

BANKING ACTIVITIES ASSESSMENT BASED ON BUSINESS MODELS

Iryna Khymych¹, Nataliia Tymoshyk², Tetiana Podvirna³

¹ Ternopil Ivan Puluj National Technical University, Ternopil, Ukraine, e-mail: khymych31@gmail.com

² Ternopil Ivan Puluj National Technical University, Ternopil, Ukraine, e-mail: nata_like@ukr.net

³ Ternopil Ivan Puluj National Technical University, Ternopil, Ukraine, e-mail: tanyatab@i.ua

Abstract

Banks performance based on their business models is assessed. Under current conditions it is urgent for banks to identify resources it receives profits from and which ones require to be paid for. This model is called the generalized financial model of banking institution activity. Features of the banks' activity business models during 2018 are researched, using PryvatBank, Raiffeisen Bank Aval, Oschadbank as case studies. Results of the risk level in the financial sector are analyzed based on the impact of certain determinants in Ukraine during the May of 2019. It is found that one of the most significant negative impacts on the country's overall performance and performance of its financial sector is attributed to the risk of corruption and law enforcement and judicial activity which accounts for 57%. The general estimation of Ukraine's banking sphere functioning and rating of banks' viability in Ukraine for 2018 are presented. Leader among the presented list of banks under study, is Raiffeisen Bank Aval with a rating of 4.5 points and an instant liquidity score of 19.7%. Conditions and possibilities for holding their financial positions by the banks of the country are determined. Ways of improving the banking activities functioning for both individuals and legal entities are identified. A constant monitoring of the customers' "products" necessary to have is to be carried out for adaptation to changing environment to be successful.

Keywords: banking, lending, attracted financial resources, inflation, business model.

INTRODUCTION

Monetary and credit resources are of great importance for the development and implementation of adaptation opportunities not only for the production and economic activity of the enterprises, but also for the economy of the country as a whole. Attracting investments and other necessary financial resources to support and ensure normal and efficient functioning of enterprises both in production and service sectors is quite normal and "natural" phenomenon in the current conditions of activity and transformation of financial and economic processes both at the international and national levels.

However, one should remember that the funds involved have several important features, both for businesses and economy in general. Among them there are recurrence and promptness. Therefore, before attracting investment and other financial and credit resources, it is necessary to plan the possibilities of their return clearly.

Banks are one of the main objects of the sources crediting. However, there are some important points here. After all, in order to pay off the loan, one need to know the "rules" and conditions of its return rather well.

It is known that the credit activities of banks are significantly influenced by the risks. Among them there are the following: inflation processes in the country; changes in interest rates; changes in monetary policy; changes in credit policy; changes in currency policy; credit user's insolvency; credit user's unprofitability, etc. In addition, one should not forget about the existence of unpredictable risks (in

particular, political and legal, military and political, social and legal). These and many other risks have a great impact on the conditions of both crediting and financial resources.

RELATED RESEARCH ANALYSIS

Studies in the field of financial and credit relations, monetary policy, functioning of the banking system, monetary and currency activity, overcoming financial and economic crises, etc. were carried out by such scientists as: Vladymyr O.M. [1], Dzyublyuk O.V. [1], Drobyazko A. [2], Karpova K.V. [4], Kiryeyeva K.O. [3], Koval Ya.S. [4], Migus I.P. [4] and many others.

It is known that banking activities are focused mainly on the financial and credit aspect of the activity. After all, this is one of the main sources of formation of its profitability.

However, there is another side to this activity. If the credit sector becomes «burdensome» for entrepreneurs and it may adversely affect its functioning and also its overall financial condition.

Therefore, choosing the «right» conditions for attracting financial resources to entrepreneurs one need to analyze the activities of the selected bank on the basis of its business model functioning.

This article presents an assessment of banks' activity based on the functioning of their business models, which include the following elements of study:

- an overall assessment of the banking sector, functioning in Ukraine;
- analysis of conditions and possibilities to maintain own financial positions by the country's banks;
- study of business models of banking institutions during 2018, on the example of such banks as: PrivatBank, Raiffeisen Bank Aval, Oschadbank;
- presentation, on the basis of the statistical materials examined, of the banks' viability rating during 2018;
- possible ways of improving functioning of banking activities for both individuals and legal entities.

RESEARCH RESULTS AND DISCUSSION

Over the past few years banking sector in Ukraine, as well as other structural elements of the country's economy, has experienced significant upheavals. However, it still finds and uses opportunities for adaptations and exits from crises.

