“Accounting of non-performing long-term bank loans in Ukraine”

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ACCOUNTING OF NON-PERFORMING LONG-TERM BANK LOANS IN UKRAINE

Abstract

The research paper outlines general problems of ensuring the continuity of the reproductive process in the Ukrainian economy with the help of long-term bank lending, and the problem of improving the accounting of non-performing long-term bank loans in the country was urged. The importance of solving this problem is conditioned by the significance of this group of loans in the loan portfolios of Ukrainian banks in terms of the current crisis economic situation in Ukraine. The objective of the research paper is to analyze the current state and trends in the methodology and practice of accounting of non-performing long-term bank loans in Ukraine, as well as formulate and substantiate directions for improving this methodology and practice. In the process of fulfilling the tasks of this reserch paper, the significance of the objective accounting of non-performing long-term loans of banks was substantiated; the status and changes in the accounting system of non-performing loans of Ukrainian banks were analyzed; the importance of European experience in this area was urged, which has being consistently adopted; and the scheme of allowing for changes in a share of non-performing bank loans when determining loan price was suggested. The ways to improve the accounting system of non-performing long-term loans in Ukrainian banks were suggested.

Keywords long-term bank loans, non-performing loans, loans, accounting, control, distressed loans, credit risk, Ukraine, the National Bank of Ukraine

JEL Classification D81, E42, G21, G24

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INTRODUCTION

Adequacy and timeliness of meeting the needs of economic agents in financing the operation and development of activities is an important function of the country's banking system. The success of this function implementation depends on solving the problems of accounting and control of bank loans, in particular – long-term loans, which, according to the world practice, include loans with over one year maturity.

This problem is especially urgent for countries that are currently experiencing significant economic difficulties in stimulating economic growth at the country level, when bank loans can become a priority source of stimulating economic development, which in turn creates the need for efficient organization of their accounting and control. Ukraine is one of the countries, for which long-term bank lending may become, along with foreign investment and the active state property privatization. The country has determined the direction for the development – the orientation towards European integration (as evidenced by Ukraine-European Union Association Agreement), which at the same time not only offers broad opportunities for the development but is also a significant challenge for the country's financial regulator (the National Bank of Ukraine), owners and man-

agers of banks as regards the efficiency of financial transactions, their regulation and accounting, which is an important factor of the effective providing long-term loan resources to the country's economic entities.

Accounting of non-performing long-term bank loans is one of the most pressing problems in the domestic banking practice. It is essential because the given group of loans is quite important especially in economies that are experiencing great difficulties, are at the crisis stage, but a significant proportion of these loans significantly negatively affects the level of lending rates (they are high due to the need to compensate for losses of banks for such loans), on the terms of issuing loans, criteria for assessing the borrower. This problem requires substantial and complex consideration from the point of view of management at the macro-, meso- and micro levels. At the same time, this research paper focuses on the accounting aspect of this problem, urging the need to develop and improve the system of accounting of non-performing long-term bank loans in Ukraine, taking into account progressive European experience (in the context of European integration processes), which will contribute to a more adequate and objective assessment of the loan repayment problem scale and the dynamics of changes in the system of long-term lending in the country.

1. LITERATURE REVIEW

Looking through the scientific literature, which covers the range of problems urged in this research paper, one should pay attention to the studies on ranking borrowers in credit ratings in the system of managing the lender-borrower relationship. Thus, in particular, the studies of the world-known scholars are well-known, the works by Saunders (2002), as well as Aiyar, Bergthaler, Garrido (2015) are worth noting. Among Aiyar, Bergthaler, Garrido (2015), is mostly focused on the range of problems of non-performing loans in the EU.

The work by Shulzhenko (2012) is worth noting among the studies of Ukrainian scholars, where the attention is focused on the range of problems of credit risks being important for this research paper. The studies of Jaremenko and Lysenko (2015) cover the problem dealt with in this research paper from the perspective of a wider range of problems of the regulatory influence when achieving the goals of stabilization and development of the country's loan market and the banking system.

