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# Financial service markets of Eastern Europe: a compositional model

#### **Abstract**

The article deals with the models of functioning of financial service markets in the countries of Eastern Europe. The authors have conducted an analysis of the development of financial institutions within separate segments of relevant markets, such as deposit, credit, insurance and investment. The analysis shows that banking institutions play a significant role in the economic development of the countries of the selected group and makes it possible to determine the peculiarities of the development of their financial service markets. In view of the similarity between such countries, the obtained research results can be taken into account when considering other states that have chosen a similar path of their own economic development.

The results allow us to partially predict future transformations in the financial service market of Ukraine by taking into account virtually identical starting conditions for the development of Eastern European countries in the early 1990s. This assumption is also confirmed by the changes that have already taken place in Ukraine in view of the functioning of the country's banking system, which has led to a decrease in the number of banks and an increase in their financial stability. This is consistent with the development of banking systems in other Eastern European countries. This allows us to assert that there is gradual convergence of the functioning of the banking systems of both Eastern European countries and Ukraine. A detailed analysis of the transformations in the banking system gives reason to state that in the future the same changes are expected in other segments of the financial service market. In Ukraine, the markets of insurance services, services of non-state pension funds and investment companies remain poorly developed. The transformation of the relevant segments of the financial services market is a prerequisite for its further development.

**Keywords:** Financial Service Market; Compositional Model; Banking Institutions; Insurance Companies; Bank-centred Model

JEL Classification: G1

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# Ринки фінансових послуг країн Східної Європи: композиційна модель функціонування Анотація

У статті розглянуто моделі функціонування ринку фінансових послуг у країнах Східної Європи. Проводиться аналіз розвитку фінансових установ в окремих його сегментах: депозитному, кредитному, страховому та інвестиційному. Аналіз дозволив дійти висновку щодо вагомої ролі банківських установ в економічному розвитку країн даної групи та визначити особливості розвитку їхніх ринків фінансових послуг. Отримані результати, враховуючи їх схожіть між країнами, дають змогу здійснювати їх екстраполяцію і на інші держави, які обрали подібний шлях власного економічного розвитку.

Результати дослідження дозволяють частково передбачити майбутні трансформації на ринку фінансових послуг України, враховуючи фактично однакові стартові умови розбудови держав Східної Європи на початку 90-х років XX ст. Подібне припущення також підтверджується вже реалізованими в Україні змінами у функціонуванні банківської системи, наслідком яких стало зменшення кількості банків та підвищення їх фінансової стійкості, що відповідає практиці побудови банківських систем інших країн Східної Європи. Детальний аналіз трансформацій у банківській системі дає підстави стверджувати, що у майбутньому такі ж зміни відбудуться в інших сегментах ринку фінансових послуг. В Україні слабо розвиненим залишається ринок страхових послуг, послуг недержавних пенсійних фондів та інвестиційних компаній. Саме трансформація таких сегментів ринку фінансових послуг є необхідною умовою його розвитку.

**Ключові слова:** ринок фінансових послуг; композиційна модель; банківські установи; страхові компанії; банкоцентрична модель.

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# Рынки финансовых услуг стран Восточной Европы: композиционная модель функционирования Аннотация

В статье рассмотрены модели функционирования рынка финансовых услуг в странах Восточной Европы. Проведен анализ развития финансовых учреждений в пределах его отдельных сегментов: депозитном, кредитном, страховом и инвестиционном. Такой анализ позволил сделать вывод о весомой роли банковских учреждений в экономическом развитии стран данной группы и определить особенности развития их рынков финансовых услуг. Полученные результаты, учитывая их подобность между странами, позволяют осуществлять их экстраполяцию на другие государства, которые выбрали подобный путь собственного экономического развития.

Результаты исследования позволяют частично предсказать будущие трансформации и на рынке финансовых услуг Украины, учитывая фактически одинаковые стартовые условия развития государств Восточной Европы в начале 90-х годов XX века. Подобное предположение также подтверждается уже реализованными в Украине изменениями в функционировании банковской системы, которые привели к уменьшению количества банков и повышению их финансовой устойчивости, что соответствует практике построения банковских системы других стран Восточной Европы. Детальный анализ трансформаций в банковской системе дает основания утверждать, что в будущем такие же изменения ждут и другие сегменты рынка финансовых услуг. В Украине слабо развитыми остаются рынки страховых услуг, услуги негосударственных пенсионных фондов и инвестиционных компаний. Именно трансформация таких сегментов рынка финансовых услуг является необходимым условием его дальнейшего развития. Ключевые слова: рынок финансовых услуг; композиционная модель; банковские учреждения;

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страховые компании, банкоцентрическая модель.

