hungary has not increased its international investment position. In 2019, compared to 2014, assets increased by only 6 %, and liabilities even decreased by 4 %. Of course, within the period there was a surge in all countries in 2016–2017, which was fully repaid in subsequent years. Most likely, this is due to the fact that today the liabilities of the international investment position are 2.3 times higher than the country's GDP and their further increase will pose a threat to its financial stability. Only countries with a high level of development and those that have chosen the model of hyperactive recipients can afford such an excess.

The structure of assets of the international investment position of Hungary is given in Table 3. In general, the asset model can be classified as formed. Even some changes in the ratio of other investments and reserves do not change the overall picture, which is determined by a particularly large share of direct investment. None of the countries surveyed has such a structure when $\frac{3}{4}$ assets are one type of investment. And since this is a direct investment (the riskiest among others), the whole asset model can be classified as risky.

Table 3

Structure of assets (A) and liabilities (L) of Hungary (%) [17]

Years	Direct investment		Portfolio Investment		Derivatives		Other investment		Reserves
	A	L	A	L	A	L	A	L	
2014	73.7	69.6	3.2	15.4	1.6	1.1	7.1	14.0	14.4
2015	74.9	72.2	3.2	14.5	1.7	0.6	8.8	12.6	11.5
2016	78.7	76.2	3.0	12.5	1.5	0.5	9.2	10.8	7.5
2017	76.1	74.1	4.2	13.6	0.9	0.4	10.8	11.8	8.1
2018	69.1	70.4	4.5	15.1	0.9	0.6	14.0	14.0	11.4
2019	72.0	71.9	4.5	14.5	1.0	0.6	12.2	13.0	10.3

On the other hand, Hungary has the lowest share of reserve assets – only 10.3 % in 2019. This is the lowest figure among the surveyed countries. It would seem that with its national currency Hungary would have to build up significant reserves to maintain its stability. Moreover, there is a stable tendency to depreciate the forint against the US dollar: in 2014, 1 dollar was worth 279.33 forints, and in 2019 – already 295.33 forints (Central Intelligence Service). On the other hand, if we consider reserve assets not as a source of funds for currency manipulations, but as a certain insurance fund for the fulfillment of external obligations, even such an amount is sufficient to perform this function. This is evident in the analysis of the structure of liabilities of the international investment position (Table 3).

Hungary demonstrates a formed model of liabilities in the international investment position. Again, this is due to one component – foreign direct investment. Their share reaches more than 70 %. And certain fluctuations do not change this picture. It is necessary to repeat again that among the studied countries it is the highest indicator. It defines the model as the one that has a low level of risk for the country, as foreign direct investment does not carry risks of financial stability. However, as already noted in relation to the Czech Republic, there are other risks: loss of control over the national economy and its transition to foreign investors. After all, today foreign direct investment per capita is 27.9 thousand dollars.

Attention should be paid to another potential threat that arises when comparing individual items of assets and liabilities. Although the share of portfolio and other investments is not large, the amount of negative balances on these positions in 2019 is 52.7 billion dollars, which is much higher than the amount of reserve assets (31.8 billion dollars). And while these obligations are not only public but also private, there is a potential threat.

Regarding the third criterion, according to which we classify the models of the international investment position (activity of the state), as in relation to the model of assets, the state is not a decisive player. The main component of liabilities, where the state is manifested (other investments) is only 13 %.

Poland. Poland has a very similar Czech asset model to the international investment position (Table 4). However, unlike the Czech Republic, Poland already has a model in place. Structural shifts usually occur (the share of direct investment has decreased somewhat, other investments have increased), but the overall picture remains the same.

