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MANAGING FINANCIAL THREATS IN THE CONTEXT OF SOCIAL RESILIENCE: A CASE OF THE BALTIC STATES*

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Abstract. Since regaining independence from the Soviet Union, the Baltic States have faced many challenges and threats, such as financial instability, energy dependence, high levels of emigration, and, more recently, illegal immigration from third countries, encouraged by Belarus, the war between Ukraine and Russia, etc. The dynamic nature of socioeconomic situations, especially during crises such as pandemics and natural disasters, thus affects a country's resilience. The paper aims to estimate indices for social and financial resilience. The paper employs expert assessment, SAW, and correlation methods. The research focuses on filling in the resilience theory gap while focusing on financial and social issues. It has been noted that scientific literature lacks financial and social resilience integration. The research provided an alternative measurement of financial and social resilience. The results showed that financial resilience has been more unstable than social resilience. The decline in financial resilience contributes to external shocks such as the Russian–Ukrainian war and the COVID pandemic. Both financial and social resilience have declined during the period of 2020–2021. Hence, there is no correlation between financial and social resilience in the Baltic States.

Keywords: financial security; financial security challenges; threats to national financial security; international financial security; Baltic States

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1. Introduction

Social resilience regarding financial risks is a significant research domain, especially as communities and individuals encounter escalating economic difficulties. Financial threats may originate from diverse causes, such as economic recessions, unforeseen expenditures, and systemic financial crises (Verma & Chattarje, 2025). The capacity of individuals and communities to endure and recuperate from these dangers is profoundly affected by their financial resilience, which includes access to resources, financial literacy, and social support networks.

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In the current climate of global instability and uncertainty (He et al., 2024), the emergence of new challenges, hazards, and threats amplifies the significance of a nation's financial security and social resilience as essential prerequisites for the existence and advancement of an independent, sovereign state (Wang et al., 2025). A nation's financial security is vital for sustainable development and enhanced competitiveness (Bayai & Ikhida, 2018). It indicates a nation's fiscal well-being and capacity to endure economic adversities, maintain the stability of its payment and settlement systems, and counteract the destabilising impacts of global financial crises and foreign influences (Saule & Yessentay, 2018). Terms like 'challenge', 'threat', and 'danger' frequently arise in the examination of financial security, as the financial systems of nations in a globalised context are perpetually vulnerable to diverse shocks (Sethi, Mahadik, 2025; Reznik et al., 2020). Economic conditions and safeguards against financial security threats and difficulties determine a society's stability and effectiveness. The correlation between financial stability and social resilience is undeniable. Financial instability, originating from internal or external causes, can significantly impact a nation's security. A debilitated financial system can hinder a nation's economic progress, impair the provision of vital public services, and damage community support systems (Cavallaro & Villani, 2024). Consequently, it leads to political and social instability.

In contrast, robust financial security can augment a nation's capacity to safeguard its communities' interests, provide support, and respond adeptly to emerging dangers. Salignac et al. (2019) characterise financial resilience as the ability to withstand and recuperate from financial disruptions, highlighting the significance of income, savings, and credit access. Kass-Hanna et al. (2022) support this viewpoint, asserting that inclusive financial institutions enable vulnerable communities to save, borrow, and mitigate risks, thus improving their resilience. Effective management of financial resources is essential for individuals and families with economic difficulties since it directly influences their ability to address financial risks. The significance of the research topic pertains to the need for a more in-depth examination of the theoretical and practical aspects of financial security concerns and dangers; nevertheless, despite advancements in this area, numerous issues remain unaddressed. This renders the research on this subject both pertinent and opportune. The research objective is to assess societal resilience and the interconnections of financial concerns. Therefore, financial and social resilience alternative indices have been estimated. The paper is divided into four sections for methodological purposes. The initial section is dedicated to the literature review. The second section delineates the data and methodologies employed. The third presentation yields the outcomes of the findings. The fourth section summarises the research.