## 1. Introduction

The financial service market is an integral part of the national economy. As the consequences of the financial and economic crisis of 2008-2009 show, stability of the activities of economic actors depends on the sustainability of functioning of such a market, which may have either positive or negative impact on the development of economic relations in the state. This determines the importance of ensuring stable conditions for its operation for financial intermediaries, who are the main participants of such a market.

In many countries, financial service markets have undergone a difficult period of evolutionary development and each national economy has its own specific features determining its development. However, when analysing the historical aspects of the functioning of the identified markets in different countries, one can distinguish common features relating to activities of financial institutions.

For countries of Eastern Europe, reforming of their national economies after the collapse of the Soviet Union is characterised by some peculiar features. Similar processes took place in the financial service markets. It is possible to highlight the main common aspects of building such markets. Among them, one can distinguish the prevailing role of banking institutions in the development of national economies and a high proportion of foreign capital in the banking system of each country.

Ukraine has its own specific way of reforming the financial service market. Unlike Eastern European countries, the national market develops in turbulent conditions of economic functioning, which can be explained by the permanent economic and financial crises. However, today, we can observe processes similar to those in Eastern Europe, taking place in the financial service sector. Nevertheless, they are very slow.

Until 2014, the compositional model of the financial service market in Ukraine was significantly different from that of Eastern European countries. First of all, it should be noted that there was a significant number of financial institutions with low capitalisation. Starting from 2014, under the pressure of a complicated macroeconomic situation and requirements of the International Monetary Fund, the National Bank of Ukraine began to pursue a policy of increasing the resilience of the Ukrainian banking system and that led to a significant decrease in the number of banks in Ukraine. Thus, there was a slight approximation of the functioning model of the Ukrainian banking system to similar models in other Eastern European countries, within which there is also a small number of commercial banks.

This refers to the development of the banking sector in Ukraine. The remaining segments of the financial service market remain underdeveloped, financially unstable and play a minor role in the functioning of the national economy. Such a situation cannot be tolerated, taking into consideration an increase in the level of interaction between Ukraine and the European Union, the lack of domestic investment for the development of the national economy and high dependence on external borrowing. Improving the level of the development and sustainability of the non-banking sector of the economy is possible only through its reformation in accordance with the transformational processes taking place in the banking system. Taking into consideration regularities of the development of financial service markets of Eastern European countries will allow predicting further transformational processes in the financial service market of Ukraine.

# 2. Brief Literature Review

The development of the financial service market as an important component of the functioning of the national economy. It is considered in scientific works by both foreign and domestic scientists, in which attention is paid to the issues of reforming the Ukrainian financial service market and increasing the efficiency of its operation by taking into consideration the experience of Eastern European countries in this area.

The importance of reforming the financial sector in the state is justified in the work by R. J. Herring and A. M. Santomero (1996), who note that for the development of the financial services market within the national financial system, it is important to increase the level of trust among all participants in such a market. The emphasis in the work is also on creating conditions for the formation of an effective financial system in the state, which promotes the optimal allocation of resources, expands the capabilities of each citizen and provides funds for both business entities and the state.

E. Thalassinos (2008), analysing directions of the development of the European financial sector, researches the trends in the convergence of financial service markets between already existing participants of the European financial sector and its new participants, including Eastern European countries. The author emphasises the important role of the processes of merging, consolidating

and creating of new enterprises by different types of financial intermediaries in countries of Eastern Europe, which leads to an increase in the level of foreign capital within national financial systems in order to increase the volume of credit and investment resources that began to be produced by such institutions. In general, such processes have contributed to the formation and rapid development of capital markets in relevant countries.