The author Drobyazko A. [2] outlined a number of topical aspects that most specifically reflect last year's state of affairs in the banking sector of Ukraine, in particular, such as:

1. Stabilization and stagnation processes occurred after significant political and economic changes during 2014-2015. So, we cannot certainly say that throughout 2018 the entire financial system became «ideal» and regained lost positions in terms of financial resources. However, there are several positive points that have occurred during 2018, namely: increase in the amount of short-term deposits amounted to 10.8 billion UAH; the amount of current accounts increased by 22.2 billion UAH; the

amount of current accounts in foreign currency increased by 260 million USD; the amount of term accounts reduced by 160 million USD.

In general, population of the country made savings in national currency during 2018 that is why the deposit portfolio of the banking institutions of the country, is mainly formed on this terms. Thus, during 2018, the deposit portfolio volume of the banks in the national currency increased by 10 %, that is, to 539.7 billion UAH. As for the amount of the national currency deposits of individuals placed in solvent banks, their volume in 2018 increased by 14.5 %, that is, up to 268.9 billion UAH, while a positive growth dynamics is also present in the foreign currency – an increase by 1.6 %, that is, up to 8.6 billion USD.

If to analyze the result of deposits from business during 2018, here is the following trend: the amount of deposits of business in national currency, which is placed in solvent banking institutions of the country increased by 5.9 %, that is, up to 270.1 billion UAH.

Limited ability of the banking system to perform normal and efficient crediting during 2019 due to lack of their own financial resources remains a negative factor.

2. Entrepreneurs and business entities do not consider it necessary to store their own funds in banking institutions. Then, as time and past experience show, banking institutions credibility is not too high or even sufficient. However, it should be noted that during 2018 the amount of funds in the bank current accounts tended to increase (increased by 14.5 billion UAH), the amount of funds in current accounts increased (by 0,9 billion UAH only) not significantly relatively to data of 2017. Decrease in the amount of foreign currency funds in comparison to the result of the previous period remains negative.

3. Crediting of individuals gains positive growth dynamics. Thus, during 2018, the result of crediting of individuals by banking institutions of the country increased by 25.7 billion UAH, in relation to the result of crediting during 2017. In turn, foreign currency crediting of individuals decreased by 430 million USD. It is worth mentioning that the provision of credits to individuals in foreign currency has been banned since 2009, however, this matter can be decided in the court.

4. Negative tendencies are seen in corporate loans. Due to the significant impact of past financial and economic crises and military-political conflict, as well as «inability» of many banking structures to adapt quickly to the constant negative factors in financial sphere of the country, banking system requires significant improvements in providing corporate loans.

At present, the credit portfolio of the banks in UAH does not show the necessary growth; in foreign currency – growth occurs mainly due to crediting of non-residents by the Ukrainian banking structures.

According to the National Bank of Ukraine, UAH crediting portfolio volume for the country's population in 2018 increased to 135.4 billion UAH or by 31.4 % compared to the 2017's result. This growth was driven by consumer crediting.

The total credit portfolio of the banking institutions in the national currency during 2018 increased to 616 billion UAH, that is, by 8.1 %, compared to 2017.

According to the head of the National Bank of Ukraine, Yakiv Smoliy, the main task for 2019 is to resume corporate loans. Efforts should be made to restore the banking system to normal conditions of cooperation with large corporate clients.

It is worth noting that the so-called credit register of the National Bank was created with more than eighty thousand creditors, including 53.2 thousand individuals and 27.2 thousand legal entities.

5. Failure of the Deposit Guarantee Fund to resolve independently the issue of assets received from the bank institutions recognized as bankrupt in the amount of half a trillion UAH.

6. Significant increase in the discount rate of the National Bank of Ukraine. In general, UAH rate increased during 2018 primarily due to the gradual increase of the discount rate of the National Bank of Ukraine since 2017. Having compared the data, it is determined that the result of the discount rate increased by 5.5 of gross national product to the current 18.0 % per annum.

Considering the increase in interest rates on UAH business deposits, during 2018 their result increased by 5.9 of gross national product, that is, up to 14.5 % per annum, partly due to the increased competition between banking institutions for retaining existing and attracting new corporate clients.

As for the profitableness of the population deposits, it makes 11.7 % per annum during 2018.

