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ACCOUNTING FOR ANTI-CRISIS MANAGEMENT OF THE BANK'S CREDIT PORTFOLIO

ОБЛІКОВЕ ЗАБЕЗПЕЧЕННЯ АНТИКРИЗОВОГО УПРАВЛІННЯ КРЕДИТНИМ ПОРТФЕЛЕМ БАНКУ

The credit portfolio is one of the key portfolios that ensures the bank's profitability, and therefore its quality is constantly in the focus of anti-crisis management. In the course of the research, a hypothesis was put forward that bank accounting accounts are an important source of information for anti-crisis management of its credit portfolio, which allows management to make operational administrative decisions and respond in a timely manner to any negative changes in the portfolio, which, in turn, helps to prevent crisis phenomena or reduce their negative impact. To verify it, the content of the information, the accounting sources of its receipt, and the directions of its use in the process of anti-crisis management of the bank's loan portfolio were investigated, in particular, for identifying crisis phenomena in the loan portfolio and monitoring its quality. The quality analysis of loan portfolios of Ukrainian banks has been revealed that more than 30% of these portfolios are non-performing loans, which negatively affects the banks' financial results. The largest share of non-performing loans was accumulated by state banks, in particular, JSC CB "PrivatBank". Among loans granted to individuals, non-performing loans make up about 17%, among loans granted to legal entities more than 40%. This indicates the presence

Кредитний портфель (КП) є одним з ключових портфелів, що забезпечує прибутковість діяльності банку, а тому його якість постійно перебуває в центрі уваги антикризового управління. У ході дослідження висунута гіпотеза про те, що рахунки бухгалтерського обліку банків є важливим джерелом інформації для антикризового управління його кредитним портфелем, яка дозволяє менеджменту приймати оперативні управлінські рішення та вчасно реагувати на будь-які негативні зміни портфеля, що, своєю чергою, допомагає запобігти кризовим явищам або зменшити їх негативний вплив. Для її перевірки досліджено зміст інформації, облікові джерела її отримання та напрями використання у процесі антикризового управління КП банку, зокрема для ідентифікації кризових явищ у кредитному портфелі та моніторингу його якості. Проведений аналіз якості кредитних портфелів банків України показав, що понад 30% з них є непрацюючими кредитами, а це негативно впливає на фінансові результати банків. Найбільшу частку непрацюючих кредитів акумулювали державні банки, зокрема АТ КБ "Приватбанк". Серед кредитів, наданих фізичним особам, непрацюючі становлять близько 17%, серед кредитів, наданих юридичним

of significant problems in the credit portfolios of banks and requires the application of various anti-crisis measures. An important role in the anti-crisis management of the bank's loan portfolio is played by the diagnosis of crisis phenomena, in which information support, in particular accounting, plays a crucial role. The accounting support for the diagnosis of crisis phenomena in the credit portfolio was considered. Directions for using the bank's analytical accounting parameters to identify crisis phenomena in the loan portfolio has been proposed. An example of the early detection of debtors with signs of potential problems using the analytical accounting parameter S191 "Code of the level of loan delinquency" has been given. The accounting support for monitoring the bank's credit portfolio, which is a mandatory stage of anti-crisis management and allows assessing the effectiveness of anti-crisis measures, as well as identifying new problems in the credit portfolio, has been studied. Algorithms for calculating the quality indicators of the bank's loan portfolio have been proposed, based on the use of information from analytical and synthetic accounting accounts.

особам, – понад 40%. Це свідчить про наявність значних проблем у кредитних портфелях банків і вимагає застосування різноманітних антикризових заходів. Важливу роль в анти-кризовому управлінні кредитним портфелем банку відіграє діагностика прояву кризових явищ, в якій визначальну роль відіграє інформаційне забезпечення, зокрема облікове. Розглянуто облікове забезпечення діагностики кризових явищ у кредитному портфелі. Запропоновано напрями використання параметрів аналітичного обліку банку для ідентифікації кризових явищ у кредит-ному портфелі. Наведено приклад раннього виявлення боржників з ознаками потенційної проблемності із застосування параметру аналі-тичного обліку S191 "Код рівня прострочення кредитів". Досліджено облікове забезпечення моніторингу кредитного портфеля банку, що є обов'язковим етапом антикризового управління та дає змогу оцінити ефективність антикри-зових заходів, а також виявити нові проблеми у кредитному портфелі. Запропоновано алгорит-ми розрахунку показників якості кредитного портфеля банку, що базуються на використанні інформації аналітичних та синтетичних рахун-ків бухгалтерського обліку.