Kalemli-Ozcan et al. (2015) discuss the issue of the formation and development of credit risk accounting systems in the activities of lending banks. The said problem in the context of finding ways of coming out of a banking recession using the example of Japan is considered by Nelson and Tanaka (2014); in a number of papers, principal significance from the point of view of the mechanism of mitigating these risks is attributed to accounting of non-performing (distressed, overdue) bank loans, including Aiyar et al. (2015), Belova (2012) and others.

Jaremenko and Lysenko (2015) consider the problems of ranking loans by the degree of their repayment (risk) potential. Festic, et al. (2011) analyze in their studies ranking of borrowers, as well as problems of the developing a methodology to estimate the magnitude and dynamics of non-performing bank loans on the basis of information available to the bank from borrowers and from other sources.

At the same time, a substantiation of the dependence between referring a loan to non-performing in terms of certain characteristics and the corresponding accounting of such a loan when shaping relations between banks and borrowers, as well as the formation of the size of rates on loans in bank lending require further scientific development. Thus, this range of problems has been already urged in "Resolving Non-Performing Loans in Europe" (2017), "Basel Committee on Banking Supervision" (2013) and requires futher elaboration.

In view of the considerable attention of specialists to the problems of managing lending activities of banks, identified, for example, in the

works by Haneef and Riaz (2012) and Saba et al. (2012), these issues are of particular urgency to Ukraine in today's conditions of deepening of integration processes characterized by the intensive competition, including in the markets of credit resources, capital, and investments (Klioba, 2009; Liubun, 2006; Sokolova et al. 2016). This requires looking for ways of improving the efficiency of banks' lending activities in transition economies such as Ukraine. The level of rates on loans, lending conditions, approaches to ranking of borrowers are at the core of the competitiveness of Ukrainian banks in this area, which is largely due to the objectivity and efficiency of accounting of non-performing loans of the bank, which determines the level of a particular bank advantages over competitors.

2. SETTING OBJECTIVES

The above circumstances caused the relevance of this article, which aims at analyzing the current state and trends in the methodology and practice of accounting of non-performing long-term bank loans in Ukraine, as well as formulating and substantiating ways to improve this methodology and practice.

To achieve this purpose it is necessary to:

- substantiate the significance of non-performing loans when forming the system of accounting of long-term bank loans based on retrospective data about the Ukrainian banks' activities;
- analyze the current state and changes in the accounting system of non-performing loans in Ukrainian banks;
- formulate and substantiate the ways of improving the methodology and practice of accounting of non-performing long-term bank loans in Ukraine.

The accounting system of non-performing long-term loans of Ukrainian banks is the subject of this research paper.

3. METHODOLOGY

In the course of the research, while solving the problems of formulating and substantiating ways of improving the methodology and practice of accounting of non-performing long-term bank loans in Ukraine, the selection method was used through the comparing the elements of the accounting system of non-performing loans from the existing groundwork of the theory and practice for improving the accounting systems of non-performing loans in Ukrainian banks.

Methodological approaches to identifying non-performing loans of the borrowing banks are based on the use of certain methods and mathematical models from a group of classification models (Lysenok, 2011; Karminsky et al. 2007; Saunders, 2002). According to these models, depending on the category of loans, which is established using a set of calculated indicators, their ability to be repaid and serviced is estimated. Further, loans are referred to non-performing and are considered allowing for the characteristics of the established credit rating in the process of determining the value of loans.

Regarding the coverage of the methodology for determining "distressed assets", there are three main approaches to categorizing distressed assets in the foreign scientific groundwork ("International Financial Reporting Standards"; "Regulation (EU) No 575/2013", 2013; "Guidance to Banks on Non-Performing Loans", 2017): accounting (impaired/non-impaired), according to which a long-term loan cannot be repaid in the event that there is objective evidence of a loss with the determination of the impairment of the loan, allowing for the existence of a collateral; prudential (defaulted asset/loan), according to which the debtor is recognized insolvent in the event of overdue payments on the loan for more than 90 days and/or the low likelihood of fulfilling the obligations in full without a security; statistical reporting, which determines the total amount of impaired debts overdue for more than 90 days and the signs of probability of defaulting without a security (regardless of the timing of being overdue) to be a non-performing loan.

The most comprehensive source of data on non-performing loans by countries is the Financial Stability Indicators of the IMF (FSI).