2. Literature review

2.1. The concept of social resilience

Social resilience is characterised as a strategy for alleviating risk and uncertainty. Jermalavičius et al. (2018) define social resilience as the resilience exhibited by a society. It pertains to the country's capacity to sustain societal cohesion against foreign and internal challenges stemming from socio-political changes and/or violent disruptions. Balžević (2021) delineates a complex concept of community. She asserts that "a community is a socioeconomic ecosystem operating within a designated geographical area, characterised by a common structure of resources, service systems, governance, and a distinct socio-cultural identity." Cultural components define a society's individuality and are more difficult to identify using conventional data methods. This definition of community corresponds with the Law on Local Self-Government of the Republic of Lithuania (effective 1 April 2023), which equates a municipality with a community. However, a community's unique characteristics, such as its identity or association with a specific religious organisation, may surpass the legally defined geographical boundaries.

A resilient community adjusts to unexpected disturbances. There are three categories of social resilience. The first is characterised by its adaptability to change and its maintenance of the status quo. The second is characterised by gradual adaptation or slight alterations. The third is characterised by adaptability and openness to change. The third category of resilience has demonstrated the greatest efficacy in research. Taneja et al. (2025) identify three attributes of social resilience: coping ability, adaptive capacity, and transformative capacity. In the previous situation, communities can withstand and overcome adversity. Secondly, society can extract lessons from historical experiences and adapt to impending challenges in everyday life. Thirdly, communities can create institutions that improve individual well-being and promote enduring societal resilience.

to future disasters. The intricacy of social resilience illustrates the interaction of the individual, the community, and the social milieu (Poznanski, 2024), especially when societal changes correlate with the determinants of cultural identity and when social transformations, nationalist feelings, and cultural adaptations transpire. Community solidarity and mutual support are essential components of social resilience. Communities with strong interpersonal connections typically respond more rapidly and effectively to crises due to their need for social support and assistance. In the context of social resilience, social capital denotes the social connections or networks that provide essential resources and empowerment, assisting households in navigating obstacles and dangers or leveraging social support opportunities (Mei et al., 2021).

Haynes et al. (2023) underscore the importance of social support and distinguish between its functional and structural components. Functional components comprise emotional support (e.g., comfort, empathy), instrumental help (e.g., aid with material needs), and informational support (e.g., personal guidance) offered by others. Social relationships constitute a fundamental element of social support. Social capital is established through the cumulative value of these social connections. Collective agency and community belonging, encompassing participation in community life via social ties and networking, are regarded as key determinants of a community's involvement, adaptation, and resilience to external influences and disruptions (Pooyan & Hokugo, 2025).

A more integrated society enhances the overall resilience system, as everyone can contribute to the common good. Social institutions, including families, churches, and educational entities, foster social resilience among youth. They assist youth in surmounting adverse influences and enhancing their resilience. The interrelationship between sleep and stress management (Bush, 2022), positive thinking, self-awareness, and stress management capabilities (Lei et al., 2022), enhances an individual's physiological and psychological resilience. Furthermore, individual resilience is influenced by interpersonal interactions, a supportive work environment, and social support.

Authentic research indicates that psychological resilience regulates the association between life satisfaction, depressive symptoms, and happiness (Chang et al., 2023). Certain studies (Hart et al., 2016) contend that resilience strategies should encompass the alteration or transformation of systemic difficulties, including societal stigma and mental health challenges. Resilience is the ability to overcome adversity while potentially modifying or significantly transforming elements of that adversity. Meanwhile, vulnerability is inherent in social systems before catastrophes, influencing exposure to risk and harm. At the same time, resilience pertains to the factors that enable social systems to absorb, manage, and adapt to hazards and disasters.