Keywords: crisis, anti-crisis management, bank, credit portfolio, accounting, accounting provision, accounting accounts.

Ключові слова: криза, антикризове управління, банк, кредитний портфель, облік, облікове забезпечення, рахунки бухгалтерсь-кого обліку.

Introduction

Over the past decade, Ukrainian banks have been in a state of almost constant turbulence, which was caused first by the financial crisis of 2014 and the cleaning of the banking system, then by the Pandemic, and today is being exacer-bated by the long-term war with russia. Constant negative external influence causes crisis phenomena in banks, where one of the key objects of influence is the loan portfolio (LP), the quality of which directly depends on the solvency of borrowers, currency risks, the state of collateral, etc.

In these conditions, the role of LP anti-crisis management is increasing, which is constantly encountering new challenges. One of the factors of effective LP anti-crisis management is high-quality information support, which can be considered from different perspectives, in particular by the source of origin, the nature of information, the periodicity of formation, etc. And each type of information plays its own role in such management.

In this research, the main subject is focused on accounting information support and its use in the process of anti-crisis management of the bank's loan portfolio. Today, the scientific literature largely focuses on the features of bank loan portfolio management under martial law. In particular, Bugel (2024)

examines the impact of the macroeconomic environment and growing credit risks on the quality of the loan portfolio, as well as management methods that are appropriate to apply in these conditions. Many scientific works by Ukrainian authors are devoted to credit risk management (Shalygina, 2024; Dotsenko, 2024), the problems of non-performing loans (Usatyuk, 2024) or their regulation, adaptation of bank credit policy (Vladyka et al., 2024) and increasing the efficiency of bank loan portfolio management (Zharikova et al., 2023) under martial law.

Similar problems are also being addressed by foreign scholars in their countries. In particular, authors, as Rahman et al. (2021), pay attention to the issues of resolving non-performing loans using the example of Bangladesh; Venugopal (2024) examines the impact of loan portfolio composition on the performance of different types of banks in India; Walkhoff and Ziegen-hagen (2024) analyze the challenges facing banks in the face of geopolitical upheavals, including wars in Ukraine and the Middle East, supply chain disruptions, rising energy costs, significant price increases, funding costs, and cybercrime, and how this affects banks' non-performing loans and changing approaches to managing them.

The issue of bank crisis management is considered in the scientific literature mostly in general at the bank level (Dragan et al., 2021; Marynchak & Savchyn, 2023; Ryzhonkov & Azarenkova, 2023; Azarenkov, 2024) or from the perspective of ensuring the stability of the banking system (Cociug & Postolache, 2020; Vakhovich et al., 2023). Foreign authors also consider the impact of crises on bank activities in general (Mecatti, 2023), bank crisis management strategies (Davis et al., 2024), as well as the content of various stages of such management, in particular, crisis prevention, preparedness for them, response to them and recovery after them (Jayasundera, 2023).

It's worth to note little attention to crisis management of specific portfolios or areas of bank activity in the scientific literature. Thus, Zhovtanetska (2015) considers anti-crisis management of deposit and loan portfolios, Kovalenko (2024) considers the choice of a strategy for anti-crisis management of cash flows in the interest-bearing business of banks.

Regarding the information support of a bank's anti-crisis manage-ment, the authors Dragan et al. (2022) usually focus on financial reporting, which is an important source of consolidated information on various areas of a bank's activity. At the same time, foreign scholars pay attention to the impact of information on anti-crisis management. Thus, Anderson and Copeland (2019) analyze how information management during crises and the transparency of banks affect their stability; Vukajlović et al. (2019) conduct a statistical analysis of the impact of information on anti-crisis management and the actions of managers, which confirms the relevance of studying the information, including accounting, support of anti-crisis management.