The distribution of interest between individual items is almost the same as in the Czech Republic: direct investment accounts for about a quarter of assets and reserves – more than 40 %. Therefore, this model can also be classified as the one that has a moderate risk and involves an active position of the state. As Poland does not intend to join the eurozone in the near future, it is worried about the stability of its national currency. And it succeeds. In recent years, the Polish zloty not only has not depreciated against the dollar, but even increased

Table 4

Structure of assets (A) and liabilities (L) of Poland (%) [17]

Years	Direct investment		Portfolio Investment		Derivatives		Other investment		Reserves
	A	L	A	L	A	L	A	L	
2014	28.6	44.3	8.8	28.7	3.4	1.5	15.7	25.5	43.5
2015	27.1	43.0	13.5	29.7	2.0	1.3	16.0	26.0	41.4
2016	26.0	43.3	11.0	27.8	1.4	0.9	15.2	28.0	46.4
2017	26.6	45.5	13.0	29.5	1.8	0.6	17.3	24.5	41.3
2018	24.2	46.1	13.0	28.5	1.9	0.6	18.0	24.8	42.8
2019	23.8	47.4	13.1	26.5	1.8	0.6	17.2	25.5	44.1

in value. If in 2014 1-dollar cost 3.77 zlotys, then in 2020 – 3.67 [18].

The models of liabilities of the international investment position of Poland and the Czech Republic are quite similar. The structure of liabilities can also be considered formed. Almost half of them are direct investments and about a quarter are portfolio and other investments. As in all other countries, derivatives are an insignificant area of investment. Therefore, the current model is with moderate risk and moderate activity of the state.

Ukraine. Ukraine's international investment position is not similar to any of the studied countries and has significant differences. Firstly, Ukraine is the only country among the respondents that fell into the group with a relatively balanced international investment position. In fairness, this has only been possible due to the improvement in the asset-liability ratio in recent years. In 2019, compared to 2014, assets increased slightly, and liabilities even decreased slightly. Secondly, the volume of assets and liabilities is much smaller than in the Visegrad countries. Thus, the assets of Poland, which is approximately comparable in population to Ukraine, are twice as large, and the liabilities are three times larger than in Ukraine. On the other hand, if we compare assets and liabilities with GDP, this indicator in Ukraine will be almost the largest among the studied countries. Thirdly, the structure of assets and liabilities in Ukraine is completely different from any other country (Tables 5).

The asset model in Ukraine's international investment position is dynamic. There is no element that would remain more or less stable for six years under study. The share of direct investment has halved, other investment has lost more than 8 percentage points, and the share of reserves has almost tripled.

The share of Ukraine's foreign direct investment is negligible compared to other countries (about 3 %). It can be assumed that portfolio investments do not play any significant role at all. The bulk of Ukraine's foreign assets are other investments, among which foreign currency outside banks accounts for almost 90 % [19]! This is an extremely inefficient form of assets, which means their freezing and the actual withdrawal of significant amounts of funds from economic turnover (almost 90 billion dollars). Such investments are not associated with entrepreneurial risk at all. There is only a risk of losses due to changes in exchange rates. Therefore, such a model can be characterized as a low-risk model.

Ukraine has been increasing its reserve assets in recent years. This trend can be considered positive and needs to be developed. The models of Poland and the Czech Republic, which use reserves to achieve the stability of the national currency and guarantee the fulfillment of external obligations, can be used as guidelines. But the current asset model is a model with moderate government activity.

Comparing the Ukrainian asset model with the achievements of other countries, we can conclude that Ukraine has

Table 5
Structure of assets (A) and liabilities (L) of Ukraine (%) [17]

Years	Direct investment		Portfolio Investment		Other investment		Reserves
	A	L	A	L	A	L	
2014	6.6	29.4	0.2	18.7	87.0	51.9	6.2
2015	2.8	27.9	1.8	18.2	86.1	53.9	11.0
2016	2.7	29.6	0.1	18.6	84.3	51.8	13.0
2017	2.7	29.3	0.1	19.4	82.1	51.3	15.1
2018	2.7	28.9	0.1	21.1	81.1	50.1	16.1
2019	3.1	31.0	0.4	22.9	78.6	46.1	18.0

formed a very inefficient model. The main directions of its transformation can be:

- mobilization of foreign currency funds that are outside the banking system and reorientation of their use for the purposes of direct and portfolio investment;
- increase the share of direct and portfolio investment to 20–25 % of total assets;
- accumulation of reserve assets with bringing their share in assets to 25–30 %.

The implementation of these areas will bring the Ukrainian model closer to successful European countries and take advantage of international investment activities.