Access to healthcare, education, social safety, and other vital services enhances social resilience by equipping individuals and communities to prepare for and respond to changes and difficulties effectively. Consequently, social resilience policymaking has concentrated on strategies to improve societal resilience during health crises. Economic prospects, including employment, income, and social safety systems, significantly influence individuals, as they are more susceptible to vulnerability in poverty or economic instability conditions. Discrimination, social exclusion, and inequality undermine resilience by marginalising specific populations who may lack crucial resources and support (Yıldırım et al., 2025).

Public institutions that deliver social services, crisis intervention, and long-term resilience strategies are crucial in fostering social resilience. Likewise, the stability of the legal and political system is vital as it offers legal protection and guarantees equitable resource distribution. Community networking and institutions positively influence resistance to natural disasters, including earthquake hazards. Ultimately, robust community identity and social connections facilitated by social media can enhance social capital and community resilience. A resilient community guarantees that all members, irrespective of their social or economic status, receive support and the opportunity to make significant decisions.

2.2. Financial threats and security system

International financial security is a broad term that includes many things that affect a country's ability to be financially stable and trade with other countries (Vasylieva et al., 2020). To get a complete picture of foreign financial stability, you need to look at it from different points of view. International financial relations are based on a system of interconnected parts. These parts include the external economic and financial security of each country's economy, the financial security of major economic and legal coalitions and alliances (like the European Union, OECD, BRICS, and the Russia-Belarus-Kazakhstan Customs Union), and the ability to respond financially to major short-term trends and global threats. The financial health of every country is affected by international financial security. An important part of a country's economic security is its ability to keep its finances stable. Other studies emphasise that financial security is when the financial and credit sector is stable, can handle bad things from inside and outside the country, and can help the national economy work well and grow (Reznik et al., 2020). This definition only describes one part of a country's financial security. Threats to a country's financial security make it harder or impossible to reach its economic and financial goals (Apergis, 2019). Threats to a country's financial security are very unstable, varied, and, most importantly, hard to predict because the financial system can be affected by changes in the economy and government of other countries. Even if things are going well and you know a lot about your country's interests, you still need to think about the unpredictable things that could cause risks when looking for threats to financial security. The country's leading financial and economic goals are to make the financial system more efficient, be the major regulator of market interactions, keep a closer eye on inflation, attract foreign investment, and make the laws more consistent and fair.

2.3. Aspects of financial security and risk management in the Baltic States

In the last thirty years, the Baltic region has undergone significant economic advancement and a reorganisation of its financial system. The Baltic States have successfully transitioned from a centrally planned Soviet economy to market economies, ultimately attaining full membership in the European Union, the eurozone, and the banking union. This transformation has encountered significant challenges, necessitating substantial modifications in economic development, reforms, and expenditures for all stakeholders in the financial system.

An essential condition for sustainable growth, important for a nation's economic transformation, is public agreement on accepting unavoidable adversity. The Baltic States have enacted significant reforms in the financial sector during their transition to a market economy, which, alongside liberalising the financial system, have involved establishing institutions, competencies, markets, instruments, and legal and regulatory frameworks. In this phase of financial liberalisation, before establishing a robust, market-oriented financial sector, all three experienced banking crises (McNaughton, 2024). Foreign bank ownership provided expertise, legitimacy, and capital from the primary corporate entities. Before the euro's adoption, the Baltic States anchored their currencies to the dollar and subsequently to the euro, resulting in little exchange rate volatility. Public debt levels in the region conformed to the Maastricht criteria. Concurrently, dangers have been escalating inside the banking industry. The competitiveness of enterprises in the tiny, open Baltic States diminished progressively as real exchange rates increased, real estate markets exhibited overvaluation, and banking sectors relied on the financial stability of foreign parent companies (Buch et al., 2024).

Further, economic transformations have profoundly affected real wages and labour markets. Consequently, the Baltic economies have enhanced their competitiveness and initiated a sustained transformation in the real economy. Unit labour costs have decreased throughout all Baltic States, but via various causes, including reduced nominal pay, increased productivity, and workforce reductions (Blanchard et al., 2013).