The issue of accounting support for anti-crisis LP management is insufficiently studied in the scientific literature. But it is the accounting information accumulated in the accounts of analytical and synthetic accounting

that serves as a source of operational information for the anti-crisis management of the bank's LP and is one of the most important when making management decisions, which determined the choice of the research topic.

The research aim is to develop suggestions for the information usage accumulated in the accounts of synthetic and analytical accounting of banks in the anti-crisis management of the bank's credit portfolio.

In the research it was hypothesized that bank accounting records are an important source of information for anti-crisis management of its credit portfolio, which allows management to make operational administrative decisions and respond in a timely manner to any negative changes in the portfolio, which, in turn, helps to prevent crisis phenomena or reduce their negative impact. To verify this, the content of the information, accounting sources of its receipt and directions of use in the process of anti-crisis management of the bank's credit portfolio were investigated, in particular for identifying crisis phenomena in the credit portfolio and monitoring its quality.

To achieve the aim, the following research methods were used: induction and deduction; analysis and synthesis to study the quality of the credit portfolio of Ukrainian banks and their changes in recent years; empirical research, to review the types and content of information accumulated in the bank's credit accounting accounts; generalization, to develop directions for the use of accounting information in the process of anti-crisis management of the credit portfolio. The research is based on the regulatory documents of the National Bank of Ukraine on bank accounting study, official websites and reports of banks, scientific publications of foreign and national experts.

The main part of the research consists of three interrelated sections. The first examines the quality of loan portfolios of Ukrainian banks and its changes in recent years; the second considers the accounting support for the diagnosis of crisis phenomena in the LP; the third one is the accounting support for monitoring the loan portfolio.

1. Loan portfolios quality of Ukrainian banks

Over the past decade, Ukrainian banks have been going through difficult times. After the crisis of 2008–2009, a new crisis occurred in the banking sector in 2014–2015 and was, as the NBU notes, "the deepest since independence" (NBU, 2016). As a result of this crisis, "the level of negatively classified loans increased to the highest historical values" (NBU, 2016, June). Later, after the cleaning up of the banking system and the application of stabilization measures at the level of both the NBU and the banks themselves, the quality of banks' LP began to gradually improve. As can be seen from *Figure 1*, before the start of the full-scale invasion, the share of non-performing loans in Ukrainian banks, for which the NBU began to publish full-fledged statistics in February 2017, showed a tendency to decrease in all bank groups. However, the war with the russian federation brought new risks

and the share of such loans began to grow sharply from March 2024. However, this growth was not as large as in 2014–2015, and from the beginning of 2023, a reduction in the share of non-performing loans began to be observed, but to this day, banks' loan portfolios remain under the influence of war risks, and as of 01.01.2025, the share of non-performing loans on average in the banking system is over 30%.
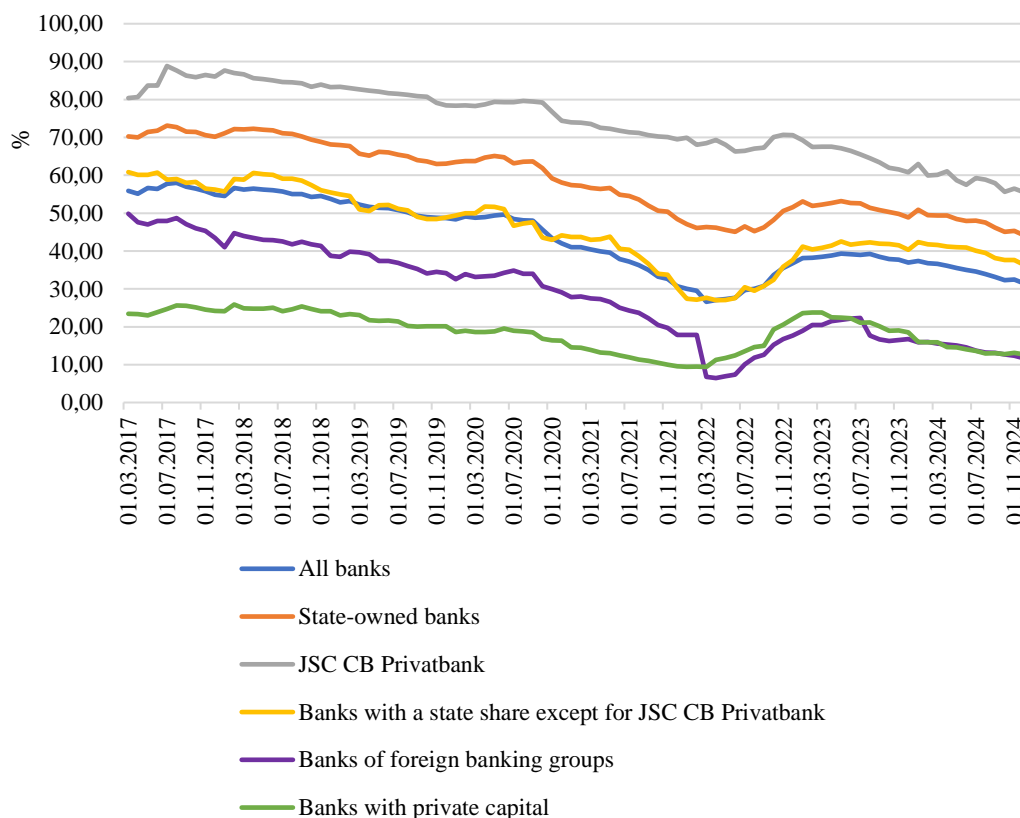