4. FINDINGS

The statistics indicate a more significant increase in the cost of banks (by 92.94%) compared to an increase in revenues (by 33.35%) for the period of 2009–2016. As a result, the total net loss of banks for the period under review increased from UAH 38 billion to UAH 159 billion (The National Bank of Ukraine – Web site (2017)).

Thus, the Ukrainian banking system, which should become a drive of economic development, is a source of replenishment of the resource base for economic growth, is unprofitable in general, and this situation tends to deteriorate. It was unfavorable already after the global economic crisis of 2008, which had a very negative effect on the country's banking system. Despite the relative recovery in 2012–2013, the situation has aggravated influenced by the economic crisis of 2014 due to the internal economic structural and objective external (Russian aggression in the East of the country and the annexation of the Crimea) factors. It is important in this sense to analyze the correlation in the dynamics of interest income and interest costs of banks (Figure 1), based on data (The National Bank of Ukraine – Web site, 2017).

It is obvious that there has been a reduction in the difference between the amount of interest income and interest costs of banks in recent years, which is a factor of negative impact on the profitability of banks and is due to the lending ineffectiveness. Under these conditions, the situation is formed in which the short-term lending is dominant and the share of medium- and especially long-term loans is very low. In Ukraine, for example, long-term loans are mostly used to cover working capital shortages, its influence on stimulating economic activity of economic entities and increasing their resource base is also very weak despite the fact that this should be its main function.

This situation is largely due to the high level of loan rates, which results in the fact that lending for companies (especially long-term one) is too expensive to be served, and therefore an unacceptable source of resources for the development. At the same time, as regards lending to companies (The National Bank of Ukraine – Web site, 2017), there has been a tendency for the loan rates to decline over the past three years, which is generally positive.

The current situation does not meet the needs of economic entities in the country and needs a system of measures to be developed that would provide incentives for long-term lending to fully provide the economic agents with debt capital. As a result, the main reasons for the low activity of Ukrainian banks in the market of long-term lending to economic entities of the country can be as follows (Figure 2). As can be seen from Figure 2, one of the basic problems of the development of

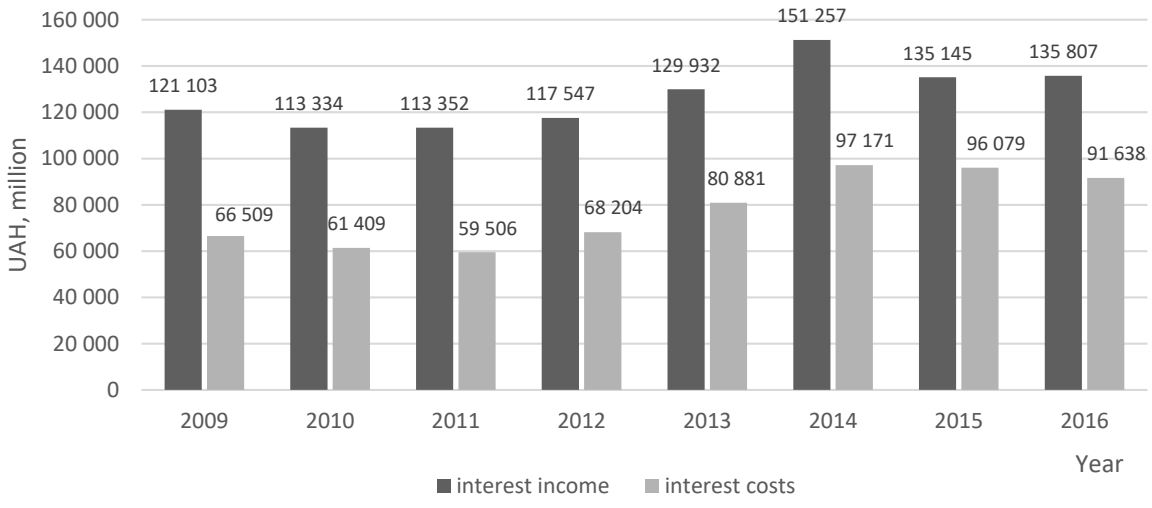

Figure 1. Analysis of the correlation of the value and dynamics of interest income and interest costs in Ukrainian banks in 2009–2016