The Baltic economy experienced a significant recession from 2008 to 2009. Estonia, Latvia, and Lithuania had economic declines of 18%, 21%, and 12%, respectively (Staehr, 2015). Consequently, unemployment surged markedly, reaching 15-20% in 2010 (IMF 2024). In response to the crisis, the Baltic governments instituted a series of economic reforms. To alleviate the impacts of the crisis, the Baltic governments enacted structural changes, encompassing fiscal contraction and labour market deregulation. Notwithstanding government intervention, the banking sector saw challenges stemming from a rising amount of non-performing loans (NPLs), as a significant number of individuals failed to fulfil their loan obligations, resulting in severe

complications for the banking industry. The non-performing loan ratios have increased to 20% in Latvia and Lithuania, and 5% in Estonia (Baudino et al. 2022).

The significant presence of other Nordic banks necessitates meticulous coordination and oversight among nations. The Nordic-Baltic Macro-prudential Forum, founded in 2011, primarily facilitates cooperation on banking regulation and macro-prudential policy in the Nordic-Baltic region. The Nordic-Baltic Stability Group, founded in 2010 to enhance cooperation and readiness for potential financial crises, consolidates financial institutions. The Baltic financial industry is more bank-centric compared to other European nations. Financial institutions are essential to their economies (Pataccini, et al., 2019). The Baltic States, like other European nations, are diligently enhancing the resilience of their financial institutions against cyber-attacks and enacting rigorous measures to prevent money laundering. The European banking authorities, particularly the ECB, are essential for maintaining the stability and security of the financial industry.

2.4. Social resilience response to financial threats in the Baltic States

Social resilience regarding financial dangers denotes the capacity of individuals, communities, and organisations to endure and recuperate from financial disruptions, including economic recessions, unemployment, or unforeseen expenditures. This resilience is widely acknowledged as essential to comprehensive community welfare and economic stability. Comprehending the mechanisms that foster financial resilience can guide the development of policies and programs designed to bolster communities' ability to withstand financial risks. The Baltic States—Estonia, Latvia, and Lithuania—have had various financial difficulties, including the global financial crisis of 2008 and the economic repercussions of the COVID-19 pandemic. Aidukaite et al. (2021) observe that the Baltic States have experienced substantial transformations in their social policy frameworks since regaining independence in the early 1990s, especially under economic crises. Following the dissolution of the Soviet Union, the populace encountered economic hardships, corporate insolvencies, unemployment, national instability, and the emergence of criminal organisations. During a crisis, individuals experience significant emotional and psychological effects, characterised by elevated tension, worry, and anxiety. Psychosocial issues have emerged as an issue for all communities. Certain community members experienced an inability to cope, resulting in stress, unhappiness, and suicidal ideation. Lithuania has consistently held the highest suicide rates in Europe for many years. As of the second decade of the 21st century, the Baltic States have the highest suicide rate inside the European Union. Lithuania's suicide rate, expressed as a proportion of total deaths, is notably significant, being twice the EU average. Consequently, the Baltic States enact initiatives to promote mental health.

In Lithuania, even seven psychological helplines have been created. In the Baltic States, diverse initiatives are being executed to enhance employment, entrepreneurship, or education. Nevertheless, these are insufficient. Consequently, the communities lack sufficient information regarding strategies to tackle economic and social issues or harbour distrust and frustration towards the institutions. This indicates that the social resilience of communities in the Baltic States is inadequately developed. Conversely, it is noteworthy that the Baltic States reacted to the COVID-19 epidemic with greater promptness and efficacy, leading to a comparatively low mortality rate in contrast to other EU nations.