Figure 1. Dynamics of the share of non-performing loans in the loan portfolios of Ukrainian banks during 01.03.2017 – 01.01.2025

Source: compiled by the authors according to (NBU, b. d. a).

The largest share of non-performing loans throughout the analyzed period is observed in JSC CB "PrivatBank" and other banks with a state share. It was the ineffective credit policy that became one of the key reasons for the nationalization of JSC CB "PrivatBank", and the problem of non-performing loans has not been overcome in this bank to this day. At the same time, banks of foreign banking groups and banks with private capital demonstrate a significantly lower share of non-performing loans compared to the market average, but it still exceeds 10%.

It is worth noting that according to the Regulation on the Organization of the Problem Asset Management Process in Ukrainian Banks, "a bank is considered to have a significant level of problem assets if the ratio of the total amount of debt on loans granted to legal entities and individuals classified as non-performing assets to the total amount of debt on loans granted to legal entities and

individuals exceeds five percent" (NBU, 2019, July 18). Therefore, the banking system of Ukraine can be characterized as having a significant level of problem assets and being in a state of crisis, therefore requiring constant anti-crisis measures.

As it can be studied from *Figure 2*, the portfolio of loans provided by Ukrainian banks to individuals demonstrates better quality than the portfolio of loans provided to legal entities. Thus, in the portfolio of individuals, the share of loans of the best quality (class 1) is over 80%, while in the portfolio of legal entities is only about 10%. The low quality of loans provided to legal entities is also evidenced by the presence of about 39% of class 10 loans, which are non-performing.
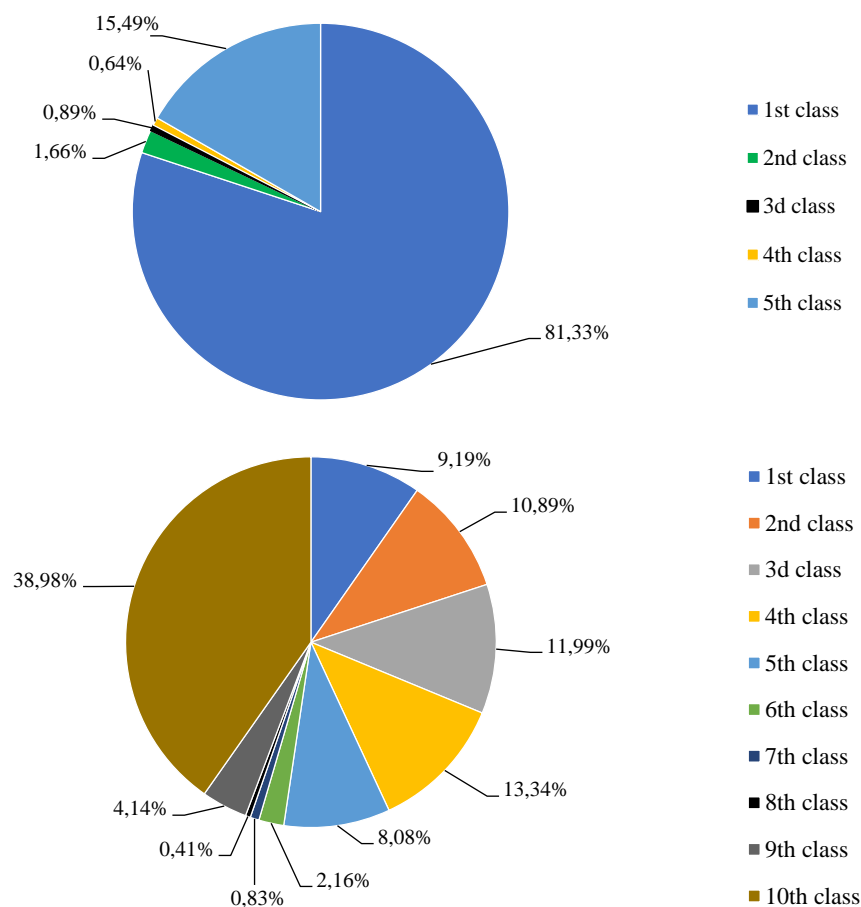
Figure 2. The structure of loans granted to individuals (a) and legal entities (b) by classes of debtor in Ukrainian banks, January 01, 2025