N. K. Cevik, S. Dibooglu and A. M. Kutan (2016) have studied the peculiarities of the functioning of the financial sector in Central and Eastern Europe and concluded that the activities of foreign banking institutions in the countries of this group are more effective if compared to the activities of domestic commercial banks. This only confirms the importance of attracting foreign capital to the financial sector of Ukraine.

A. Yu. Semenog and O. M. Pakhnenko (2017) consider the structure of the financial service market of the European Union, including a group of Eastern European countries, and note that the financial service market in the European Union is mainly formed through the activities of banking institutions, loans of which are the dominant source of financial resources both for business entities and for households. In addition, the authors state that financial companies within the EU are active participants in the financial service markets of the Eastern European countries (BNP Paribas S. A., ING, AXA, etc.).

O. A. Gural, and I. A. Lomachinskaya (2017) observes that the banking system, as a dominant component of the national financial system of the Visegrad Group countries, has a significant impact on their socio-economic well-being. The financial sector has become an important driver of the economic development by mobilising foreign direct investment and targeting the most productive enterprises and types of economic activity.

P. Wiesiołek and D. Tymoczko (2015) outline the peculiarities of the evolution of the banking sector in Central and Eastern European countries and consider Poland's experience in detail. The scholars state that the peculiarities of the functioning of the financial service markets in selected countries are the existence of imbalances in lending to citizens and the real sector of the economy. In particular, the prevalence of lending to the population restrains, as the authors point out, the development of industrial production and does not contribute to raising the level of GDP in these countries. The researchers emphasise the importance of changing this situation using appropriate instruments of state regulation. The outline is also important for Ukraine, in which banks actively offer loans to the population, but provide loans to enterprises with sufficient restraint.

The review of scientific literature makes it possible to draw conclusions about the existence of a significant set of similar features of the development of financial service markets in Eastern Europe (see the works by Berglof & Bolton (2002), Thimann (2002), Altomonte & Guagliano (2003), Bonin & Wachtel (2003), Bakker & Gross (2004), Barisitz (2008), Iorgova & Ong (2008), Patrice et al. (2012), Barjaktarović, Paunović & Ječmenica (2013), Lagoa (2014), Radulescu (2016), Bayar (2017)). Some of them are already characteristic of the financial service market in Ukraine (Dubyna, 2016). Thus, given the important role of such a market in the development of the national economy, the issue of analysing the current trends in this market functioning in the countries of Eastern Europe is relevant.

**3. The purpose** of the article is to explore models of the financial services market in countries of Eastern Europe and define the peculiarities of their possible functioning in the Ukrainian financial service market.

## 4. Methodology

General scientific methods of research are used within the article, in particular comparison, measurement and observation. The outlined market is considered through the systematic approach, which allows studying such a market as a holistic object of knowledge with the identification of its individual segments (markets of credit, insurance and investment services). This made it possible, using statistical approaches, to determine the aggregated quantitative indicators of the functioning of these segments of the financial service markets in the selected countries of Eastern Europe, including Ukraine.

#### 5. Results

To substantiate the direction of the financial services market transformation in Ukraine, let us consider the peculiarities of functioning of the models of such a market in the selected countries of Eastern Europe. To do this, we will analyse the current situation relating to financial intermediaries in those countries.

Figure 1 provides information on the development of the banking service market in the countries of Eastern Europe.

Figure 1 shows that there is a small number of banks in Eastern European countries. The only exception is the Russian Federation. However, the number of citizens in this country is larger than in other states. In this regard, structural subdivisions of banks and branches of foreign banking institutions operating within individual countries were not considered. It should be noted that the largest number of banks, after the Russian Federation (499 units), is registered in Ukraine (82 units).

We'd like to note that for Eastern European countries, the existence of a small number of classical banking institutions within national economies is inherent. It is advisable to note that in Figure 1, the number of cooperative financial institutions, savings banks is not reflected. The number of such institutions several times exceeds the number of banks, yet it should be considered that their activities are local.

Figure 2 reflects data on the development of the insurance market and the functioning of non-state pension funds (NSPFs) in the mentioned countries. It should be noted that they develop insurance markets, in which a small number of companies operates. The only exceptions are Russia, Slovakia and Ukraine, in which the number of insurers is abnormally high.