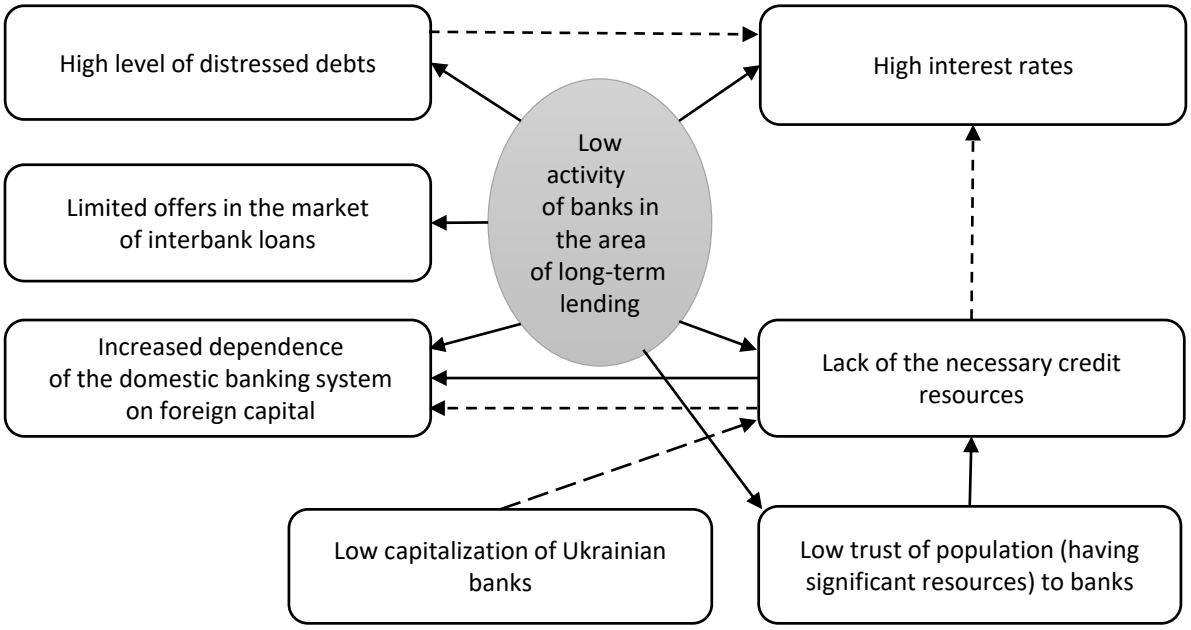

Figure 2. The main reasons for the low activity of Ukrainian banks in the market of long-term lending to economic entities of the country

long-term lending in the country is the high level of distressed debt, which, in turn, reflects on the level of rates on loans offered by Ukrainian banks.

Distressed debts include non-performing loans (NPL), which, according to the IMF definition (Financial Stability Indicators, 2007), are doubtful and uncollectible loans. In the European banking practice, the term "non-performing debts" is also used for regulatory reporting, asset diagnostics and stress testing, internal risk management and public reporting ("Regulation (EU) No 680/2014", 2014).

As of June 30, 2016, after the Regulation of the National Bank of Ukraine No. 351 ("Regulation of the NBU's Executive Body No. 351", 2016) came into effect, the changes in the categorization of bank assets were introduced. This Regulation defines unconditional signs of default (paragraph 165 of the Resolution). In this regard, referring the asset to the category of non-performing does not depend on the existence of a collateral. The existence of a collateral influences the size of the reserves (in accordance with the rules of the IFRS) and the credit risk, but is not taken into account for the purpose of categorizing the asset as performing or non-performing.

In the context of implementing the provisions of the NBU Regulation No. 351 and the implementing the international practice of recognizing non-performing loans, Ukraine has undergone significant changes in the last year and there are significant changes in the accounting system of distressed debts on bank loans. Thus, among the trends in the methodology and practice of determining and accounting of non-performing loans in Ukraine, the following shall be singled out:

- Introducing own concept of "non-performing assets/loans", which is as close as possible to the generally accepted concept of "non-performing exposures/loans" (NPE/NPL) in the world practice. Previously, from January 1, 2012 to January 1, 2017 the term "negatively classified assets/loans" was used in accordance with "Regulation of the NBU's Executive Body No. 346", 2012; and "Regulation of the NBU's Executive Body No. 23", 2012.

