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SOME CHALLENGES TO FINANCIAL STABILITY DURING THE ECONOMIC DOWNTURN

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Abstract
Financial stability issues, arising during the COVID-19 pandemic and the ongoing conflict in Ukraine, have affected the problems of financial market instability: interest rates of commercial banks started to rise, inflation increased, affecting consumer solvency issues, the need for bank financing and investment opportunities decreased, part of the staff was lost, labour supply decreased, productivity declined due to emerging economic stabilisation problems. Financial stability cannot be achieved without effective operation of the financial system, which is explored in this article, based on the evaluation models of financial stability. These models illustrate the integral relationship between the impact of individual factors and the effects on the interest rates of commercial institutions, the impact of interest rates on household financing, and the assessment of the interaction between interest rates and inflation. The assessment of financial stability takes into account the performance, liquidity, solvency, and evaluation of adverse conditions of banks as financial institutions.
KEY WORDS: Financial stability, interest rates, assessment under adverse conditions, bank activity.

Introduction

With the Russian war continuing, high inflation, and central banks tightening monetary policy, the country's economy is growing slowly. Therefore, it is projected that the Lithuanian economy will grow by 1.3% in 2023. With tightening financing conditions and prevailing uncertainty, the financial cycle in Lithuania shifted to an economic slowdown phase since the end of 2022. This is clearly reflected in the significant deceleration of lending to households and businesses in the environment of rising inflation. As the financial cycle slows down, lending to firms in the manufacturing sector, which is sensitive to economic downturns, such as construction, tourism services, logistics, and trading businesses, slows down the most. Decreased economic activity in the country, continued high uncertainty, and a changed interest rate environment in conjunction with declining loan demand indicate that the credit cycle will remain in a decelerating phase for some time. As the research shows, the level of non-performing loans in the country's banks reached a low level in 2022. On the other hand, however, the study shows a new trend in the banking sector, where commercial banks are experiencing unexpectedly high profits due to the accumulation of high profitability and rising interest rates, which is projected to increase profits by up to a factor of 3. Therefore, the Government recommends that commercial banks establish a solidarity tax. The results of stress testing of banks under adverse conditions indicate that the banking sector has accumulated substantial capital reserves and is capable of withstanding even highly adverse economic scenarios, covering a decrease in deposits by about 40% with the available liquid assets (Financial Stability Review, 2023, Bank of Lithuania).

Many authors have examined the impact of financial stability on economic activity, inflation, the foreign exchange market, or the interaction of profitability and risk. When assessing financial stability and its impact on economic activity, in this study, we rely on the views of prominent authors, including Schinasi, Hauben bei Kases (2004), Morris (2010), Albulesen (2008), Morales ir Estrada (2010), Maliszewski (2009), Serbanescu (2022), Shehzad, Xiaoxing, Bilgili, Kocak (2021), Pulawsko (2021), Bessler, Vendrasco (2022), and others, who have analysed financial stability from various perspectives.
In the article, the authors specifically examine the challenges to financial stability in the context of economic stability and the impact of commercial banks.
The following questions are raised in the study:

1. The essence of financial stability and assessing its impact on economic activity
2. Assessing the challenges of financial stability in different economic activity periods.
3. Conducting an assessment of the impact of bank activity on the sustainability of the financial system.

The situation related to the Russian war has had a particularly sharp impact on energy prices, the rise in which has led to higher inflation, reduced consumer purchasing power and negatively affected the country's economic growth and unemployment, had a negative impact on financial stability. As the interest rate rises (the US Federal Reserve interest rate fluctuates between 5-5.25%, the Bank of England's interest rate is set at 4.25%, and the EURIBOR rate reached 3.9%), the continued high level of liquidity in the euro area financial system has a positive impact on banks' profitability, but the change in monetary policy direction causes some tensions in financial markets.

Uncontrollable interest rate risk and the failure of several banks in the US had a significant impact on financial stability, leading to corresponding corrections and large-scale turbulence in the financial sector worldwide.