The model of the structure of liabilities of Ukraine's international investment position can also be considered dynamic. Only one component (foreign direct investment) remained virtually unchanged. As for the other two elements, there is a generally positive trend: a decrease in the share of other investments and an increase in the share of portfolio investments (Table 5).

If we compare the structure of liabilities of Ukraine and other studied countries, we can find the following:

- the share of portfolio investments in Ukraine's liabilities is at the average level. In some countries it is slightly lower (Czech Republic, Hungary), and in Poland – slightly higher. Therefore, for strategic purposes, this indicator can be considered acceptable for this country;
- foreign direct investment in Ukraine is clearly inferior to that in other countries. This significantly increases the level of risk of the whole model. Improving the impact of liabilities on the Ukrainian economy can be achieved by increasing the share of direct investment to 45–50 %;
- too high a share of other investments, in which the share of the state is quite significant, requires a gradual redistribution of liabilities in favor of direct investment.

Conclusion. Thus, the analysis allowed classifying the models of assets and liabilities of the studied countries according to the criteria of formation, level of risk and degree of activity of the state. In generalized form, this classification is given in Table 6.

Based on the comparison of the models of assets and liabilities formed in Ukraine with similar indicators of Visegrad

Table 6

Classification of models of assets and liabilities of the international investment position of selected countries

Country	By the criterion of formation	By the degree of risk	By the activity of the state
Czech Republic			
assets	dynamic	moderate risk	increased activity
- liabilities	formed	moderate risk	moderate activity
Slovakia			
- assets	formed	low risk	low activity
- liabilities	dynamic	high risk	increased activity
Hungary			
- assets	formed	high risk	low activity
- liabilities	formed	low risk	low activity
Poland			
- assets	formed	moderate risk	increased activity
- liabilities	formed	moderate risk	moderate activity
Ukraine			
- assets	dynamic	low risk	moderate activity
- liabilities	dynamic	high risk	increased activity

Group countries, we have expressed a number of hypotheses about the strategy of improving the international investment position of Ukraine. The basis for solving these problems should be activities aimed primarily at solving the internal problems of Ukraine, which can improve the mechanisms of direct and portfolio investment.

Developed methods for assessing the models of international investment position of the country can be used in other studies, which will allow developing countries to choose a certain international model to develop their own strategy for managing international financial flows.

References.

1. *Balance of payments and international investment position manual* (2009). Washington, D.C.: International Monetary Fund.
2. Alves, P., López, E., Martín, C., & Roibás, I. (2020). The Balance of Payments and International Investment Position of Spain in 2019. *Economic Bulletin, Banco de España; Economic Bulletin Homepage*, (2/2020), 1-20.
3. Śliwiński, P. (2018). Short and Long Term Determinants of the Net International Investment Position Resulting from the Balance of Payments of the European Monetary Union Countries. *Acta Universitatis Lodzianis Folia oeconomica*, 4(336), 209-224. <https://doi.org/10.18778/0208-6018.336.13>.
4. Petrikova, Ye. M. (2019). Trends in the development of the balance of payments and the international investment position of Russia. *Questions of statistics*, 26(10), 46-56.
5. Sivtsova, N. F., Kamyshanchenko, Ye. N., & Boltenkova, Yu. V. (2020). International investment position of the Russian Federation: trends and development prospects. *Modern economy: problems and solutions*, 7, 96-106. <https://doi.org/10.17308/meps.2020.7/2399>.
6. Maciejczyk-Bujnowicz, I. (2015). Decomposition of Polish International Investment Position with Selected Countries of Central and Eastern Europe. *Acta Universitatis Lodzianis. Folia Oeconomica*, 6(317). <https://doi.org/10.18778/0208-6018.317.06>.
7. Maciejczyk-Bujnowicz, I. (2016). International investment position of European countries – chosen aspects. *Acta Universitatis Lodzianis. Folia Oeconomica*, 6(326). <https://doi.org/10.18778/0208-6018.326.06>.
8. Lomachynska, I., Yakubovskiy, S., & Plets, I. (2018). Dynamics of Austrian foreign direct investment and their influence on the national economy. *Baltic Journal of Economic Studies*, 4(5), 167-174. <https://doi.org/10.30525/2256-0742/2018-4-5-167-174>.
9. Navoy, A. V. (2014). Analysis of the state and development of the external sector of the economy based on the balance of payments and international investment position. *Questions of statistics*, 2, 56-59.
10. Mobasher Kazmi (n.d.). *Weakening US net international investment position and its implications for holders of US assets*. Retrieved from <https://www.theasianbanker.com/updates-and-articles/weakening-us-net-international-investment-position-and-its-implications-for-holders-of-us-assets>.
11. Fidora, M., & Schmitz, M. (2018). Factors driving the recent improvement in the euro area's international investment position. *Economic Bulletin Boxes, European Central Bank*, 3. Retrieved from https://www.ecb.europa.eu/pub/pdf/other/ecb.ebbox201803_02.en.pdf.
12. Antošová, G., Vogl, M., & Schraud, M. (2020). Challenges for the Visegrad group – the coronavirus crises and its impact on tourism. *Visegrad Journal on Bioeconomy and Sustainable Development*, (1), 28-32. <https://doi.org/10.2478/vjbsd-2020-0006>.
13. Ivanova, E., & Masárová, J. (2018). Performance evaluation of the Visegrad Group countries. *Economic Research-Ekonomska Istraživanja*, 31(1), 270-289. <https://doi.org/10.1080/1331677X.2018.1429944>.
14. Keese, M. (2020). The future of work in the Visegrad group of countries. *Society and Economy*, 42(2), 124-145. <https://doi.org/10.1556/204.2020.00011>.