- Establishing clear criteria for recognizing loans as non-performing (in accordance with international practice), which include loans where the delay in debt repayment exceeds 90 days (30 days for debtor banks) or for which the counterparty is unable to enforce fulfilling obligations without collection of a collateral secu-

Table 1. Volumes of active transactions and share of non-performing assets

Source: summarized and processed form of statistic reporting No. 600 (to the NBU).
Non-performing assets are determined according to the regulations of the NBU's Regulation No. 351 of 30.06.2016.

Active transaction	Total							
	01.02.17	01.03.17	01.04.17	01.05.17	01.06.17	01.07.17	01.08.17	01.09.17
Credit transactions								
Loans to the corporate sector	657.098	860.991	853.817	827.008	843.311	843.164	842.102	843.124
• non-performing loans	345.661	477.180	469.524	471.346	477.589	492.972	497.996	490.752
• share of non-performing loans, %	52.60	55.42	54.99	56.99	56.63	58.47	59.14	58.21
Loans to individuals (including individual entrepreneurs)	156.514	162.352	161.879	160.520	159.816	160.093	160.489	161.991
• non-performing loans	98.538	100.206	97.442	95.770	94.148	92.766	91.884	90.090
• share of non-performing loans, %	62.96	61.72	60.19	59.66	58.91	57.95	57.25	55.61
Interbank loans, deposits	9.884	11.461	15.143	16.708	12.496	12.961	16.128	16.474
• non-performing loans	454	1.583	1.599	1.761	1.491	1.473	1.398	1.392
• share of non-performing loans, %	4.59	13.81	10.56	10.54	11.93	11.37	8.67	8.45
Loans to public authorities and self-governments	118	1.395	1.381	1.336	1.338	1.337	1.296	1.060
• non-performing loans	14	265	251	251	251	251	251	15
• share of non-performing loans, %	11.97	19.03	18.19	18.80	18.77	18.79	19.38	1.39
All loans	**823.614**	**1,036.198**	**1,032.221**	**1,005.573**	**1,016.962**	**1,017.555**	**1,020.015**	**1,022.649**
Non-performing loans	444.667	579.233	568.816	569.128	573.479	587.463	591.530	582.249
including banks:								
• with public share	198.019	338.613	338.763	345.637	346.513	359.760	359.780	357.811
• foreign banking groups	205.384	203.608	191.627	187.327	186.359	183.638	185.865	178.111
• with private equity	27.827	27.324	27.063	25.834	26.773	27.942	29.097	29.171
• insolvent	13.438	9.689	11.363	10.329	13.834	16.122	16.787	17.156
Share of non-performing loans, %	53.99	55.90	55.11	56.60	56.39	57.73	57.99	56.94
including banks:								
• with public share	77.23	70.24	69.96	71.43	71.75	73.10	72.67	71.55
• foreign banking groups	49.66	49.84	47.57	47.04	47.92	47.97	48.73	47.06
• with private equity	23.75	23.40	23.31	23.01	23.86	24.71	25.62	25.55
• insolvent	36.82	33.57	39.11	92.20	41.97	54.70	56.10	57.30
Total assets	1,279.764	1,766.990	1,783.765	1,753.545	1,768.314	1,762.586	1,785.880	1,767.335
• non-performing assets	456.202	601.906	593.590	593.388	597.963	612.289	617.057	607.675
• share of non-performing assets, %	35.65	34.06	33.28	33.84	33.82	34.74	34.55	34.38
Total assets and financial liabilities	1,460.234	1,979.557	2,115.275	2,087.665	2,110.518	2,105.097	2,127.047	2,111.929
• non-performing assets	461.918	608.651	602.411	601.635	606.374	620.185	624.905	618.007
• share of non-performing assets, %	31.63	30.75	28.48	28.82	28.73	29.46	29.38	29.26

rity ("Regulation of the NBU's Executive Body No. 351", 2016). Previously, all assets/loans overdue for over 90 days and individual assets/loans overdue for 30 days and a low counterparty financial class were referred to the negatively classified ones ("Regulation of the NBU's Executive Body No. 346", 2012; "Regulation of the NBU's Executive Body No. 23", 2012).