As of the end of 2018, foreign currency interest rates of population and businesses made 2.7 % per annum and 2.5 % per annum, respectively.

During 2018, there was a gradual increase in interest rates on UAH credits that can be explained by significant increase in demand on them both by enterprises and population. All this, in turn, led to increase in the total cost of business credits by 6.6 of gross national product, that is, up to 20.9 % per annum, instead, the value of credits for population increased by 3.9 % of gross national product, that is, up to 33.1 % per annum during 2018.

However, it should be noted that, according to the National Bank of Ukraine, in 2018 the volume of credit and deposit resources of population in the banking institutions of the country exceeded the pre-crisis level.

7. The existence of small banking structures remains in a much larger risk area. First of all due to the need to form its own authorized fund in the amount of 300 million UAH, and secondly, withdrawal from the banking sector in 2014-2015 of a significant proportion of banking institutions with national capital.

All of the above described trends in functioning of the banking sector of the country still contribute to further development of the banking system, however, as noted in the studied sources – in case of «black swans» absence.

In addition, concerning an improvement of the mechanism of bank insolvency, on March 25, 2019, the National Bank and the Deposit Guarantee Fund with the World Bank together agreed on Directive 2014/59/EC on Bank Recovery and Resolution (BRRD) which is Ukraine's obligation to the Association Agreement with the EU.

As mentioned above, the banking sector activity is significantly influenced by a large number of various factors. Therefore, according to the National Bank of

Ukraine «Financial Sector System Risk Survey» (May, 2019), the following information is presented by financial institutions (Figure 1), which reflects the results of risk level in the financial sector based on the impact of a specific set of factors.

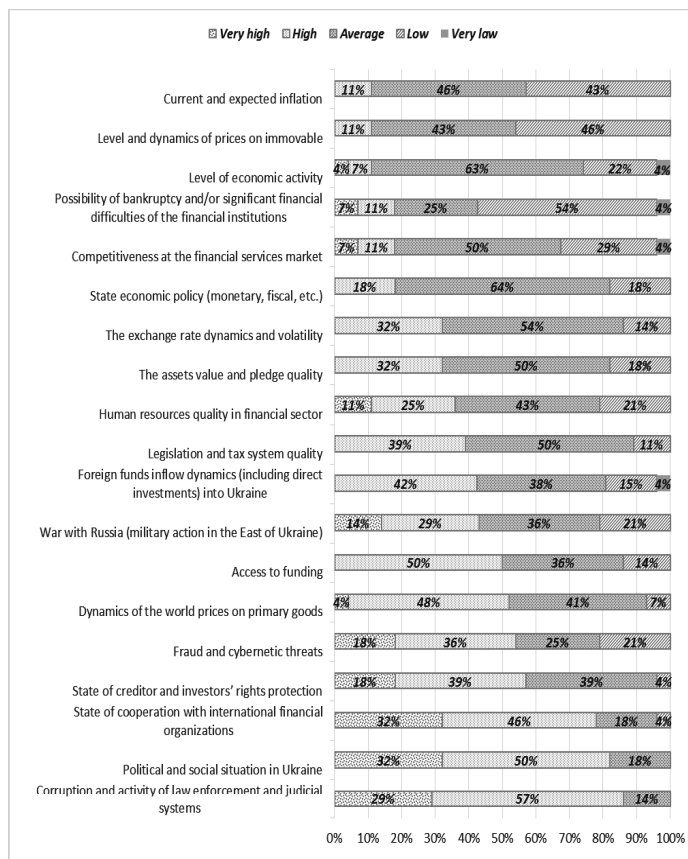


Figure 1. Results of the risk level in the financial sector, based on the impact of certain identified factors in Ukraine during May 2019, %

Source: [5]

Having examined the data presented in the figure, it was revealed that high, and therefore one of the most significant negative impacts on the overall activity and efficiency of the financial sector of the country as a whole have the following risks: factor of corruption and activity of law enforcement and judicial systems, the result of which is equal to 57 %; factor of political and social situation in Ukraine with the result at the level of 50 %; access to funding factor with the result at the level of 50 %; factor of dynamics of the world prices on primary goods, the result of which is equal to 48 %; factor of the state of cooperation with international financial organizations with the result of 46 %; factor of foreign funds inflow dynamics (including direct investments) into Ukraine, the result of which is equal to 42 %; factor of the state of creditor and investors' rights protection with a value of 39 %;

factor of legislation and tax system quality with the value of 39 %; factor of fraud and cybernetic threats with the result of 36 %; factor of the exchange rate dynamics and volatility with the value of 32 %; factor of the assets value and pledge quality of 32 %; factor of military action in the East of Ukraine with the result of 29 %.

