ENSURING THE EFFICIENCY OF FINANCIAL SUPERVISION THROUGH FEE-BASED SYSTEMS: A COMPARATIVE APPROACH

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Daniela DERMENGI

PhD student, Academy of Economic Studies of Moldova

https://orcid.org/0000-0003-2318-9208
danieladermengi@gmail.com

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SUMMARY

The article examines the role of banking supervision from a new perspective, shaped by the increasingly volatile and complex nature of financial services. Unlike most existing studies, which predominantly focus on compliance or prudential rules, this article highlights the need to transition from compliance-based banking supervision to a proactive supervisory framework that can anticipate shocks. It contributes to the scientific literature on banking supervision by redefining supervision not merely as a regulatory obligation but as a strategic investment in the long-term sustainability of the banking sector. A key innovation of the article lies in linking supervisory efficiency with sustainable funding mechanisms, qualified human capital, and technological innovation. While these elements are often discussed separately in the literature, they are rarely integrated into a comprehensive analysis. The article examines the experiences of various countries in financing banking supervision activities and assesses their impact on institutional efficiency. The study offers a new analytical perspective on how sustainable funding enhances institutional independence, strengthens resilience, and promotes economic growth. This approach opens new avenues for rethinking how supervision should be designed to remain effective in an increasingly complex financial environment.

Keywords: *banking system, Basel III, efficient banking supervision, funding mechanism, resilience, viability*

INTRODUCTION

After the 2008 global financial crisis, supervisory frameworks evolved considerably – shifting from a compliance-focused to a risk-oriented approach, from microeconomic oversight to the use of macroeconomic instruments, and from reliance mainly on quantitative indicators to integrating more qualitative assessments. The Basel III reforms introduced stricter capital and liquidity requirements to bolster resilience against shocks or crises. However, regulation alone cannot ensure the viability of a poorly managed bank. According to Dahlgren et al. (2023), „there is no reasonable level of minimum capital or liquidity that will make a bank viable if it does not have a sustainable business model and sound governance."

Agustín Carstens, General Manager of the Bank for International Settlements (BIS), stated in a 2023 speech that the root causes of bank failures originate within the institutions themselves, highlighting poor governance, inadequate risk management, and flawed business models. These vulnerabilities can be recognised through stronger supervision that allows for early detection and decisive intervention. This necessitates broader coverage and increased investment in supervisory resources. „Banking supervision must evolve to become more proactive, better resourced, and technologically equipped." (Carstens, 2023).

At the same time, the digitalization of financial services has made supervision even more urgent and complex. Mobile banking, real-time payment systems, and social media can accelerate deposit withdrawals and magnify instability, as seen in the collapse of Silicon Valley Bank in 2023. Supervisory authorities now face growing pressure to adapt by acquiring digital capabilities, developing staff expertise, and adopting real-time data tools such as Sup Tech.

Technology offers significant potential to enhance supervision effectiveness. Sup Tech tools used by supervisory authorities can automate routine tasks, perform text analysis of regulatory reports, and detect early warning signals through sentiment and network analysis. These tools were especially useful during the pandemic, when most on-site supervision shifted to remote working modes (Beerman et al., 2021).

Nevertheless, technology alone is insufficient without skilled professionals. Supervisory authorities, particularly in emerging economies, encounter challenges in attracting and retaining qualified experts in cybersecurity, data science, and financial analysis. A 2023 report by the Cambridge Sup Tech Lab revealed that although over 80% of authorities have adopted or piloted Sup Tech tools, fewer than 10% possess a clear long-term digital strategy or sufficient internal capacity. (Cambridge Centre for Alternative Finance, 2023).

These challenges are especially significant for small and emerging economies like Moldova, where supervisory bodies operate with limited resources, smaller staff pools, and rising expectations from international partners and local stakeholders. As Moldova works to align its financial sector more closely with EU standards and adopts risk-based supervision, the issue of how to sustainably fund supervisory activities becomes increasingly pressing.

A 2022 IMF Technical Note stresses that transparent and risk-sensitive supervisory fee systems are crucial for maintaining the long-term viability of financial oversight. They also aid in safeguarding the independence and effectiveness of supervisory authorities, particularly amid increasing digital and cross-border risks.

The study explores how banking supervision must evolve, not only through more innovative technologies but also through greater investment in personnel, training, infrastructure, and balanced cost recovery systems. Moldova's experience is a timely case study of the opportunities and limitations that smaller economies face in modernizing supervision under financial and institutional constraints.

The issues of supervisory efficiency and financing mechanisms have garnered increasing attention in academic and policy literature. Previous studies have examined the determinants of banks' prudential supervision financing structures (Donato et al, 2007), the influence of digitalisation and SupTech on supervisory practices (Beerman et al., 2021), and the challenges posed by resource constraints in small and emerging economies (IMF, 2022). Most contributions come from international organisations and policy institutions, with limited comparative academic analysis on how fee-based mechanisms influence supervisory efficiency, independence, and sustainability.