Thus, the system of accounting of non-performing loans in Ukrainian banks outlines and implements maximum harmonization with international standards (including the indicators of financial stability of the IMF) in contrast to the national classification of assets/loans of banks prevalent until 2017 that provided only partial, limited compatibility with international standards unacceptable for the operating conditions of Ukrainian economic entities and banks in the European integration area.

Speaking about the prospects, to further develop the accounting system of non-performing loans it should be noted that the harmonization of the domestic methodology for accounting of non-performing loans with the European Union standards should continue, and the key step in this context is the transition of domestic banks to European reporting standards – IFRS 9. At the same time, a significant step that will ease the transition of domestic banks to these standards is implementing the Regulation of the National Bank of Ukraine No. 351.

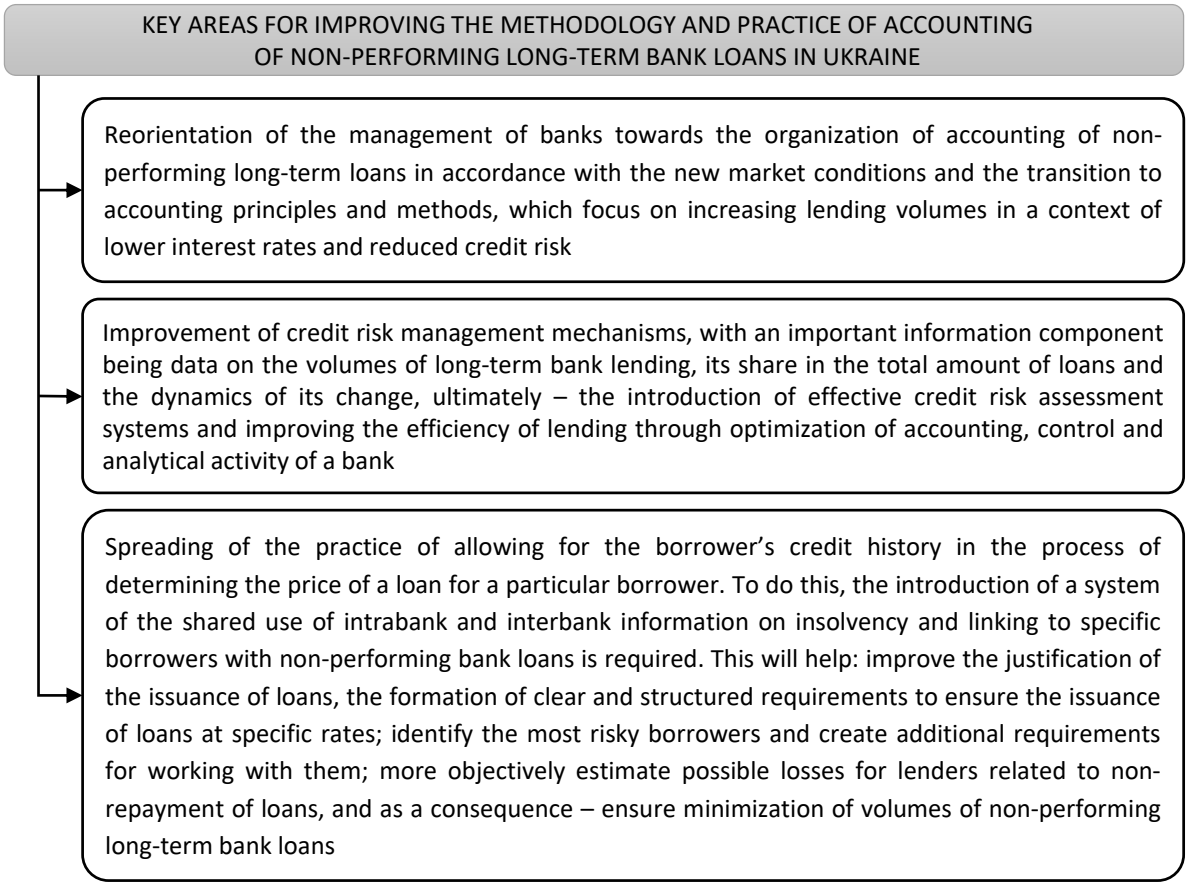

Figure 3. Ways of improving the methodology and practice of accounting of long-term bank loans in Ukraine

Table 1 presents an analytical data selection on volumes of active transactions, loans and the share of non-performing assets and loans. When analyzing the data from Table 1, it should be noted that a significant share of the non-performing loans of state banks in Ukraine, in particular, Privatbank CB, which was privatized at the end of 2016, currently has about 86% of non-performing loans, while it is the largest and most branched bank in the country. This, after all, reflects on the total share of non-performing loans of state-owned banks – about 71%.