In addition, it should be noted that there is reduction in the high level of the following risks impact on the financial sector of the country: factor of competitiveness at the financial services market and factor of current and expected inflation, which amounted to 11 %, respectively.

In order to be able to choose the best bank for the entrepreneur and not to make any mistake, it is necessary to carry out clear monitoring, which, unfortunately, sometimes also does not make any positive results. However, there is always a way out.

Thus, on the basis of the researched materials of the source [2], it was found that the best model for evaluating the activity of banking institution is a business model that reflects two main indicators of the bank’s activity – what exactly it invests in and what exactly determines its basic earnings.

After all, at present, the assessment of financial model of the bank itself, that is the analysis of where it receives financial resources and where it invests, is irrelevant because it does not reflect the “complete picture” of its activity.

Under these circumstances, one need to focus on what kind of financial resources he/she earns, and for which one have to pay. This model is already more evident and stands for the so-called business model, or it is also called the generalized financial model of the banking institution.

To make a clear assessment of a bank’s activity based on its business model, its cash flows are considered and on the results the balance there are determined: market of the legal entities; market of individuals; the MDB and IFI markets; the NBU market; the budget market; net commission income; result from trading operations; keeping the bank; operating profit.

The general view of the banks’ activity business model in the competitive environment is shown in Figure 2.

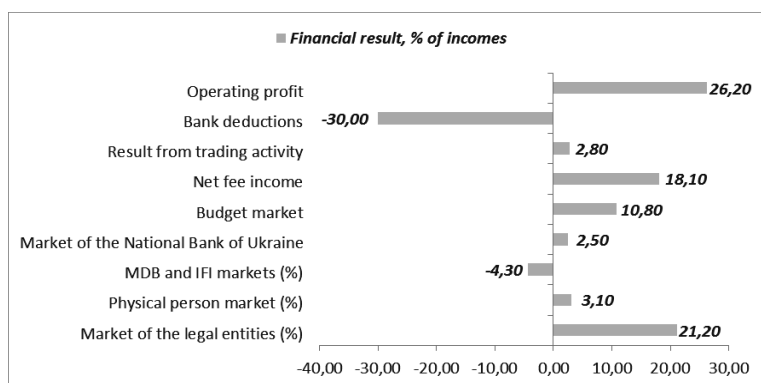


Figure 2. General view of the banks’ business model for 2018

Source: [2]

As an example of the activity of individual banking institutions, this business model will look somehow different.

Thus, in the activity of PrivatBank (Figure 3) the generalized financial model looks as follows:

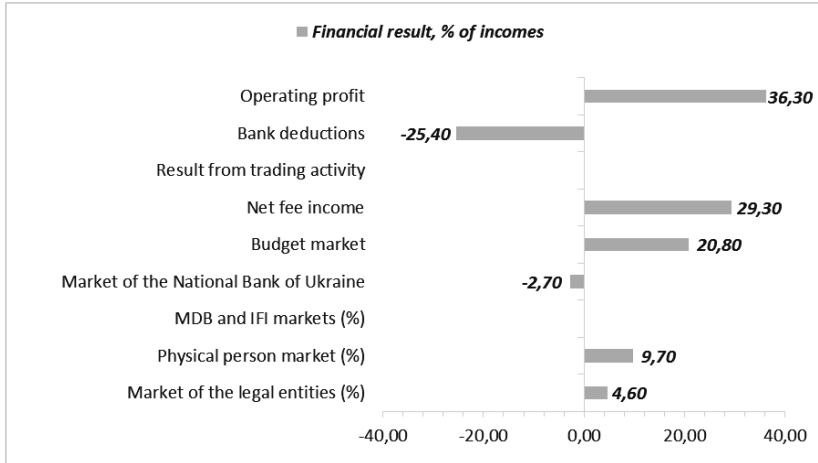


Figure 3. Business model of PrivatBank activity for 2018

Source: [2]

Business model of PrivatBank activity presented, taking into account the results of the data, indicates its positive results during 2018. This bank reflects the true latest innovative policy of its own activity, which primarily concerns the functioning of the corporate loans portfolio.