The NSPF service market is more homogeneous in the countries, if we analyse the number of relating institutions only. In Ukraine, there were 64 NSPFs at the end of 2017, which corresponds to the average number of such intermediaries in the Eastern European countries. For example, in Poland, where the population is close to the population of Ukraine, the number of NSPFs is 74 units.

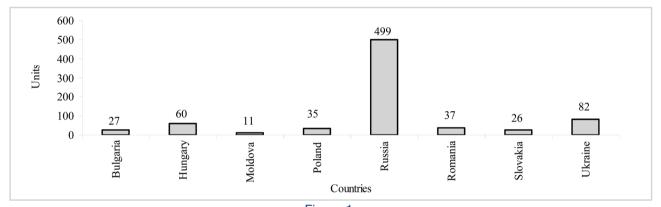


Figure 1: number of banking institutions in the countries

The number of banking institutions in the countries of Eastern Europe at the end of 2017 (excluding structural subdivisions and foreign affiliates)

Source: Made by the authors based on data by The Bank of Russia (2018), The European Banking Federation (2018), The National Bank of Ukraine (2018)

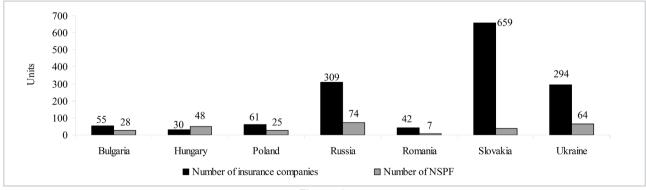


Figure 2:

Number of insurance companies and non-state pension funds in the countries of Eastern Europe at the end of 2017

Source: Made by the authors based on data by European Central Bank (2018), The Organisation for Economic Co-operation and Development (2018), The National Commission which Carries Out State Regulation in the Field of Financial Services Markets of Ukraine (2018), The Bank of Russia (2018) Figure 3 provides information on the activities of investment funds operating in the countries of Eastern Europe. At the end of 2017, the largest number of the relevant institutions was established in Russia (1497 units), Poland (887 units) and Ukraine (1660 units). However, information about the assets formed by these institutions shows a different trend. If in Bulgaria, there were 119 investment companies and they formed EUR 6.9454 billion assets, in Slovakia, 87 investment funds formed EUR 10.58 billion. A similar situation is observed in Romania: the number of funds is only 96, but their aggregate assets amount to EUR 9.45 billion. The situation is also logical for Poland and Russia, where a significant number of such institutions causes large volumes of assets created by them. The most obvious situation is in Ukraine, where the number of investment funds does not correlate with the volumes of their assets.

Having analysed the statistical data on the number of financial institutions in Eastern Europe, we can determine the role of their separate types in the forming of financial assets in the national economies. It is possible to determine the compositional model of the development of their financial service markets. We propose to do this by using the following equation:

$$Com_{FSM}^{State} = \gamma_A^{bank} * A_{bank} + \gamma_A^{ic} * A_{ic} + \gamma_A^{nspf} * A_{nspf} + \gamma_A^{if} * A_{if},$$

$$\tag{1}$$

where:

 $Com_{FSM}^{State}$  - the compositional model of the functioning of the financial service market in a particular state;

 $\gamma_A^{bank}$  - the share of assets of banking institutions in the total volume of assets formed by financial institutions;

 $A_{bank}$  - the volume of assets of banking institutions;

 $\gamma_A^{\overline{k}}$  - the share of assets of insurance companies in the total volume of assets formed by financial institutions;

 $A_{ic}$  - the volume of assets of insurance companies;

 $\gamma_A^{nspf}$  - the share of assets of non-state pension funds in the total volume of assets formed by financial institutions;

 $A_{\it nspf}$  - the volume of assets of non-state pension funds;

 $\gamma_A^{ij}$  the share of assets of investment funds in the total volume of assets formed by financial institutions:

 $A_{ii}$ - the volume of assets of investment funds.

Thus, in order to determine the compositional model of the functioning of the financial service market, we will use indicators of the formed assets of each type of financial institution operating in such a market. Using Table 1, we obtain the following types of the indicated model (Figure 4).