Financial literacy, which includes having the knowledge and skills to make sensible financial choices, is essential to being financially resilient. Kass-Hanna et al. (2022) say that financial literacy and inclusion are important for providing people, especially those from disadvantaged groups, the power to save, invest, and protect themselves from financial risks. At the same time, Lithuanians' knowledge of funds has dropped by more than 20%, making it below the average of 39 other countries. The Financial Literacy Centre of the Bank of Lithuania (2024) started a study on financial literacy in Lithuania. The method used was created by experts from the Organisation for Economic Cooperation and Development (OECD). Lithuania last took part in an international study like this in 2015. In our country, financial literacy decreased from 62 points in 2015 to 56 points in 2018. Only 23% of people who answered the survey in Lithuania have reached the basic level of knowledge, at least 70 out of 100. Poor financial literacy is seen in people with lower incomes and less schooling and people under 30 and over 60 years old. A slight difference exists between men and women: women are less likely to be literate. This shows that Lithuanians are not responding well enough to financial threats. People who know much about money can better deal with problems and make smart choices that stabilise their finances.

It is also important to have the idea of financial robustness, which means being able to handle operational risks and adapt to changing circumstances.

Financial robustness, as indicated in the literature, encompasses the establishment of contingency plans, adherence to regulations, and the capacity to manage financial shocks proficiently. This resilience is crucial for organisations, as it allows them to sustain stability and persist in operations despite unfavourable financial circumstances. The effects of financial shocks on households have been thoroughly examined, especially regarding the COVID-19 epidemic. Salignac et al. (2019) characterise financial resilience as the ability to withstand and swiftly recuperate from financial disturbances, highlighting the significance of access to economic resources, financial literacy, and social capital (Sun et al., 2022). Furthermore, the role of migrants is crucial for societal resilience in addressing financial risks in the Baltic States. Rausser et al. (2018) examine the role of remittances from expatriate workers in fostering economic development in their home countries, offering a safeguard against financial crises and bolstering local economies. The influx of financial resources can strengthen community resilience by allowing people to manage economic challenges and invest in local enterprises. The broader economic situation also affects financial, individual, and societal resilience. The robustness of financial systems and institutions is essential for sustaining economic stability. Korostelkina et al. (2020) emphasise the necessity of ongoing surveillance of financial markets to evaluate their security and resilience to external disruptions. This systemic viewpoint emphasises the interrelation of individual, community, and institutional resilience against financial threats.

3. Materials and methods

The predominant studies concentrate on economic resilience, sustainability, or security concerns. Nevertheless, the evaluation of societal resilience to financial threats remains unexamined. Zaman and Vasile (2014) categorise a nation's economic resilience and economic fragility as metrics of its ability to endure and recuperate from external and internal disruptions. The scholarly literature emphasises a limited selection of principal indicators (Jermalavičius et al., 2018). These typically encompass gross domestic product as a gauge of economic activity resilience and total employment as an indicator of labour market resilience (Gleeson et al., 2020). Some scholars consider unemployment rates as an indicator of vulnerability (Zaman, Vasile, 2014). Wage income (Blanchard et al., 2013), family income (Gleeson et al., 2020), yearly business turnover (Blanchard et al., 2013), and debt-to-equity ratios (Dankiewicz et al. 2022), utilised to assess business resilience (Baudino et al., 2022), have been incorporated in various research. Social resilience refers to the ability of individuals and groups to withstand, adapt, and learn. Consequently, educational achievement is a criterion in the evaluation (Mylord et al., 2023). Mortality rates, child mortality rates, and life expectancies indicate a population's ability to access sufficient healthcare and maintain conditions conducive to a long and productive life (Chang et al. 2023). Gender equality is evidenced by the representation of women in senior and mid-level managerial roles (Šimelytė & Peyravi, 2024). The Simple Additive Weighting (SAW) method evaluates the financial and social resilience indices. SAW is a quantitative indexing methodology utilised in several studies across disciplines to provide indexes and rankings. The SAW method, as an indexing approach, assigns weights to several criteria and then combines them to produce a comprehensive index. This notion enables a methodical and organised approach to decision-making and assessment processes.