Theoretical background

From a theoretical perspective, financial stability is an integral part of the financial system, which includes institutions such as banks, insurance companies, stock exchanges, and others, performing the fundamental function of lending between borrowers and lenders. On the other hand, elements of the financial system also reflect the stability of the functioning system: lending conditions, restrictions, the possibility of risk, monetary policy that affects the scale of economic growth. And very important (Schinasi, G., 2004), useful principle is that financial stability not only implies that finance adequately fulfills its role in allocating resources and risks, mobilizing savings, and facilitating wealth accumulation, development, and growth; it should also imply that the systems of payment throughout the economy function smoothly (across official and private, retail and wholesale, and formal and informal payments mechanisms). This requires that fiat (or central bank) money—and its close-substitute, derivative monies (such as demand deposits and other bank accounts)—can adequately fulfill its role as the universally accepted means of payment and unit of account and, when appropriate, as a (short-term) store of value. In other words, financial stability and what is usually regarded as a vital part of monetary stability overlap to a large extent. A third principle is that the concept of financial stability relates not only to the absence of actual financial crises but also to the ability of the financial system to limit, contain, and deal with the emergence of imbalances before they constitute a threat to itself or economic processes.

Allen, Chui, and Maddaloni (2004), examining the financial system structures of European, US, and Asian countries, point out: 1) efficiency of the financial system; 2) stability of the financial system; 3) channels of monetary policy transmission. These conceptual approaches to the structure of the financial system have been confirmed in scientific studies by foreign authors. D. Hendricks, J. Kambhu, P. Mosser (2007), E. Cerutti, C. Claessens and P. McGuire (2011), A. G. Halande and R. M. May. (2011), L. Allen, T. G. Bali and Y. Tang (2012) and G. N. F. Weis, S. Neuman, D. Bostandzic (2014). The authors agree that the sustainability of the financial system and the related economic situation arise when operational problems in one commercial bank affect the activities of other commercial banks, and such problems go beyond the external borders of one country and start to spread globally, affecting the entire financial system. Their arguments are supported by the Bank of Lithuania (2008, 2009, 2011) and national authors such as V. Deltuvaitė (2009), E. Martinaitytė, A. Keleras, V. Katkus, and G. Nausėda (2012), and by T. Ambrasas (2014). The problems of the financial system mentioned above become especially relevant in different phases of the economic cycle, such as recession or crisis. Conceptually, there has been a prevalent view among researchers and practitioners regarding the liquidity aspect of the financial system. The negative correlation between liquidity and profitability was confirmed by P. Vadova (2011). According to A. Lileikienė and A. Likus (2011), in order to maintain the required liquidity level, commercial banks had to optimise the number of short-term loans, which is not profitable due to low interest rates. This means that the negative relationship between liquidity and profitability has been confirmed throughout the evolution of commercial banking. Therefore, according to the researchers, compliance with the new liquidity coefficient requirement not only determines the "cleaning" of commercial banks from "bad" assets and liabilities but also the potential insolvency of commercial banks in case of non-compliance. The latter perspective is confirmed by foreign authors. P. J. König (2010), R. A. Nowak (2011), P. Legland (2012), J. M. Liang (2012) and F. Housa (2013). According to these authors, the effectiveness of the convergence of the liquidity ratio for the sustainability of the financial system is not yet clear. R.A. Nowak (2011) argues that the new liquidity ratios are likely to be an ambitious project that may not deliver the desired results. In contrast, P.J. König (2010), P. Legland (2012), J.M. Liang (2012) and F. Housa (2014) highlight another problem with the new regulatory ratio: the most profitable assets are the riskiest, but their liquidity is low, and commercial banks tend to allocate assets to yield higher returns to ensure the profitability of their operations, and the new liquidity ratio requirement obliges banks to form a "buffer" of "good" liquid assets. Recently, certain developments in the activities of commercial banks have not proven successful and have contributed to ensuring the financial stability of banks amidst economic instability.