The information in Table 1 gives grounds for determining the peculiarities of functioning of the financial service markets in the selected Eastern European countries, indicating the leading role of banking institutions in the functioning of the national economies. The conclusions are as follows:

1. The smallest share of banking institutions is in Slovakia (72.71%), and the largest share is in Russia - 87.93%).

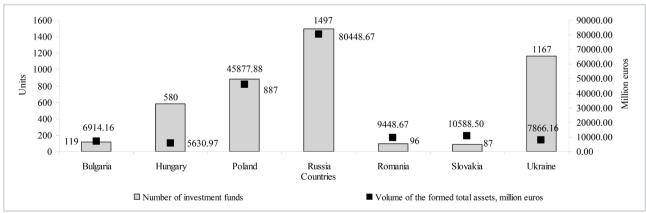


Figure 3:

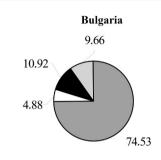
# Information on the operation of investment funds in Eastern Europe

Source: Made by the authors based on data by The Bank of Russia (2018), The National Bank of the Republic of Belarus (2018), European Central Bank (2018), The Ukrainian Association of Investment Business (2018)

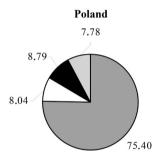
Table 1: Composition of the model of the financial service markets of the Eastern European countries by size of assets formed by various financial institutions

Indicators of assets	Bulgaria	Hungary	Poland	Russia	Romania	Slovakia	Ukraine
Assets of banks, %	74.53	85.28	75.40	87.93	79.46	72.71	85.30
Assets of insurance companies,%	4.88	6.29	8.04	2.47	3.61	6.17	2.61
Assets of NSPFs, %	10.92	4.47	8.79	3.88	8.98	11.20	0.11
Assets of investment funds, %	9.66	3.96	7.78	5.72	7.95	9.91	11.98
IN TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00

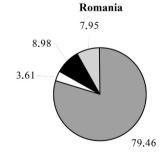
Source: Compiled by the authors



$$Com_{FSM}^{Bu \log aria} = 74.53 * A_{bank} + 4.88 * A_{ic} + 10.92 * A_{nspf} + 9.66 * A_{if}$$

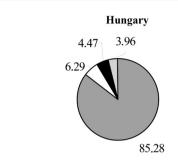


$$Com_{FSM}^{Poland} = 75.4 * A_{bank} + 8.04 * A_{ic} + 8.79 * A_{nspf} + 7.78 * A_{if}$$

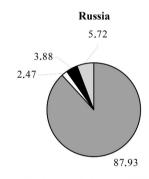


$$Com_{FSM}^{Romania} = 79.46 * A_{bank} + 3.61 * A_{ic} + 8.98 * A_{nspf} + 7.95 * A_{if}$$

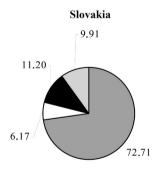
- – the share of assets of banking institutions in the total volume of assets formed by financial institutions
- $\hfill \Box$  the share of assets of insurance companies in the total volume of assets formed by financial institution



$$Com_{FSM}^{Hungary} = 85.28*A_{bank} + 6.29*A_{ic} + 4.47*A_{nspf} + 3.96*A_{if}$$



$$Com_{FSM}^{Russia} = 87.93 * A_{bank} + 2.47 * A_{ic} + 3.88 * A_{nspf} + 5.72 * A_{if}$$



$$Com_{FSM}^{Slovakia} = 72.71 * A_{bank} + 6.17 * A_{ic} + 11.2 * A_{nspf} + 9.91 * A_{if}$$

- – the share of NSPF assets in the total volume of assets formed by financial institutions
- – the share of assets of investment funds in the total volume of assets formed by financial institutions

Figure 4:

Compositional models of the financial services market of the countries of Eastern Europe
Source: Authors' own calculations

- 2. After the banking sector, the insurance service market is one of the most developed in most of the countries, since it plays a prominent role in terms of economic development. The largest share of assets by insurers has been formed in Poland (8.04%) and Hungary (6.29%).
- 3. In the selected countries of Eastern Europe, non-state pension funds play a prominent role in the development of the financial service markets. In many countries, the assets of such institutions prevail in the size of the assets of insurance companies (Bulgaria, Russia, Romania, Poland and Slovakia). Such institutions are most developed in Slovakia, with their share in total assets amounting to 11.2%).
- 4. The activity of investment funds in most countries of Eastern Europe is low and these institutions do not play an important role in the development of financial service markets. The only exception is Ukraine, where the share of their assets is over 11.98% of their total volume in the country. If compared with data from other countries, the given indicator looks abnormal.