Additionally, the SAW technique has been employed in other fields, such as decision-making for paints and coatings, the development of a sustainable energy index (Ligus & Peternek, 2022), and the assessment of land fragmentation for sustainable urban regeneration (Kilić et al., 2019). It was employed to prioritise action plans in disaster management (Büyüközkan et al., 2022) and to evaluate success factors of AI applications in supply chain management (Güler et al., 2014). The SAW methodology provides a methodical and clear framework for developing indices and rankings by allocating weights to criteria and consolidating them to generate an overall score. It is a crucial tool for decision-making, assessment, and indexing methodology. It is assumed that each element possesses equal importance in bolstering or weakening a nation's resilience.

$$\sum_{i=1}^n w_i = 1 \quad (1)$$

As dimensions of the factors' measurement, they will be normalised. The following formulas are applied:

For the maximising factors:

$$x_{ij} = \frac{a_{ij}}{a_j^{max}} (2)$$

For minimising factors:

$$x_{ij} = \frac{a_j^{min}}{a_{ij}} (3)$$

Where, w_i is the weight of the factors, a_{ij} is the attribute of each criterion, x_{ij} – normalised performance rating, a_{ij}^{max} – the maximum value of the criterion; a_{ij}^{min} is the minimum value of each criterion. Further, each member of the normalised matrix of the same alternative is multiplied by its significance and added with other members of the alternative.

$$I = \sum_{i=1}^n x_{ij} \times w_i (4)$$

Due to the lack of data on some factors, the index is estimated for each year from 2014 to 2023.

Table 1. Factors and sub-factors of the proposed financial resilience index and social resilience index

Criterion	Sub-criterion	Measurement	Min or max
Financial	Progress in economy	Real GDP per capita	Max
	Circulation of cash flows	% of GDP	Min
	Credit to the private sector domestically	% of GDP	Min
	Government expenditures	% of GDP	Max
	Non-performing credits	% of all credits	Min
	Foreign capital	FDI Net inflows, % of GDP	Max
	Value added of banking sector	% of Gross added value	Max
	Households with heavy financial burden due to the housing cost	% of all households	Min
	Increase in price of goods	Inflation, %	Min
	Level of Education	Spending on education in current euros	Max
Social	Mortality rate	Crude (per 1,000 people)	Min
	Health system	Medical expenditure in % of GDP	Max
	Employment	15+, total population (%)	Max
	Gender equality	Females in senior or middle management as a share of employment in %	Max
	Internet availability	% of population	Max
	Life expectancy	Average in years	Max
	Infants mortality	Number of deaths per year	Min

Source: Authors

The dataset for the analysis has been compiled using multiple databases, including Eurostat and World Bank, focussing on financial and social factors.

3. Results

An experts' evaluation was performed to determine the weights of the criterion, which included six experts. The experts were asked to assign the weight for each sub-criterion when the sum of the weight would be equal to 1. In addition, none of the sub-criterion might be assigned 0 or evaluated in negative value (Table 2). To assess the reliability of this approach, an assessment of the consistency of the experts' opinions was carried out. The level of consistency is expressed as a concordance coefficient. A concordance coefficient of $W = 0.505$ was calculated based on the available expert judgements. The significance of the concordance coefficient is tested by calculating Chi-square = 45.4, $df=15$, $p<0.001$.