Pulawska (2021), in her examination of the consequences of economic crises on financial stability, emphasises that this leads to a negative impact, resulting in a decrease in the profitability of assets. Elnahass, Trink and Li (2021), through the analysis of the financial performance and risk indicators of banks around the world, argue that the outbreak of the pandemic crisis caused significant damage to the financial stability of banks, which in the course of the investigation revealed bank defaults, high liquidity and asset risks.

The challenges of financial stability during the crisis were examined by Rababak, Al-Haddad, Sial Chunmei and Cherian (2020), who in the course of the study found out the generalising financial performance of Chinese exchange companies, especially small and medium-sized ones, using the OLS (Ordinary least squares) method.

The authors of the article relied on hypothetical statements to substantiate their research, based on the correlation between the interest rate's influence on the loan portfolio, the assessment of the dependency between the loan portfolio of banks and household consumption, and the correlation between the banking system and state debt.

Research methodology and research organisation

In the course of the research, in order to identify deeper factors influencing the quality of the loan portfolio, the interconnection situations of 3 groups were formulated. To determine the influence of factors, two hypothetical statements were made for each situation. In the course of the research, the method of pair correlation analysis was used, allowing to assess the strength of the relationship of factors. In the First situation - interpendence between Lithuanian banking system's loan portfolio and public debt developments, exists the weak link. On the second situation - Interpendence between Lithuanian banking system's loan portfolio and housing price, when show analyses, exists very strong link. And in the III situation - Interpendence between Lithuanian banking system's loan portfolio and interest rate changes, exits strong link (table 1).

Table 1

Situation	Pair correlation analysis hypothesis	Results	Conclusion
Situation I : Interpendence between Lithuanian banking system's loan portfolio and public debt developments	H_0: Interpendence between Lithuanian banking system's loan portfolio and public debt developments the statistical link does not exist; H_1: Interpendence between Lithuanian banking system's loan portfolio and public debt developments the statistical relationships exists;	r_{X1Y} =0,375 $t_{fakt.}$=2,809 $t_{teor.}$=2,074 Because2,809>2,704, tai H_0 rejected.	Interpendence between Lithuanian banking system's loan portfolio and public debt developments exist the weak link
Situation II: Interpendence between Lithuanian banking system's loan portfolio and housing price	H_0: Interpendence between Lithuanian banking system's loan portfolio and housing price changes the statistical link does not exist; H_1: Interpendence between Lithuanian banking system's loan portfolio and housing price changes the statistical relationships exists;	r_{X6Y} = 0,907 $t_{fakt.}$= 9,609 $t_{teor.}$= 2,074 Because 9,609>2,704, tai H_0 rejected.	Interpendence between Lithuanian banking system's loan portfolio and housing price changes the exist very strong link;
Situation III: Interpendence between Lithuanian banking system's loan portfolio and interest rate changes	H_0: Interpendence between Lithuanian banking system's loan portfolio and interest rate changes the statistical link does not exist; H_1: Interpendence between Lithuanian banking system's loan portfolio and interest rate changes the statistical relationships exists;	r_{X7Y}= -0,772 $t_{fakt.}$= -5,432 $t_{teor.}$= 2,074 Because |-5,432|>2,704, tai H_0 rejected.	Interpendence between Lithuanian banking system's loan portfolio and interest rate changes exist strong link;

In assessing financial stability, the study draws attention to lending trends and indebtedness. Borrowing trends increased significantly until the second half of 2022, at approximately 11.7% annual rates. However, the rise in the ECB base interest rates from the beginning of 2023 triggered a slowdown in the loan portfolio, although Lithuania, compared to EU countries, maintains a high position in the borrowing process, as shown in Fig. 1. Dynamic changes in the loan portfolio in the EU countries are shown in Figure 1. According to the study, the largest changes in the loan portfolio in 2010 –2022 were in the following European Union countries, such as Finland, Poland, France, Portugal, Hungary and Lithuania. Fig.1.

