Analysis of Banking Performance in the Context of Accounting Information

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Abstract

The primary aim of the research is to analyse the influence of accounting factors on the formation and development of banks' performance characteristics. However, the study seeks to examine the impact of various banking, macroeconomic factors, and legislative changes on the development of banking performance.
The methodological approach relies on a collection of methodological tools that integrate fundamental research with quantitative research, as well as modern methods with classical methods. The relevance of the theme is derived from the dynamic economic landscape and the obstacles encountered by banking systems in recent years, which have affected their performance. These challenges include the 2007 economic crisis, the ongoing COVID-19 pandemic since March 2020, the energy crisis resulting from geopolitical tensions in Eastern Europe, and the recent bank failures in the United States of America. This paper focuses on accounting research that is of practical significance, as it presents accounting information from the primary source of data for analyzing banking performance. Typically, when analyzing banking performance, the emphasis is placed on specific measurement indicators, while neglecting accounting techniques that effectively capture the nature of banking phenomena, employ accounting logic, and offer crucial information for profitability analysis.

The relevance of this study lies in the necessity to develop a banking analysis system that offers the essential information, arguments, and solutions to prevent the occurrence of specific phenomena that can make the banking sector vulnerable.

Keywords

accounting information, banking performance, banking efficiency, banking profitability, economic profitability, financial reporting.

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Introduction

The role of banks in the economy has aroused the interest of the academic world and the specific industry in all periods of modern economic development, and in situations of manifestation of crises (economic, pandemic, geopolitical or other typologies), specialized studies highlight the importance of banks in supporting the economy.

Banks are the backbone of the financial infrastructure and a well-functioning financial system is a prerequisite for economic development (Baker, Kumar and Pandey, 2021).

The primary functions of a country's financial system include producing information about investment opportunities, allocating capital, monitoring investments, exercising corporate governance after the provision of finance, facilitating transactions, mobilizing and pooling savings, organizing trade in goods, services and securities (Agoraki, Kouretas and Tsamis, 2021).

Banks are the most important financial intermediaries, a role that results from their activities as payment providers, loan providers, depositories of funds and, at the same time, producers of information needed by a wide range of users (Abu Alrub, Ağa and Rjoub, 2018).

The international financial crisis that started in 2007, the manifestations of the COVID-19 pandemic, starting in 2020, the geopolitical developments in Eastern Europe (against the military conflict in Ukraine), record levels of inflation and the energy crisis represent the most important challenges that have brought up the resilience of banking systems in recent years. The strongest impact on financial stability from geopolitical tensions manifests itself directly, through the restrictions imposed on capital flows and payments, by increasing the degree of uncertainty and risk aversion of investors towards the future, the escalation of conflicts, expropriations, etc (Ahmad et al., 2020).

As essential intermediaries of the economy, banks are expected to effectively manage risks and vulnerabilities to financial stability, through the adequacy of financial and prudential positions, respectively through the ability to manage social, economic or environmental shocks (Bran et al., 2023a).

The most recent events that tested financial stability after the 2007 crisis occurred in the United States of America in March 2023, when two banks went bankrupt amid massive withdrawals of depositor funds (Bholat et al., 2018), and in Europe, the Swiss authorities announced a state-backed merger of Credit Suisse with USB. Market reactions have not been slow to emerge, risk aversion has increased and global concerns about the stability of financial systems are evident, amplified by the speed at which information flows today thanks to digital technologies and the interconnectedness of financial markets.

Review of the scientific literature

The initial approach of the research involves the conceptual delimitation of the terms associated with banking performance, with the aim of forming an adequate initial base of the associated economic terminology and capturing the essential aspects of performance and its valences in the banking environment (Bran et al., 2020). Thus, in the first instance, the foray into the field of banking performance requires the delineation, definition and clarification of essential concepts that revolve around specific terms (such as economy, efficiency, effectiveness and profitability). The premises of a gradual approach to banking performance are thus created, in a first terminological sense, undesirably connected with the methods and techniques of performance evaluation and monitoring in the banking environment, which will be the subject of the following sections of the thesis.