Determination of the share of non-performing loans in the bank plays an important role in the functioning of the financial system of the developed economies. The main purpose of this process is to reduce the asymmetry of information between creditors and borrowers (Kovalev, 2007). At the same time, the change in the share of non-performing loans towards its decrease may affect the decline in the cost of loan capital, and vice versa – the increase in the share of non-performing loans and their volumes is the basis for revising the loan value, which is expected by the bank.

Based on the results of the analysis of the current situation, the existing achievements and trends in changing the system of accounting of long-term bank loans in Ukraine, it is advisable to recommend the following directions to improve the said system (Figure 3).

5. DISCUSSION

Specifics of the formation and management of an efficient system of long-term bank lending is determined by the choice of certain elements of this system (approaches, methods, functions, and factors), as well as their combination, which, by a complex interaction, promote, on the one hand, the implementation of the lenders' objectives to obtain benefits from lending activities, minimi-

zation and adequate compensation of the risks of such activities, on the other hand – the realization of the borrower's objectives to obtain long-term credit resources for the development of activities at an acceptable interest rate.

The mentioned problem is covered in this paper, the problems and prospects of improving the system of accounting of long-term bank loans are determined, while the issue about who should become the key initiator of changes in this accounting system is open to discussion. On the one hand, they are initiated by the NBU in accordance with the European integration aspirations of the country and the practice of adopting the experience of developed countries. On the other hand, the management and owners of banks should be interested in an adequate assessment of the structure of their assets and liabilities. Under these circumstances, receiving certain accounting instructions (for example, in the NBU reform Regulation No. 351), the bank receives an accounting tool to calculate the value and the share of non-performing loans (used in the financial reporting system and provided by the NBU), and must further form a certain managerial tool for responding to one or another figure, certain changes in the level and share of non-performing loans. This will allow the bank to form its own pricing policy, pricing strategy for long-term lending and work with borrowers, adjust the resource base and form measures to minimize credit risks.

In this context, it is the managerial, microeconomic aspect that the authors of the paper consider fundamentally important, given that the very fact of establishing the value or the share of non-performing assets of the bank is not yet a way to ensure the bank's success, but instructions, models, methods, tools, options of actions as a response to changes in the size and structure of the bank's non-performing loans determine the possibilities for the development of long-term bank lending.

CONCLUSIONS

This paper urges the problems of organizing objective accounting of non-performing long-term bank loans in Ukraine, allowing for the current problems of the economy, the banking system of the country, trends in the development of methodical support of the given process. During the research, the state and changes in the accounting system of non-performing loans of Ukrainian banks were analyzed.

It has been found that under the current conditions, the use of European experience in this field is topical, it is determined that this experience is already largely being adopted with the initiative of the National Bank of Ukraine (Regulation No. 351).

The results of accounting of non-performing bank loans obtained using the updated accounting methodology are analyzed. A significant share of non-performing loans is identified, especially in the state banks of the country (due to the inclusion of the loans of Privatbank CB nationalized into the public ones at the end of 2016, which had and still has very significant problems with the repayment of distressed debt and quality of the loan portfolio, which became a major cause for its nationalization).

The scheme of allowing for changes in the share of non-performing loans of the bank in the process of determining the price of a loan is proposed. Based on the results of the analysis of the current state, the existing achievements and trends in changes of the accounting system of non-performing long-term bank loans in Ukraine, the ways of improving the said system are recommended, which in general orientate the bank's management to three areas: organization of effective accounting based on well-founded and advanced methods (largely borrowed from the best European practice); organization of effective credit risk management based on the information on the size, share and dynamics of non-performing long-term bank loans; organization of information exchange and qualitative work with borrowers in order to minimize the possibility of inclusion of loans for borrowers with a negative credit history in the loan portfolio.

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