In this context, the present article contributes to existing literature with three objectives: (1) to analyse the evolution of supervisory practices and the challenges of maintaining efficiency amidst increasing financial complexity and digitalisation; (2) to examine the experiences of different countries in financing banking supervision activities and to assess their impact on institutional efficiency; and (3) to focus analytically on Moldova, a small emerging economy where supervisory sustainability is both urgent and under-researched, and to evaluate Moldova's potential to adopt a supervision-fee mechanism. Through these objectives, the article aims to contribute to the broader debate on how supervisory authorities can sustain both efficiency and independence in an increasingly volatile and complex financial environment.

DATA AND METHODS

The study aimed to analyze and synthesize existing literature and official sources regarding banking supervision mechanisms, particularly focusing on:

- Supervisory resources and funding models (including fee-financed supervision);
- Availability and role of qualified supervisory personnel;
- Adoption and impact of supervisory technologies (Sup Tech);
- Comparative experiences of advanced and emerging economies;
- Benefits and challenges reported in these contexts.

The study is based on a comprehensive review of secondary sources retrieved from:

- Academic and policy research articles (e.g., IMF, BIS, World Bank reports);
- Official supervisory authority publications and legal frameworks (e.g., ECB fee model, national supervisory bodies);
- Working papers and case studies on supervisory funding and operational capacity;
- Public databases and supervisory reports detailing staffing levels, budget structures, and technology use;

The comparative analysis covers a sample of the following countries: Czech Republic & Slovakia, Georgia, Netherlands, Poland, Switzerland, the United Kingdom and Moldova. These countries were selected to reflect a mix of advanced and emerging economies, diverse supervisory models, and varying approaches to fee-based financing mechanisms. Sources were selected based on relevance, recency, and coverage of both advanced and emerging economies.

In the context of this cross-country analysis, Moldova was chosen as a case study due to its specific characteristics as a small country, with an emerging economy and bank-oriented financial system. These characteristics makes it particularly relevant for examining the feasibility and the potential benefits of adopting a supervision-fee mechanism, especially in light of recent systemic shocks and the ongoing process of supervisory and regulatory reforms aimed at aligning the national framework with EU and Basel III standards.

The analysis of the Moldovan banking sector specifically covers the period from 2008 to 2024, capturing the impact of major international and domestic shocks, including the global financial crisis (2008-2009), the failures of three banks in 2014, the COVID-19 pandemic (2020), and the high inflation pressures resulting from the war in a neighbouring country. This extended period allows for a comprehensive assessment of the sector's main characteristics, enabling conclusions on the relevance and potential effectiveness of a supervision-fee mechanism in this context.

THEORETICAL FRAMEWORK

Legal frameworks provide supervisors with a broad and adaptable toolkit to identify, assess, and, if necessary, address banks' exposure to increased risks. By integrating the results from various components, such as onsite inspections, stress tests, and business model analysis, supervisors can develop an informed, comprehensive understanding of banks' capacity to manage their main risk exposures and the sustainability of their business models." (Carstens, 2023).

Supervisory assessments serve as a foundation for taking early steps to mitigate risks before they materialise. At first, ongoing supervisory discussions and persuasive communication may suffice to address concerns. If issues persist, supervisors generally have the authority to escalate their response by imposing legally binding requirements based on the severity of the identified problem. These measures may include additional capital or liquidity requirements, as well as qualitative actions aimed at enhancing governance, risk management, and the bank's overall business model. (Coelho et al, 2022). „With such a holistic and forward-looking approach, supervisors can prevent an identified vulnerability from evolving into a threat to the bank's safety and soundness" (Coelho et al, 2023).

Early identification of vulnerabilities is even more important in the light of recent events. The combination of social media and technology appears to have increased the speed at which bank runs can happen. Social media can spread concerns about a particular bank among depositors even more rapidly. Additionally, technology such as a mobile banking app allows customers to open and close accounts and transfer deposits in a matter of minutes" (Federal Reserve, 2023). Therefore, proactive and forward-looking supervision, ready to take decisive action at the earliest signs of trouble, is now more essential than ever.

In such a context, proactive and forward-looking supervision – with the capacity to take early, decisive action – becomes more essential than ever. This proactive approach relies on supervisors having operational independence, a clear mandate, sufficient legal powers, and protection from external pressures. It also demands an organisational culture that enables supervisors to act decisively even when faced with uncertainty.

„Banking supervision needs to identify weaknesses at an early stage and act forcefully to ensure that banks address them. To do this, supervisors will need to have operational independence, strengthen their forward-looking culture and adopt a more intrusive stance. They will also need to continuously seek to improve their capabilities. First, by accessing greater resources. And second, by enhancing their productivity with the aid of technology" (Carstens, 2023)

Supervisors must have operational independence to carry out their duties free from external interference, complemented by strong accountability. They require a clear mandate to focus on the most critical issues, along with the legal authority to enforce their decisions. Adequate resources, specialised expertise, and the ability to exercise sound judgment—supported by a precise understanding of changing conditions, risks, and vulnerabilities—are also vital.