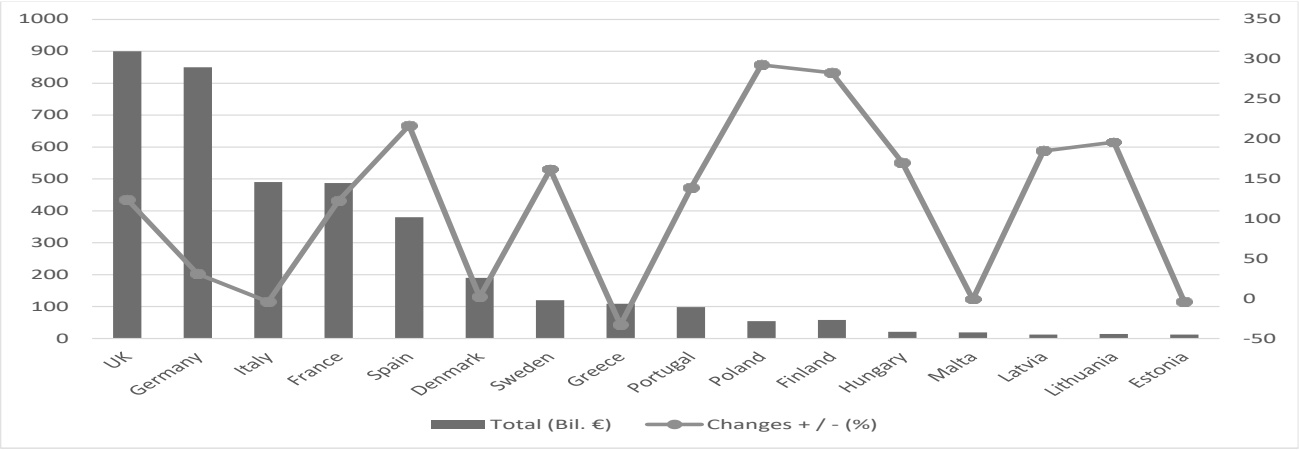

Fig.1. Dynamic changes in the loan portfolio in the EU countries (%)

In Lithuania, a significant part of the loan portfolio, about 43%, consists of loans granted to households – for the purchase of housing. The volume of loans to households grew until the beginning of the crisis period in 2008. With the onset of the crisis, lending to households became restricted by commercial banks, and as the study shows, in the structure of the loan portfolio, lending to households in 2010 –2023. gradually decreased (Fig. 2).

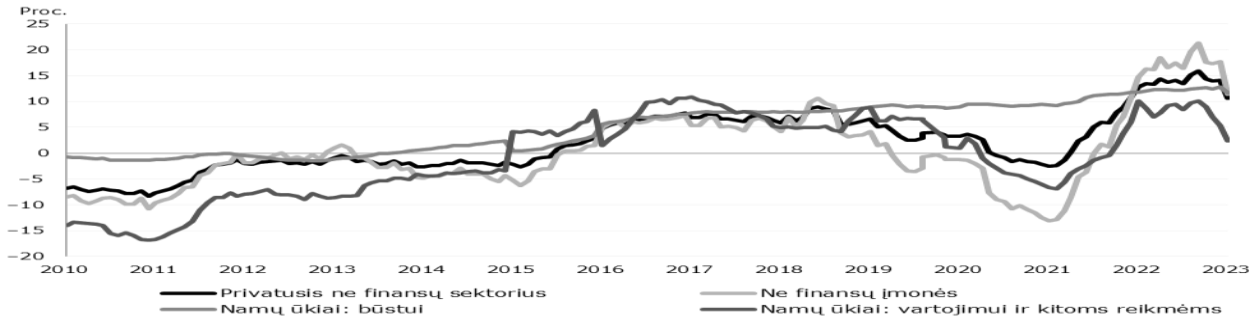

Fig. 2. The loan portfolio for the housing dynamic changes 2010–2023 (mln. €)

In the course of the research, relevant trends revealing financial instability are observed in the context of economic changes. In a period of economic growth, lending has taken place under simplified conditions, which triggered an "economic overheating" in 2008, and the financial crisis has affected the quality of the loan portfolio. 27 percent the loan portfolio was devastated by insolvent loans. In analyzing the quality of the loan portfolio, the largest share of insolvent loans was accounted for by loans to businesses and in period 2022-2023 year. (Fig. 3).