The following business model reflects the activities of Raiffeisen Bank Aval (Figure 4):

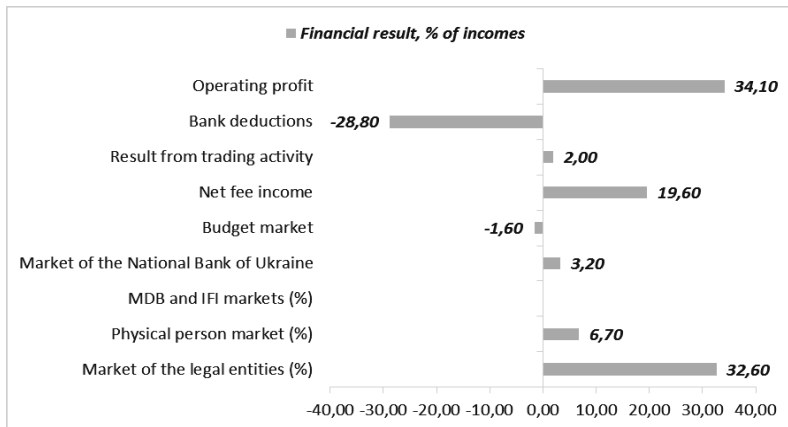


Figure 4. Business model of Raiffeisen Bank Aval activity for 2018

Source: [2]

In general, this bank is a leader among other banking institutions during 2018. After all, it has the best positions in terms of both of credit activity and possibilities of bank deductions at the expense of its own assets from trading operations.

Figure 5 shows the features of a business model that reflects the activities of the State Savings Bank (Oshchadbank):

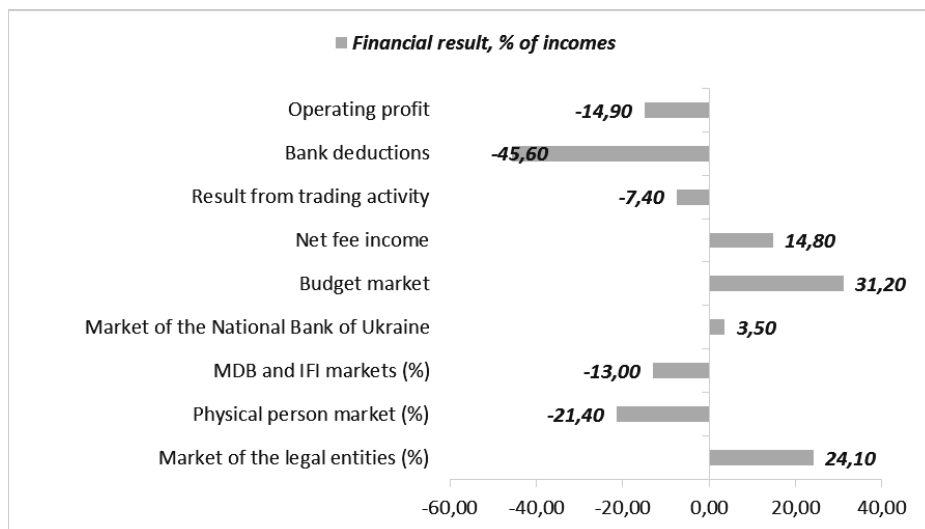


Figure 5. Business model of the State Savings Bank (Oshchadbank) activity for 2018

Source: [2]

From the presented data it is clear that the State Savings Bank (Oshchadbank) should «adjust» its credit portfolio, which is significantly overburdened by so-called default credit users as soon as possible. This issue is the most profound one for resolving and implementing an effective future policy for this bank. After all, this financial institution generates its profits on the basis of corporate loans.

Therefore, evaluating the business models of banking institutions, one can not only determine how one bank differs from another, but also choose the best for oneself.

An equally important stage of study is the viability rating of the banks in Ukraine during 2018, which is presented in Table 1 [2].

Raiffeisen Bank Aval was ranked the leader in 2018 among the banks surveyed, with a rating of 4.5 points and an instant liquidity score of 19.7 %.

10 banks ranked second, with a rating of 4 points. Among them there were one state-owned bank (PrivatBank) and nine foreign banks (Credit Agricole Bank and UkrSibBank – French; ING Bank Ukraine – Dutch; Citibank – American; Kredobank and Idea Bank – Polish; ProCredit Bank – German; Pravax Bank – Italian; OTP Bank – Hungarian).