The conceptual analysis of banking performance is carried out from a double perspective: epistemological (through the appeal to the scientific meanings of the terms and a theoretical-methodological approach to the concepts of performance measurement) and chronological (through the foray into the specialized literature specific to different historical periods in which performance and methods of measuring it were recorded). The methodological orientation that leads to the achievement of the main objective of this chapter is focused both on the semantic analysis of the extended lexical family of the term performance, but also on the documentary synthesis of approaches in the specialized literature of performance, in general, and banking performance, in particular (De Franco, Kothari and Verdi, 2011).

In order to be well outlined, the concepts associated with "performance measurement" are presented from a synoptic perspective and with a temporary reference point, the initiation represented by the empirical performance measurement approaches of the 13th century, in which the development of double-entry bookkeeping tools led to the creation of the first methods of performance quantification, based exclusively on the interpretation of data provided by accounting (Di Tommaso and Thornton, 2020).

As management science developed in the following centuries, performance measurement methods evolved into well-defined "performance management" systems, considered the prerogative and responsibility of management, but which are centered on the data provided by accounting and the economic-financial indicators provided of this (Barakat and Hussainey, 2013).

A brief historical foray into the evolution of performance measurement concepts shows the approach of the concept in close dependence with the economic development specific to the analyzed periods and which depend on the degree of maturity of the management systems (Bran et al., 2023b).

For a careful delimitation of the studied terms, the economy-efficiency-effectiveness triad is analyzed and the most important facets of the performance studied from the perspective of profitability are presented (Fang et al., 2018).

The attention is focused in the next stage of the research on the establishment of specific performance benchmarks in the banking field, with an emphasis on profitability, perceived as the deepest anchor of the analyzes from the perspective of the bank's management and the other categories of users of banking information - investors, debtors, creditors various invoices and categories, state institutions, employees, etc

A general set of performance analysis and measurement indicators provided by accounting systems are presented and commented on in the final section of the chapter, with the aim of creating a comprehensive picture, both of accounting tools for quantifying performance, but also of the evolution in time of different performance evaluation models (Fernandes et al., 2018).

Although different performance measurement schemes can be found in the specialized literature, the main component elements of such a performance measurement system can be framed in the following general model, developed according to the type of information provided (financial and non-financial), as well as from the users' perspective of information (top, bottom management, internal and external users, etc.) (Flapper et al., 1996): A first dimension is represented by financial-accounting indicators, which are constantly developed and refined in compared to a detailed classical structure on the model of profitability indicators, supplemented by non-financial aspects in performance measurement models. It is identified both in the specialized literature and in financial practice, a general awareness of the fact that only traditional financial indicators are no longer sufficient to determine the state of health of the entity, thus increasing the degree of recognition of the need to configure other types of indicators that adequately capture the performance of organizations.

The second approach to developing the performance measurement model involves the introduction of the comparison of global versus local indicators. More precisely, the modernization of the performance measurement system also involves the analysis of global and local indicators specific to the different management levels of the organization. Global performance measurement indicators are primarily aimed at top management, while local performance measurement indicators are ultimately aimed at lower level management (Nasreen et al., 2023).

The third aspect outlines the grouping of performance measurement indicators into internal versus external. Internal performance indicators are used to monitor an entity's performance on issues that are relevant to its internal functioning and are usually addressed to its management, while external performance indicators are addressed to third parties such as suppliers, customers or state institutions.

Specialized literature refers to this classification of performance indicators since the 9th decade of the last century (Kaplan, 1983). The fourth dimension involves the classification of performance indicators according to the organizational hierarchy. The vertical relationships between performance indicators are often based on the organizational structure of a company, with these being aggregated at different levels of the hierarchy. Thus, the hierarchy works in a natural way to aggregate performance indicators at a certain level, continuing with a smaller number of indicators at the next higher level (Romanenko and Rakhuba, 2019).

The last category aims to classify performance indicators according to the scope of application, closely related to the departmental structure: research and development, operations, production, sales or marketing. The idea behind this classification is based on the fact that each department has its own performance indicators, specific to its activity (Popescu and Ionescu, 2019).

Research methodology

In order to effectively study economic phenomena, it is necessary to employ suitable methodological tools such as setting objectives, determining directions, formulating hypotheses, and selecting appropriate methods. Without these tools, research in this field may not yield successful results. In the field of social sciences, knowledge is obtained by studying actual phenomena through the interaction between researchers and the environment. This process can be likened to chemical reactions between different substances. Since no one possesses the ultimate truth, it is crucial to embrace a diversity of ideas. This research is guided by a creed that acknowledges the fallibility inherent in the scientific approach. Despite this awareness, the research relies on a combination of theoretical and empirical methods to address specific research questions.