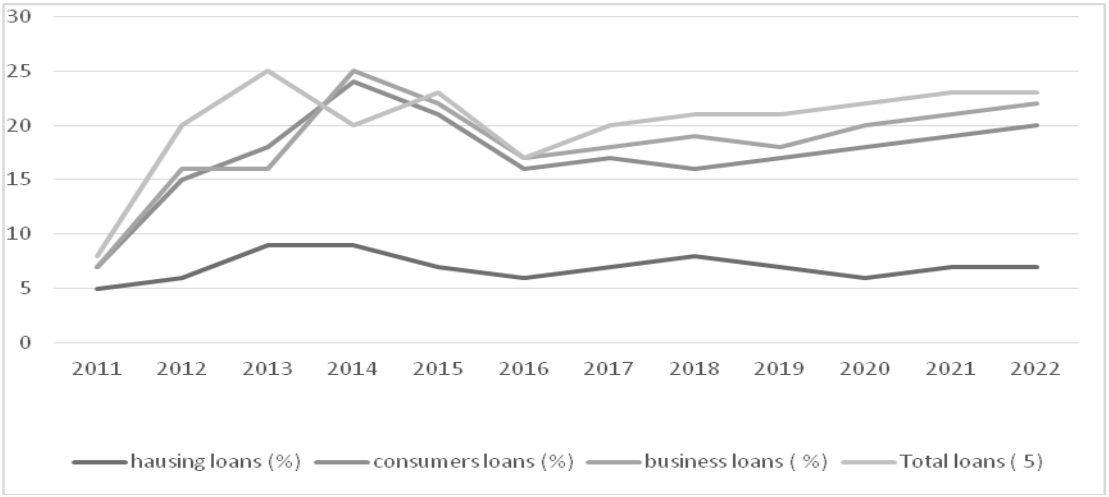

Fig. 3. Non-performing loans in the total loan portfolio (%)

The economic situation has influenced the factors that contribute to financial stability. Analyzing the factors that influenced the insolvency of business enterprises, even 61 percent. consisted of the incorrect assessment of

the competitive environment, 22 percent – problematic business administration, 6 percent – inadequate financial management, the inability to service the loan and 5 percent – conscious business disruption (table 2).

Table 2

Insolvency reasons characterization	Inadequate financial management,	The inability to service the loan	Incorrect assessment of the competitive environment	Problematic Business administration	Conscious business disruption
of all insolvent companies (%)	6	6	61	22	5

With the tightening of the ECB's monetary policy and economic uncertainty in recent years, financial institutions have notably witnessed a slowdown in financial activity.

Discussion and Conclusions

Still high inflation, stricter financing conditions, and reduced trade prospects continue to hinder the country's economic growth, reducing economic growth rates to 3.6%. This was mainly influenced by a noticeable reduction in the activities of the industrial, transport and retail sectors. Analysing the decreasing trends, the reasons for the slowdown are evidently noticeable, such as tightening financing conditions, imposed international trade sanctions, and reduced foreign demand for Lithuanian-origin goods or services in countries like Poland, Germany, the Netherlands, and Latvia. With changes in financing policies, companies become more vulnerable. A business entity is considered vulnerable when, during an economic or financial shock, it becomes unprofitable, lacks surplus liquidity, and typically has negative equity. The most vulnerable businesses may result in job losses. According to NACE, the most vulnerable sectors during economic downturns include accommodation, trade, and entertainment activities.

As research results indicate, changes in household consumption, primarily the increase in mortgage payments, have a significant impact on financial stability. This interdependence is interconnected – individuals working in the transportation and trade sectors are the most vulnerable, with expected losses from mortgage loans. This can be explained by the high vulnerability of transport companies and the likelihood of employee insolvency in these sectors.

Transitioning from an environment of low-interest rates to one with steadily increasing interest rates can lead to financial market instability, especially when associated with the activities of bankrupt US banks in the spring of this year. Although major banks such as AB SEB Bank and Swedbank did not perceive increased risk in their banks, this was directly influenced by large amounts of capital and liquidity reserves of commercial banks.

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