Source: compiled by the authors according to (NBU, b. d. b).

Analysis of the loan portfolios quality of Ukrainian banks shows that they are under the influence of crisis phenomena in the economy, which requires banks to constantly take anti-crisis measures of both preventive and reactive nature, since the state of the loan portfolio directly affects the performance of the bank.

2. Accounting support for crisis phenomena diagnostics in the loan portfolio

Anti-crisis management of the bank's LP requires a large amount of information, which is formed both at the bank level and at the borrower level, and is also collected from other sources. One of such sources of information is the bank's accounting, namely the accounts of analytical and synthetic accounting and the forms of financial, statistical and management reporting, which summarize the information accumulated in the accounts in different sections.

To form the accounting support for anti-crisis management of the bank's credit portfolio, the authors used the Chart of Accounts for Accounting of Banks of Ukraine and the Instructions for its Application (NBU, 2017, September 11), the List of References Used for Forming Statistical Reporting Indicators (NBU, b. d. c) and the Methodology for Calculating the Grouping of Accounts of the Chart of Accounts for Accounting of Banks of Ukraine (NBU, 2022).

In order to further consideration of the accounting support for identifying crisis phenomena in LP, we will first determine the filling of this portfolio by accounting accounts.

The loan portfolio is the set of all loans granted by a bank with the aim of generating income. Burlaenko (2016) also clarifies that in addition to loans, the LP includes guarantees, advances, and commitments to extend credit. In accounting terms, LP can be represented as the sum of balances at a certain date on the balance sheet accounts of the Chart of Accounts of Banks of Ukraine (NBU, 2017, September 11) groups 151-154, sections 20-24, and debit balances on accounts 2600, 2607, 2620, 2621, 2627, 2650, 2657 minus credit balances on accounts 2609, 2629, 2659 (hereinafter referred to as BSA), as well as on off-balance sheet accounts of groups 900, 910, 912 (hereinafter referred to as OBSA).

Diagnosis of crisis phenomena is the first and defining stage of anti-crisis management of the bank's credit portfolio, on which the arsenal of anti-crisis measures applied and their effectiveness subsequently depend. One of the key features of anti-crisis management is its efficiency in making management decisions, which in turn requires immediate identification of problems in LP. This requirement is met by the analytical accounting of the bank, which allows daily monitoring of changes for each loan and each borrower and timely diagnosis of problematic or potentially problematic situations.

Analytical accounting of the bank uses a large number of parameters that detail information about each loan in different sections. The list of parameters of analytical accounting of banks is determined by the Rules for organizing statistical reporting submitted to the National Bank of Ukraine (NBU, 2018, November 13). For each parameter, the NBU website provides directories of possible values (NBU, b. d. c).

Anti-crisis management of the bank's LP is carried out at various stages of the bank's credit process and includes both preventive and reactive measures.

Preventive anti-crisis management of the bank's credit portfolio is aimed primarily at preventing the manifestation of crisis phenomena, in particular problem and non-performing loans. The main task of preventive anti-crisis LP management is the early detection of debtors with signs of potential problems.