15. Zadoia, A. (2020). International investment position of the country and the level of its development: relationship between indicators. *European vector of economic development*, (2), 30-39. <https://doi.org/10.32342/2074-5362-2020-2-29-3>.
16. *The World Bank* (2021). Retrieved from <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?page=6>.
17. *International Monetary Fund* (2021). Retrieved from <https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&slid=1409151240976>.
18. *Central Intelligence Service* (n.d.). Retrieved from <https://www.cia.gov/library/publications/resources/the-world-factbook/>.
19. *International investment position (according to the methodology of PBC6)* (2021). Retrieved from https://bank.gov.ua/files/ES/IIP_y.pdf.

Моделі міжнародної інвестиційної позиції країн Вишеградської групи та України: компаративний аналіз

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Мета. Класифікація моделей активів і пасивів країн Вишеградської групи й порівняння їх із подібними показниками міжнародної інвестиційної позиції України.

Методика. Поділ моделей здійснюється за трьома критеріями: сформованість структури, ступінь ризику та активності держави. Модель активів міжнародної інвестиційної позиції України визначається як динамічна, з низьким ризиком і помірним втручанням держави. Модель зобов'язань також динамічна, але з високим ризиком і підвищеною активністю уряду. Українські економічні моделі не схожі на жодну з досліджуваних європейських моделей і є ірраціональними за більшістю критеріїв.

Результати. На основі порівняння моделей активів і пасивів, сформованих в Україні, із подібними показниками країн Вишеградської групи, висловлена низка гіпотез щодо стратегії поліпшення міжнародної інвестиційної позиції України. Основою для вирішення цих проблем має стати діяльність, спрямована насамперед на вирішення внутрішніх проблем України, що може вдосконалити механізми прямих і портфельних інвестицій.

Наукова новизна. Розроблена оригінальна методологія класифікації моделей активів і пасивів міжнародної інвестиційної позиції країни. Її апробація на прикладі країн Вишеградської групи та України дозволила знайти сильні сторони й загрози різних моделей і передбачити майбутні сценарії змін у міжнародній інвестиційній позиції.

Практична значимість. Розроблені методи оцінки моделей міжнародної інвестиційної позиції країни можуть бути використані в інших дослідженнях, що дозволить країнам, що розвиваються, вибрати певну міжнародну модель для розробки власної стратегії управління міжнародними фінансовими потоками.

Ключові слова: активи, пасиви, моделі міжнародної інвестиційної позиції, Вишеградська група, Україна

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