Table 2. Weights assigned by the experts

Criterion	Sub-criterion	E1	E2	E3	E4	E5	E6	Average
Financial	Progress in economy	0.2	0.15	0.2	0.25	0.15	0.18	0.18
	Circulation of cash flows	0.2	0.1	0.15	0.1	0.15	0.3	0.16
	Credit to the private sector domestically	0.1	0.09	0.1	0.1	0.1	0.12	0.1
	Government expenditures	0.05	0.1	0.1	0.05	0.05	0.1	0.07
	Non-performing credits	0.05	0.2	0.05	0.05	0.05	0.02	0.07
	Foreign capital	0.15	0.2	0.2	0.2	0.2	0.1	0.175
	Value added of banking sector	0.05	0.05	0.05	0.1	0.1	0.01	0.075
	Households with heavy financial burden due to the housing costs	0.05	0.01	0.05	0.05	0.05	0.09	0.05
	Increase in price of goods	0.15	0.15	0.1	0.1	0.15	0.08	0.12
	Total sum	1	1	1	1	1	1	1
Social	Level of Education	0.3	0.12	0.2	0.15	0.1	0.15	0.17
	Mortality rate	0.12	0.12	0.1	0.15	0.2	0.15	0.14
	Health system	0.1	0.12	0.1	0.15	0.2	0.18	0.14
	Employment	0.1	0.23	0.15	0.2	0.2	0.2	0.18
	Gender equality	0.03	0.1	0.1	0.05	0.05	0.03	0.052
	Internet availability	0.1	0.16	0.15	0.1	0.05	0.07	0.105
	Life expectancy	0.15	0.1	0.1	0.1	0.1	0.1	0.108
	Infants mortality	0.1	0.15	0.1	0.1	0.1	0.12	0.11
	Total sum	1	1	1	1	1	1	1

The progress in the economy has been articulated as the real GDP per capita. Over the past decade, Estonia had the highest real GDP per capita, averaging 16,940 EUR, succeeded by Lithuania at 14,420 EUR and Latvia at 13,245 EUR. In 2023, Estonia's real GDP per capita exceeded 18,000 EUR, whilst Lithuania's was about 1,000 EUR lower, and Latvia's was over 1,500 EUR lower.

The Baltic States have all demonstrated a current account deficit throughout the analysed period. The financial resilience index will include domestic lending to the private sector as a percentage of GDP. This ratio specifies the financial resources designated for the private sector by financial corporations that provide a repayment obligation, such as loans. By the end of 2023, Estonia's ratio increased to 20%. This ratio is significantly lower than those of neighbouring nations, such as Latvia (45.1%) and Lithuania (37.53%) in 2023. Estonia, the smallest of the Baltic States, received the highest net inflow of foreign direct investment. It represented 19.79% of the GDP, while in Lithuania, it accounted for only 4.3%.

Since 2021, inflation has significantly impacted purchasing power and the global economy. The Baltic States, comprising Lithuania (19.71%), Estonia (19.4%), and Latvia (17.4%), encountered substantial inflation relative to other EU nations. Societal considerations significantly influence economic conditions. The alternative selected ratio indicative of financial resilience is households experiencing significant financial strain from housing expenses. Between 2014 and 2023, the highest average proportion of households experiencing significant financial strain was in Latvia (26.65%), followed by Lithuania (23.1%). Conversely, in Estonia, this figure is far lower at 16%. Nonetheless, the highest number of households experiencing significant financial strain occurred in 2014-2015. Since then, this figure has diminished; in 2023, it reached merely 11% in Estonia. Financial resilience is dependent on the financial and insurance sectors. In the last decade, the banking sector's contribution to Estonia has decreased by an average of 0.93% annually, while Latvia has experienced a decline of 0.42%. The banking sector in Lithuania has consistently generated wealth, averaging an annual increase of 1.49%.

Latvia allocates 4.7% of its budget on healthcare, Lithuania 5.2%, and Estonia 6%. Life expectancy for both genders varies from 73.2 years in Latvia to 74 years in Lithuania and 76 years in Estonia; Lithuania exhibited the highest infant mortality rate at 74, whereas Estonia reported the lowest at 11. The statistics include the employment-to-population ratio, which varied from 57.16% in Latvia to 61.33% in Estonia. The representation of women in senior and middle management indicates fair career possibilities for all genders, with Lithuania

having the highest percentage of female senior and middle managers at 25%, followed by Latvia at 23%. Conversely, this figure is halved in Estonia, constituting merely 12%. Wealthy countries demonstrate a higher percentage of women in senior and intermediate management roles, reflecting more national satisfaction and heightened social cohesiveness and patriotism. Estonia's results demonstrate the highest robustness and social resilience among the Baltic States from 2014 to 2023, alongside the most significant positive financial resilience index over the entire duration. This indicates that Estonians can respond to and recuperate from financial shocks more swiftly than others.