One of the first signs of such debtors is the appearance of overdue debt on the loan. Identifying overdue debt on loans from the first day of overdue allows grouping the balances on the above-listed balance sheet accounts of the credit portfolio in terms of the values of the analytical accounting parameter S191 "Code of the level of overdue loans", which can take values from 1 (not overdue) to 7 (classified as hopeless). Information on this parameter allows not only to identify the facts of overdue, but also to track the age of such overdue loans and to strengthen anti-crisis measures as this age increases. The more important this parameter becomes, the more problematic such a loan becomes from the point of view of anti-crisis management. And therefore, the bank gradually moves from preventive to reactive anti-crisis measures, which are no longer preventive in nature, but are aimed at overcoming problems in LP.

Examples of other parameters of analytical accounting of banks and directions of using information formed according to these parameters in the diagnosis of crisis phenomena in LP are given in *Table 1*.

Table 1

Use of bank analytical accounting parameters to identify crisis phenomena in the loan portfolio

Analytical accounting parameter	Directions for use in crisis management
DSTI "Code of the average level of the ratio of the debtor's monthly total expenses for servicing the total amount of debt to the amount of its monthly total net income"	Identification of debtors who have insufficient income to repay the loan debt
F075 "Code of signs that, in accordance with Regulation No. 351 (NBU, 2016, June 30), indicate a high credit risk of a counterparty/bank related party"	dentification of debtors – individuals assigned to debtor class 5 and legal entities assigned to debtor class 9 or 10, and the criteria for such assignment
F075G "Presence of a default event / signs of high credit risk"	Identification of debtors with high credit risk or default events
F076 "Code of signs that, in accordance with Regulation No. 351, indicate a default event of a counterparty/bank related party"	Identification of debtors – legal entities that have been recognized as in default and are assigned to debtor class 10, as well as the criteria for such assignment
F077 "Code of the sign of timeliness of debt payment by the counterparty/bank related party in accordance with paragraphs 59, 67[5] of Regulation No. 351"	Identification of debtors for which the debtor class was adjusted after the assessment of the financial position based on the presence of debt overdue
F094 "Code of the attribute of the loan to the uncontrolled territory"	Identification of debtors registered in the non-controlled territory or loans for which collateral is located in the non-controlled territory
F095 "Code of the feature on the completeness of the security of obligations under the loan agreement between the bank and the borrower"	Identification of loans for which obligations are not fully secured
F137 "Factor code for changes in the volume of non-performing assets"	Determining the grounds on which the loan was recognized as non-performing or the recognition of a non-performing loan was terminated
FST "Code for changes in the stage of impairment/expected credit loss model recognized under International Financial Reporting Standard 9 "Financial Instruments""	Identification of loans for which there has been a change in the stage of impairment, especially downward

End of Table 1

Analytical accounting parameter	Directions for use in crisis management
K065 "Code of the type of client's connection with the state that carries out armed aggression against Ukraine"	Identification of debtors with ties to the state that carries out armed aggression against Ukraine
K160 "Debtor's class"	Grouping of borrowers by classes of debtors and identification of debtors with the worst classes
S187 "Code for the period of time elapsed since the asset was classified as non-performing"	Grouping of loans by the period of time elapsed since they were classified as non-performing in order to identify the most uncollectible loans and make decisions on the application of measures to liquidate such loans
S190 "Code for the period of debt overdue"	Identification of debtors whose contractual maturity has expired
S191 "Code for the level of loan arrears"	Distribution of debtors by the level of overdue loans

Source: compiled by the author according to (NBU, 2016, June 30; NBU, b.d.c.)

Thanks to daily monitoring of analytical accounting accounts for each parameter, bank management has the opportunity to respond in a timely manner to changes taking place and promptly apply anti-crisis management measures. Of course, monitoring analytical accounts is a painstaking job, and today management is helped by the settings of bank automation systems, as well as advanced technologies, in particular artificial intelligence, which not only allow diagnosing crisis situations, but also automatically, without the intervention of bank employees, to apply the simplest management tools, in particular SMS-informing the client, automatic phone call, etc.