This research belongs to the systematic and evolutionary approach in economic sciences, as well as the positive constructivist epistemological positioning. It focuses on studying the economic phenomenon and the use of quantitative modeling to explain its evolution. This research employs a simultaneous mixed methods approach to information seeking. It combines qualitative research, which focuses on narrative exploration, with quantitative research that emphasizes experimental methods to determine the influences of specific factors (Andrei et al., 2020).

The processes of establishing the methodological benchmarks of the theoretical-empirical study of banking performance based on accounting information involve taking into account two essential particularities of economic science: the first, which aims at high degrees of instability of economic variables and the non-linearity of the relationships between them, and the second, which draws attention to the researcher's subjectivity in formulating conclusions and recommendations specific to economic science (Răboacă and Ciucur, 2004). Overcoming these characteristics of economics-specific research is a goal aimed at throughout the doctoral studies and that leads to the configuration of those methodological tools that contribute to solid, realistic and impactful results.

The objectives of the research are the creation of a banking analysis system, based on obtaining banking performance in the supervision and control of banking risks, especially the permanent assurance of adequate liquidity, both under the conditions of a balanced economy, as well as a savings in the state of crisis.

For commercial banks, the methods of measuring and analyzing banking performance are based on two types of approaches: traditional performance measurement and economic measurement.

The traditional measurement of the financial performance of commercial banks is carried out based on the data from the bank's financial report, usually using two techniques: a) Complex Analysis of the Financial Report applying a complex system of performance indicators; b) Analysis of the Gray Relationship, applying a limited number of performance indicators. In our country, bank performance analysis is usually based on the traditional approach. At the contemporary stage, in developed countries at the beginning to be developed economic performance measurement methods that take into account the development of shareholder value creation and evaluate the economic results generated by the bank from economic assets (as part of the weight) to fiscal.

The concept of economic performance measurement focuses on efficiency as the central element of performance, modern methods of measuring banking performance – on incorporating the influence of risk into the formula for measuring banking performance.

Results and discussion

During this period 2005-2006, the banking system is characterized by a significant consolidation achieved through privatization and restructuring. Thus, in 2007-2008, with the accession to the EU, Romanian banks faced specific challenges of harmonizing with European legislation and at the same time had to manage the difficulties caused by the newly emerging international financial crisis. The efficiency indicators of the banking system, against the background of multiple challenges, recorded comfortable values, both the financial and economic returns showed a downward trend.

Table no. 1. The evolution of the main performance indicators at the level of the Romanian banking system, 2019-2022

Name of the indicator	2019	2020	2021	2022
Equity ratio	9,2	8,6	7,32	8,13
The leverage effect	0,3	0,2	0,22	0,32
Outstanding and doubtful loans	21,1	18,1	13,78	13,76

Total outstanding and doubtful debts	12,7	10,3	9,43	17,04

Source: Global Financial Stability Report, 2023

In the reference period 2009-2014, the effect of the financial crisis was still being felt in Romania, characterized by a difficult international context and the presence of policies aimed at financial stabilization, with the banking sector trying to recover its course.

Thus, during this period, the unfavorable internal and external environment left its mark on the financial results of the Romanian banking system.

Consequently, the main profitability indicators (ROE and ROA) were mainly in the range of negative values. In 2013, the financial result of the entire banking system slightly improved, which generated the placement of the main banking profitability indicators slightly above zero. In 2014, bank profitability registered an atypical behavior, bank profit being eroded by the cost of provisions for non-performing uncollectible loans, which, on the one hand, generate financial loss, and on the other hand, lead to an increase in the quality of assets.

In 2019, there is a slight decrease in profitability rates, against the background of the tempering of the rise of economic activity as well as the presence of a climate of uncertainty at the global level. In 2020, in the context of the outbreak of the COVID-19 pandemic, the degree of economic uncertainty increases, risk aversion increases, and banking profitability indicators again register slight decreases: ROA decreases by 0.3%, while ROE is lower by 3.5%.