The conducted study makes it possible to determine the basic trends in the functioning of the financial services market in the countries of Eastern Europe and predict future transformations of such a market in Ukraine.

Let us consider the peculiarities of functioning of the Ukrainian financial services market in more detail.

For Ukraine, as well as for most other Eastern European countries, a model of bank-oriented economic development, in which banking institutions play a major role in building a national economy, is inherent. However, in addition to joint investment institutions, the importance of which in the economic system of the country is significantly overestimated, other segments of the financial service market develop very poorly. Also, the banking system periodically undergoes unpredictable complex transformational processes. In 2015, there were 164 banking institutions. However, the financial stability and the capacity of such banks were low. Consequently, in 2015-2017, Ukraine introduced a policy to increase the stability of the banking system, which led to the elimination of a significant number of banks. Being conducted by the National Bank of Ukraine such a policy became a shock to the entire national economy, and the devaluation of the national currency led to destructive consequences. After the reform in the banking sector, the number of banking institutions has gradually begun to approach the average indicator, which is typical for the countries of Eastern Europe.

The markets of insurance services and services of NSPF in Ukraine are poorly developed, despite a significant number of major providers of such services. Unlike most Eastern European countries, insurance companies and NSPFs have not become institutional investors in the financial service market and have no significant impact on its functioning. In particular, at the end of 2017, the assets of all state-owned insurance companies amounted to EUR 1.7 billion, while the NSPF totalled EUR 69.91 million. For a country with a population of 42.0 million, such indicators are too low and do not correspond to the general indicators of development of such markets in all states of the specified region.

It should be borne in mind that these data are the result of the gradual clearing of the activities of these institutions from unscrupulous and ineffective organizations. At the end of 2013 (the pre-crisis period), 488 insurance companies and 81 NSPFs were registered in Ukraine. That is, the disproportion in development was even greater. In 2010, there were 538 insurance companies and 101 NSPFs. It can be stated that nowadays we observe a process of gradual consolidation of insurance companies, with an increase in their capitalisation level and reduction in the number of fictitious institutions.

According to statistical data, in Ukraine, the most rapidly developing institutions after banks are investment funds. In the financial service market, the number of such institutions today is the largest among all the investigated financial intermediaries (1167 units in 2017). However, their number has been reduced in the last six years: 1222 units in 2012; 1250 units in 2013; 1188 units in 2014; 1147 units in 2015; 1131 units in 2016. At the same time, according to statistical data from <a href="http://www.uaib.com.ua/analituaib.html">http://www.uaib.com.ua/analituaib.html</a>, the volume of assets of such institutions was increasing over the years: EUR 4.18 billion in 2011, and EUR 7.8 billion in 2017. However, in comparison with similar indicators of the rest of Eastern Europe, it can be noted that the market of joint investment in Ukraine remains undeveloped.

Figure 5 shows, a compositional model of the financial service markets of Eastern European countries. The existing model of such a market in Ukraine is also presented.

A fragmentary analysis of the current state of the financial services market in Ukraine makes it possible to highlight the following features of its development: rapid decline in the number of banking institutions and raising their financial sustainability, reduction of the volumes of granting loans to economic entities by banking institutions, weak development of the insurance service market

and the NSPF service market, a significant decline in the volume of assets of insurance companies, a decrease in the number of investment funds and an increase in their assets.

The chaotic development of the financial service market, which is currently observed in Ukraine, has the following consequences: banking institutions remain most resilient, while other institutions do not play an important role. The question arises as to what should be the composition of the model of the financial service market so that it becomes more stable in comparison with the relevant markets of Eastern European countries.

The financial service market of Ukraine, as well as the sector of services, requires measures to change the conditions of activities of financial institutions to improve the efficiency of its work. All Eastern European countries have gone through this path when reforming their own financial service markets to create conditions for their stable development. The relevant processes in Ukraine have always been chaotic and inconsistent. Accordingly, the Ukrainian financial services market has become very volatile and vulnerable to emerging crises. This negatively affects both the entire sphere of financial services and the attitude of clients of financial institutions to corresponding activities. This determines the need to find directions for further reforming of this market, taking into consideration the experience of Eastern European countries.