3. Accounting support for monitoring the bank's loan portfolio

The anti-crisis management purpose of the loan portfolio is to improve its quality, which can be assessed by indicators of its profitability, riskiness, security, etc. Today, there are many publications in which the authors analyze various indicators of the credit portfolios of Ukrainian banks in general or individual banks (Bugel, 2024; Shalygina, 2024; Dotsenko, 2024; Vladyka et al., 2024; Zharikova et al., 2023, etc.). However, all these developments, given the availability of public information, are carried out on the basis of NBU statistical data or data from banks' financial statements and notes to them, provided on the banks' websites. And such information is sufficient for external users. However, for anti-crisis management at the bank level, such information is practically not used, since it has a significant time lag.

LP monitoring is important for anti-crisis management both for the purpose of diagnosing crisis phenomena and for assessing the effectiveness of the application of anti-crisis measures, and therefore is an integral element of such management. LP monitoring can be carried out with different periodicity, which, as a rule, directly depends on the depth of the manifestation of

crisis phenomena. The information support for calculating the quality indicators of the loan portfolio at the bank level is the data of the synthetic and analytical accounting of the bank directly, or information grouped by various characteristics in financial, statistical and management reporting. *Table 2* is proposed an algorithm for calculating the indicators of monitoring the quality of the bank's LP based on accounting information.

Table 2

Samples of indicators' calculation for monitoring
the quality of a bank's loan portfolio*

Loan portfolio risk indicator	Calculation formulas	
	According to the generally accepted methodology	According to accounting data
Loan portfolio problem ratio (L_problem)	$L\text{problem} = \dfrac{LP_{overdue}}{LP}$ Where $LP_{overdue}$ – overdue loans; LP – loan portfolio volume	$K_{problem} = \dfrac{BSA\ of\ LP\ (S190 \neq 0)}{BSA\ of\ LP + OBSA\ of\ LP}$ BSA of LP (S190≠0) – the sum of balances as of a certain date on accounts of groups 151-154**, sections 20-24 and debit balances on accounts 2600, 2607, 2620, 2621, 2627, 2650, 2657 minus credit balances on accounts 2609, 2629, 2659, excluding loans (hereinafter referred to as balance sheet accounts of the loan portfolio), for which the analytical accounting parameter S190 = 0 OBSA of LP – the amount of balances as of a certain date on off-balance sheet accounts of groups 900, 910, 912 (hereinafter referred to as off-balance sheet accounts of the loan portfolio)
Share of doubtful loans (L_doubt)	$L_{doubt} = \dfrac{LP_{doubt}}{LP}$ LP_{doubt} – is the amount of doubt ful loans	$L_{doubt} = \dfrac{BSA\ of\ LP\ (S191 = 7)}{BSA\ of\ LP + OBSA\ of\ LP}$ BSA of LP (S191 = 7) – the sum of balances as of a certain date on the balance sheet accounts of granted loans and accrued interest for which the analytical accounting parameter S191 = 7
Loan portfolio provisioning ratio (L_ratio)	$L_{ratio} = \dfrac{P}{LP}$ P – provisions for loan losses	$L_{ratio} = \dfrac{S_{balance}}{BSA\ of\ LP + OBSA\ of\ LP}$ $S_{balance}$ – the sum of balances on a certain date on accounts of accrued reserves of account groups 151-154, sections 20-24 and accounts 3690, 3692
Net worth ratio of the loan portfolio (NWR)	$NWR = \dfrac{LP - P}{LP}$	$NWR = 1 - \dfrac{Sbalance}{BSA\ of\ LP + OBSA\ of\ LP}$
Non-performing loan ratio (NPL)	$NPL = \dfrac{NPLA}{LP}$ $NPLA$ – amount of non-performing loans	$NPL = \dfrac{BSA\ of\ LP\ (F137 = 01 - 20) - BSA\ of\ LP(F137 = 21 - 25)}{BSA\ of\ LP + OBSA\ of\ LP}$ BSA of LP (F137=01-20) – the amount of balances as of a certain date on the balance sheet accounts of the loan portfolio for which the analytical accounting parameter F137 has a value from 01 to 20; $OBSA$ of LP (F137=21-25) – the amount of balances as of a certain date on the balance sheet accounts of the loan portfolio for which the analytical accounting parameter F137 has a value from 21 to 25
Average yield of the loan portfolio (Y_{LP})	$Y_{LP} = \dfrac{\%earned}{\overline{LP}}$ $\overline{LP}$ average volume of the loan portfolio % earned – interest earned on loans for the period	$Y_{LP} = \dfrac{CTA_{\%accrued}}{(BAbeg_{BSA\ of\ LP+OBSA\ of\ LP} + BAend_{BSA\ of\ LP+OBSA\ of\ LP})/2}$ $CTA_{\%accrued}$ – the amount of credit turnover for the period on accrued interest accounts on the balance sheet accounts of the loan portfolio $BAbeg_{BSA\ of\ LP+OBSA\ of\ LP}$ – the amount of balances at the beginning of the period on balance sheet and off-balance sheet accounts of the loan portfolio $BAend_{BSA\ of\ LP+OBSA\ of\ LP}$ – the amount of balances at the end of the period on balance sheet and off-balance sheet accounts of the loan portfolio