Table 3. Estimated financial resilience and social resilience index

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Financial resilience										
Estonia	0.814	0.658	0.789	0.817	0.765	0.698	0.837	0.612	0.857	0.586
Latvia	0.453	0.788	0.704	0.727	0.764	0.764	0.298	0.576	0.774	0.621
Lithuania	0.610	0.401	0.278	0.648	0.606	0.540	0.515	0.679	0.658	0.665
Social resilience										
Estonia	0.843	0.855	0.795	0.954	0.845	0.884	0.965	0.749	0.900	0.927
Latvia	0.593	0.681	0.717	0.728	0.913	0.913	0.776	0.547	0.764	0.784
Lithuania	0.858	0.720	0.779	0.541	0.705	0.628	0.683	0.770	0.795	0.700

The findings indicate that both estimated indices have changed over the past decade. Latvia experienced the most significant decrease in financial resilience in 2020. This may be attributed to the COVID period. In contrast, Estonia and Lithuania had less adversity. In 2022, Latvia and Estonia experienced a dramatic boost, but Lithuania achieved only modest growth. Lithuania and Estonia had the most significant reductions in 2015 and 2016. The ramifications of the conflict between Russia and Ukraine in 2014 may elucidate this. The Baltic States have been significantly reliant on the Russian market. Consequently, the social resilience index has not fluctuated substantially between 2014 and 2023. This may be attributed to social indicators, such as mortality rate, life expectancy, and gender equality, which do not fluctuate as rapidly as inflation, government expenditures, foreign capital, or other financial ratios.

Further, the research focused on the interlinkages between social and financial resilience. For that reason, the correlation coefficient has been estimated. However, it was estimated that the relationship between financial resilience and social resilience is insignificant for all three Baltic States (Estonia $r=0.334$ $p=0.423$, Latvia $r=0.135$, $p=0.67$, Lithuania $r=0.276$, $p=0.32$).

4. Discussion and Conclusions

Social resilience denotes a community's capacity to adapt, recuperate, and flourish amidst adversities, such as crises, social upheaval, and environmental alterations. The Baltic States' distinctive histories, persistent socioeconomic disparities, and demographic transformations render them particularly significant subjects for examining social resilience. Social capital is a crucial element of social resilience in these nations. Financial instability and risk profoundly affect individuals, enterprises, and the nation. Comprehending these aspects is essential for tackling a nation's financial system issues. Threats to financial security denote conditions and factors that undermine the financial system, fiscal framework, banking infrastructure, and monetary supply.

The research has shown that financial and social resilience differ in the Baltic States. However, Estonia and Lithuania experienced similar trends in financial and social resilience indices. Hence, Latvia demonstrated a remarkable decline in financial resilience during the COVID period, which showed that Lithuania and Estonia have been prepared for the external shocks. These findings are partially in line with the research of Chen and Sun (2025), who claimed that financial resilience changes over time depending on the economic cycle and included ratios. Meanwhile, our research is opposite to Stevenson et al. (2020), who found the interlinkages between financial resilience and social welfare. These differences might have occurred due to the focus on different regions.

Contributions to science and practice. The analysis enhances the concept of resilience by evaluating alternative measures of financial and social resilience. These findings are essential for successfully enhancing social resilience, especially in response to shifting demographics. The results might be used to analyse the changes in financial and social resilience and the impact of fluctuations of the sub-criteria. Furthermore, the results contribute to the long-term resilience strategy of each Baltic State.

Limitations and future research. This study exclusively examines the influence of social connections and networking on bolstering social resilience against financial risks. Further research should explore psychological elements and their effects on community responses to catastrophes.

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