The third place with 3,5 points was divided among the following banks: A-Bank; PUMB and Ukrgasbank.

The lowest rating (2.0 points) was received by Ukrainian – Megabank and Bank Credit Dnipro, as well as Russian Prominvestbank.

Table 1. Banking sustainability rating in Ukraine during 2018

Bank	Rating	Net assets, mln. UAH	Instant liquidity, %	Problem loans, %
Raiffeisen Bank Aval	4.5	79147.5	19.7	9.7
Credit Agricole Bank	4.0	32790.3	12.9	9.8
UkrSibBank	4.0	52681.3	16.7	13.0
ING Bank Ukraine	4.0	10950.5	4.4	10.9
Citibank	4.0	24638.9	12.5	0.3
PrivatBank	4.0	282037.4	11.5	83.4
OTP Bank	4.0	32862.2	14.2	27.3
ProCredit Bank	4.0	20996.7	5.3	3.7
Kredobank	4.0	16793.0	9.6	9.9
Idea Bank	4.0	4204.7	7.3	28.4
Pravex Bank	4.0	4500.6	42.4	10.5
A-Bank	3.5	4988.0	8.1	21.7
PUMB	3.5	49917.2	7.9	28.7
Ukrgasbank	3.5	82363.8	7.3	17.0
State Savings Bank (Oshchadbank)	3.0	218248.6	7.8	67.3
Alpha Bank	3.0	60200.2	5.6	19.4
Ukrsotsbank	3.0	16105.0	12.3	90.0
UkrEximBank	3.0	161731.6	4.7	59.3
Sberbank	3.0	30614.6	9.8	80.3
Universal Bank	3.0	8379.5	8.0	37.3
TasComBank	3.0	17722.6	9.0	12.6
Industrialbank	3.0	5053.1	13.8	20.1
Bank East	3.0	9398.1	17.5	3.8
International Investment Bank (IIB)	3.0	9360.8	4.8	37.8
MTB Bank	2.5	5000.2	11.6	15.0
Bank Pivdenny	2.5	24937.8	10.7	10.4
Bank of Investments and Savings	2.5	4205.4	10.2	26.1
Megabank	2.0	9860.3	10.6	15.3
Bank Credit Dnipro	2.0	10052.4	3.3	66.5
Prominvestbank	2.0	13807.8	8.4	85.1

The presented rating shows the ability of banks to survive and the ability to adapt to changing financial and economic conditions.

The banking system, like any other financial and economic system, needs constant updating. In today's world, the smartest survive, and banks are therefore of no exception. For the best adaptation, one needs to monitor necessary "products" for customers and be able to implement them constantly.

CONCLUSION

During the recent years, the banking system has experienced considerable shocks. This is precisely the situation that reflects the ways of adapting to new opportunities in the modern world of business.

In the process of evaluating the activity of the banking system of Ukraine, it was found that its activities are influenced by huge number of various factors. Sometimes this impact is not only negative but also unpredictable. In addition, since banks are directly linked to financial resources, this is a risk activity on itself.

The only and unquestionable rule for banking institutions to ensure the maintenance of their own positions in the business environment is the constant “updating” of their own activities under the current conditions of both entrepreneurial and other activities that depend on financial resources.

REFERENCE

1. Dzyublyuk O., and Vladymyr O. (2014). *Banks in foreign exchange organizing system context*. Ternopil: PLC “Terno-hraf” (in Ukrainian)
2. Drobyazko A. (2019). Ukrainian Banks 2019 Rate and participants financial models rating analysis of 2018 results [Online]. – Available at: <https://mind.ua/publications/20194442-rejting-ukrayinskih-bankiv-2019> (in Ukrainian)
3. Kiryeyeva K. (2018). Banking regulation improvmnt. Kyiv: Kyiv. nats. torh.-ekon. un-t, 18-19 [Online]. – Available at: <https://knute.edu.ua/file/ODc0Mw==/7e941b305d933b75edb6e9010a7a8bee.pdf> (in Ukrainian)
4. Migus I., Karpova K., and Koval, Ya. (2017). Pry of Banking anti-crisis governmental regulation in terms of crisis issue appearing [Online]. – Available at: <http://www.dy.nayka.com.ua/?op=1&z=1108> (in Ukrainian)
5. Systemic systemic risks Survey (2019) [Online]. – Available at: <https://bank.gov.ua/doccatalog/document?id=95852313> (in Ukrainian)