Loan portfolio risk indicator	Calculation formulas	
	According to the generally accepted methodology	According to accounting data
Average yield of certain groups of loans (Y_i)	$$Y_i = \frac{\%_{receiv\ i}}{\overline{LP}_i}$$ $\%_{receiv\ i}$ – interest received on the i-th group of loans for the period $\overline{LP}_i$ – average volume of the i-th group of loans	$$Y_i = \frac{BA_{\%accrued\ i}}{(Abeg_{BSA\ of\ Lp\ i} + Aend_{BSA\ of\ LP\ i})/2}$$ $BA_{\%accrued\ i}$ – the amount of credit turnover for the period on accounts of accrued interest on balance sheet accounts of the i-th group of the loan portfolio $Ab_{BSA\ of\ Lp\ i}$ – the amount of balances at the beginning of the period on the balance sheet accounts of the i-th group of the loan portfolio $Aend_{BSA\ of\ LP\ i}$ – the sum of balances at the end of the period on the balance sheet accounts of the second group of the loan portfolio

*Analytical accounting parameters are given according to (NBU, n. d.)
** Numbers of sections, groups, and accounts are given according to (NBU, 2017, September 11)

Source: author's calculation.

The proposed calculation algorithms provide the opportunity to promptly monitor the loan portfolio and timely diagnose deterioration in its quality in order to determine or adjust anti-crisis measures, as well as to assess the effectiveness of the implementation of the bank's anti-crisis program.

Conclusions

Anti-crisis management of the loan portfolio is important in terms of ensuring the stability of the bank's activities and generating its income. The deterioration of the LP quality affects both the bank's liquidity, since proceeds from loan repayment are reduced, and its profitability due to a decrease in income. The results of the analysis showed that during 2017–2024, Ukrainian banks have low quality loan portfolios, as evidenced by a high share of non-performing loans, which exceeds 30% at the beginning of 2025. At the same time, the quality of loans granted to legal entities is worse than the quality of loans granted to individuals. This confirms the presence of crisis phenomena in the loan portfolios of banks.

The authors have proven that synthetic and analytical accounting accounts are an important source of information at different stages of anti-crisis management of the bank's loan portfolio. Based on accounting data, the following are carried out:

• diagnostics of manifestations of crisis phenomena in the bank's LP, which is the basis for making decisions on the list and directions of applying anti-crisis measures in order to overcome such phenomena;

• assessment of the effectiveness of applying anti-crisis measures and their effectiveness;

• constant LP monitoring in order to prevent crisis phenomena.

Based on the content analysis of the reference books used to form the indicators of the bank's statistical reporting, the authors propose directions for applying the parameters of analytical accounting to identify crisis phenomena in the loan portfolio, which will allow to promptly identify portfolio problems and take timely anti-crisis measures. The use of loan portfolio quality indicators, the calculation algorithms of which are based on information from the analytical and synthetic accounting accounts of banks, will allow for continuous monitoring of the loan portfolio in order to identify problems and assess the effectiveness of anti-crisis measures. This confirms the hypothesis.

Future scientific research is promising in terms of expanding the spectrum of accounting information usage in anti-crisis management to other areas of the bank's activity, which will generally increase the effectiveness of the bank's anti-crisis management.

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