The last three years analyzed (2021-2023), although they were marked by a series of events, such as the COVID 19 pandemic, the outbreak of the war in Ukraine, the energy crisis and the considerable increase in the inflation rate, did not decisively influence the levels of banking performance in Romania. It is surprising that the banking system was able to successfully mitigate these shocks and registered a positive evolution of profitability indicators and solvency indicators (the latter shows a slight decrease in the first quarter of 2023).

In conclusion, the analysis of the performance of the Romanian banking system in the reference period (1990s-2023) cannot ignore the macroeconomic context, the legislative changes, the political and structural changes, the national and international context, the financial and health crises, all of this influencing bank profitability and their management in various situations. Thus, since the 90s, the performance of credit institutions has had an uneven evolution, marked on the one hand by internal banking factors and the way they are managed, and on the other hand, the major influence is given by the evolution of the economy in general, as well as changes in the regulation of the banking system.

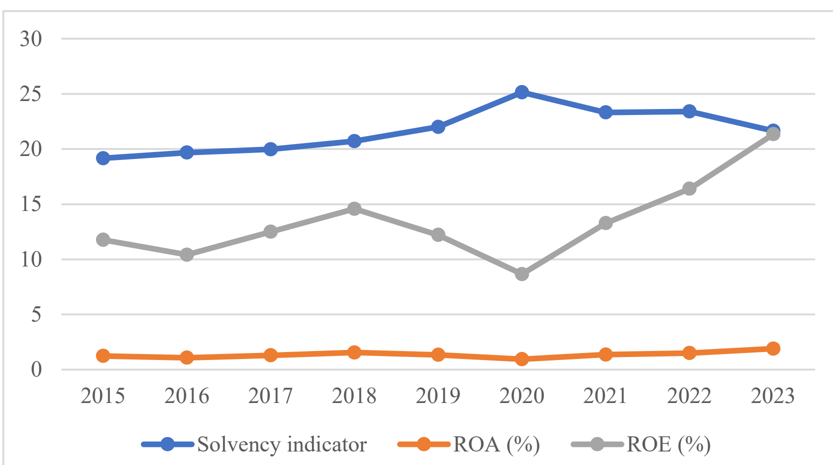

Figure no. 1. Dynamics of profitability and solvency in the Romanian banking system, 2015-2023

Source: IMF - Global Financial Stability Report, 2023

Conclusions

Although at the end of 2021, national economies seemed to be on the road to post-pandemic recovery, they experienced new challenges with the beginning of 2022, given high levels of inflation, the energy crisis and geopolitical tensions in Eastern Europe, amid the war in Ukraine. In March 2023, the bankruptcy of two banks in the United States of America and a state-backed banking merger in Switzerland generated concern and reactions from financial markets.

Financial stability is in question, large increases in raw material and energy prices are evident, periods of high inflation do not seem to end soon, and the aforementioned geopolitical conflict is protracted and has an impact on economic development, even stronger than initially expected analysts.

Uncertainties and a high degree of risk characterize the current economic situation, both nationally and internationally. Resilience, robustness and soundness of banking systems have been and continue to be among the most discussed topics in the literature in recent years, given the vital role played by banks in today's financial systems. It is understandable the wide interest of the banking literature, within which the definition and measurement of performance comprise prolific and at the same time, dynamic segments.

Barely recovered after a few years from the financial crisis of 2007, banks are now forced to implement prudential regulations and often rigid normative accounting frameworks, to set up adequate tools to maintain their viability in increasingly volatile markets and to oscillate in a world of informational asymmetry and moral hazard, strongly impregnated by digitization, the transmission of information at the speed of light and implicitly, generating risks to banking stability.

Banking performance cannot be missing from the stability of banking systems, and banks are acutely aware that banking performance markers influence the decisions of various categories of stakeholders (potential investors, customers, creditors, etc.), are of high interest to capital owners and are closely monitored by the authorities of banking supervision. In such an "impossible trinity", performance requires adequate identification, quantification, monitoring and mitigation tools for bank management.

The importance of accounting information in the management of banking performance derives from the technical processes of determining, evaluating and monitoring banking performance, which makes them susceptible to misrepresentation operations, application of creative accounting reasoning or even fraud. The relationship of accounting with bank performance does not yet appear to benefit from an extensive stream of publications, and scientific attention to the topic requires rigorous studies that clarify potential inter-conditionalities, causal relationships and interferences.

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