We will conduct a deeper analysis of the functioning of the financial service markets of Eastern European countries. To do this, we will define and analyse the relative performance indicators of financial intermediaries. In addition, we will calculate the number of people in Eastern Europe per one bank institution at the end of 2017, which will allow us to estimate the density of banking institutions.

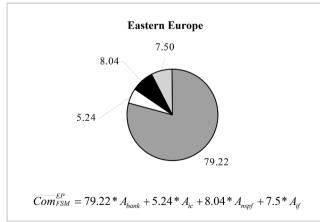
At the end of 2017, the relevant figure in Ukraine amounted to 519.21 thousand people. The average number of people for all countries of Eastern Europe was 422.3 thousand people. Thus, according to this value, the banking service market in Ukraine is showing a pan-European trend. Consequently, the number of banking institutions in Ukraine is sufficient and does not need to be increased.

The decrease in the number of banks in Ukraine to the mean value which is inherent in the Eastern European countries during 2014-2017 only confirms the hypothesis that there is an objective need to reform other segments of the market in accordance with the main trends of their functioning in other countries.

However, normalisation of the number of banking institutions does not always prove the existence of an efficient banking system. Figure 6 gives information on the assets of banks per capita in different countries is provided. These data show that, despite a significant number of banking institutions, the real functioning of banks in Ukraine is worse in comparison with other countries of Eastern Europe.

As of the end of 2017, one Ukrainian had EUR 1,314.97 of bank assets. This is the worst indicator among all the countries. In other countries banks are developing more dynamically; they are more financially sustainable and able to form assets, i.e. loans and investments. The gap between these indicators in Ukraine and other Eastern European countries is significant.

Figure 7 provides information on individual indicators of the development of the banking systems in the Eastern European countries.



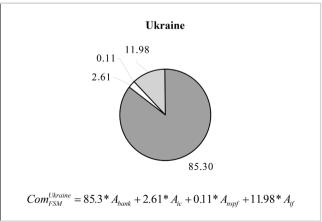


Figure 5:

Compositional averaged model of the financial services market in Eastern Europe and the model of the Ukrainian financial services market

Source: Authors' own calculations

Consequently, the information presented in Figure 7 gives grounds to state that despite the large number of banks in the financial service market of Ukraine, their quantified indicators lag far behind the functioning of similar institutions in other countries. Indicative data is on the volume of loans and deposits per person. At the end of 2017, these indicators in Ukraine amounted to EUR 393.39 and 618.46 which is one of the lowest rates among the Eastern European countries. The average for these states is EUR 5.86 thousand for loans per person, and EUR 5.98 thousand for deposits. Ukraine lags behind by almost ten times by the volume of the issued loans and almost six times by the volume of the attracted resources.

The volume of aggregate assets of insurance companies in Ukraine in comparison with the similar indicator in other Eastern European countries is too insignificant. However, the existence of a large number of insurers leads to the fact that an average of one insurance company accounted for EUR 5.83 million of assets, which is a very low indicator if compared with the other countries of the region:

- Bulgaria EUR 63.46 million,
- Hungary EUR 298.03 million,
- Poland EUR 777 million,
- Russia EUR 112.44 million,
- Romania EUR 102.32 million.
- Slovakia EUR 10 million.

Given the abnormal number of insurance companies in Ukraine with low capitalisation of the insurance market, we can assume that in the future the insurance market will face the process of cleaning from unstable, inactive insurers and, as a result, there will remain a group of the most effective insurance companies. In other words, the number of these institutions in Ukraine should be reduced. As the experience of Eastern European countries shows, a small number of powerful insurance companies is enough. For example, in Poland, there are 61 insurers (including life-companies and non-life companies). Such institutions accumulated at EUR 47.44 billion of insurance premiums at the end of 2017.

A forecast of the number of insurers required by Ukraine to reach the average number of people per one listed institution shows that 130 insurance companies will be enough (there were 294 units

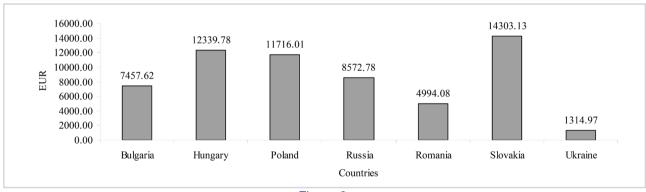
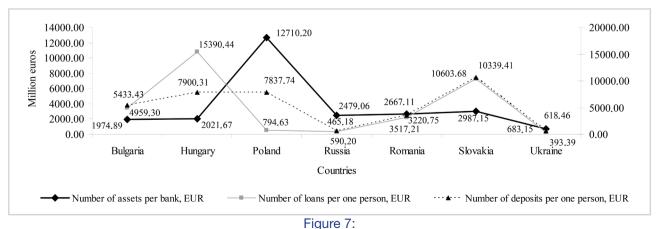


Figure 6:

Volume of bank assets in Eastern Europe per capita at the end of 2017, EUR

Source: Compiled by the authors



Individual indicators of the development of bank systems in the related Eastern European countries

Source: Compiled by the authors

at the end of 2017). The above data only confirms the thesis that it is necessary to rid from unstable and formally existing participants in the insurance service market and to increase requirements for their financial sustainability.

The NSPFs in Ukraine are also in a difficult situation. At the end of 2017, their number was 64 units. However, the volume of assets accumulated by these institutions amounted to EUR 73.61 million, which means that one institution accumulated EUR 1.73 million, which is the lowest index among all the Eastern European countries. It should be noted the system of non-state pension funds that in Ukraine develops very slowly. Accordingly, the impact that such institutional investors have on the development of the country's economy is virtually imperceptible.

At the same time, a significant number of NSPFs leads to a high number of individuals per capita. Their number was 665.63 thousand people at the end of 2017. At the same time, the situation in other Eastern European countries is quite different:

- Poland 1518.8 thousand people;
- Russia 1950 thousand people;
- Romania 2822.86 thousand people.

It is noteworthy that in Russia, where live more than 144 million people, there are only 74 NSPFs with EUR 54.53 billion. Whereas, there are 64 NSPF in Ukraine with the total value of UAH 73.61 million (1 EUR = 29 UAH).

Using the results of the conducted research and taking into consideration the peculiarities of the functioning of financial service markets in the countries of Eastern Europe, it is possible to identify future transformations of the outlined Ukrainian market that need to be conducted to maintain its successful development.

- 1. Further increase in the financial stability of banking institutions by boosting the requirements for their capital will reduce the total number of banks in the country, with the most stable financial institutions remaining in the market. This will not affect any service, as large system banks already have a large-scale system of structural units and are able to fully satisfy customers' demand.
- 2. Activate the development of the credit service market will facilitate lowering of credit rates, which will allow balancing the volumes of deposits attracted by banks and their issued loans.
- 3. Complete re-loading of the insurance market with increased requirements for insurers and a gradual decrease in their number will allow the creation of a system of financially sustainable universal insurance companies.
- 4. Reforming of the system of non-state pension funds, including the reduction of their number by increasing the requirements to the level of their capitalisation is viewed to be an effective way to increase the pace of development of this market is to establish a system for guaranteeing payments under non-state pension insurance contracts.
- 5. Updated information on the functioning of investment funds in the country will help to analyse their activities and to create up-to-date real statistics on the work of such institutions. This can be achieved by introducing new legislation on the disclosure of information by such institutions in the current legislation.

## 6. Conclusions

Today in Ukraine the issues of reforming the financial service market to improve its functioning and increase its positive impact on the development of the national economy remain open. Transformation of such a market should be implemented by taking into account similar process taking place in other countries. In our opinion, the selected countries of Eastern Europe are a clear example for determining the priorities of improving the work of financial institutions in Ukraine.

The conducted research of the current trends of the functioning of financial service markets in the countries of Eastern Europe gives a clear idea about the construction of the future model of such a market in Ukraine. Predominantly, it concerns the creation of conditions to improve the quality of institutional investors (banks, insurance companies, NSPFs and investment funds) to increase the volume of credit and investment resources for the development of the real sector of the Ukrainian economy.

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