Bank supervision is often seen as a cost, but it should be viewed as a crucial investment in maintaining the resilience of the financial system. The social and economic toll of a banking crisis can be severe, including the loss of public confidence and widespread economic damage. Strong, proactive supervision, supported by skilled staff and advanced technology, provides the best protection against these threats.

The reviewed literature suggests that the emerging model of banking supervision in the context of complex financial systems necessitates substantial investments in supervisory capacity, including human capital, digital infrastructure, and analytical tools, to ensure proactive and effective oversight.

RESOURCES

Following the Great Financial Crisis, supervisory authorities enhanced oversight of systemically important banks by adopting a risk-based approach. This strategy emphasised the allocation of resources to areas of greatest need. However, it also sometimes resulted in increased reliance on automated processes and a decline in resources allocated to less systemically significant financial institutions.

Allocating resources based on a risk-based approach makes sense. It allows supervisors to fulfil their mandate and safeguard financial stability. Supervisory resources are vital for carrying out mandates and maintaining financial stability. However, recent events show that banks not initially considered systemic can still cause systemic distress through contagion when they fail. This highlights the need for sufficient resources to ensure thorough oversight of all financial institutions.

Supervisory resources incur costs. Various funding mechanisms, including the introduction or increase of supervisory fees contributed by the industry, can support essential investments in regulatory capacity. Although some might object, such expenditures are wise given the significant social and financial costs linked to financial crises. By lowering the likelihood of such crises, investing in a stronger supervisory framework provides substantial benefits to society.

For example, in the United Kingdom, the annual expenditure on banking regulation, supervision, and resolution across all federal agencies is approximately 0.03% of GDP (Federal Reserve, 2020; FDIC, 2023; OCC, 2022). In comparison, the average fiscal cost of banking crises is estimated at around 20% of GDP, measured by the rise in public sector debt associated with these crises (Borio et al., 2020). These figures suggest that even a small reduction in the expected fiscal cost of crises, such as 1.5% of the total cost or 0.3% of GDP, would justify a substantial increase in the budget for banking oversight.

TECHNOLOGY

Supervisory efficiency and effectiveness can be enhanced through productivity improvements, which may be facilitated by advanced technology. „Supervisory technology or SupTech is the use of technology by supervisors to deliver innovative and efficient supervisory solutions that will support a more effective, flexible and responsive supervisory system." (European Insurance and Occupational Pensions Authority, 2025)

Supervisors use technology to automate processes, digitise data and tools, and improve analytics and visualisation, thereby increasing the overall efficiency and effectiveness of supervisory resources. Additionally, authorities are increasingly adopting innovative technologies such as big data, artificial intelligence, and machine learning to enhance supervisory effectiveness and efficiency further.

Many supervisors have embraced this approach, with the pandemic acting as a catalyst that hastened the adoption of these technologies. „The Covid-19 pandemic has prompted authorities to rely on virtual inspections, including the increased use of suptech tools to support supervisory risk assessments" (Beerman et al., 2021). Travel restrictions and social distancing forced supervisors to shift most on-site activities to remote surveillance. In response, many authorities devised new tools to continue effectively assessing financial institutions despite these challenges.

One area that has seen notable progress in recent years is data analytics. These super tech tools, which utilise a vast amount of data, both qualitative and quantitative, have the potential to enhance various aspects of the supervisory process. For example, tools for text analysis, text summarisation, and information classification enable faster extraction of useful insights from lengthy documents produced by the supervised entities. Tools for sentiment analysis, network analysis, and peer group identification can provide additional insights into the risks faced by banks and may therefore aid in the challenging task of identifying deficiencies at an early stage. (Beerman et al., 2021).

According to the European Banking Authority (EBA, 2021), supervisory reporting costs represent roughly 33–36% of total compliance costs across banks – around 38% for small and non-complex institutions and 25–27% for medium and large banks. Given that supervisory reporting consumes a third of institutions' compliance costs, the integration of SupTech solutions becomes particularly important. By enhancing reporting systems with digital tools, data analytics, and automation, authorities can improve efficiency, reduce the reporting burden, and increase the accuracy and timeliness of supervisory data.

According to the EIOPA assessment, implementing supervisory technology faces two main challenges:

- Organizational challenges: Authorities must foster an innovative culture and provide staff training on new technologies.
- Technological challenges: Decisions are needed on which technologies and supervisory areas to prioritize, considering technology complexity, maturity, and costs. Authorities also need to adopt new development approaches, such as design thinking. (EIOPA, 2025)

PERSONNEL

Financial market complexity has forced supervisors to broaden their expertise beyond traditional areas (e.g., accounting and credit risk) to include technology, economics, and operational risk, leading to direct competition with the private sector for talent. (Crocket, 2001)

Traditional financial disciplines, such as accounting and risk management, remain essential. However, the changing landscape requires supervisors to gain additional, non-traditional skills. Specifically, the ongoing technological disruption's substantial and wide-reaching impact on banks means that supervisors must develop expertise in areas such as cybersecurity, data analytics, and artificial intelligence. This, in turn, challenges authorities to meet the high demand for professionals with these specialised qualifications across all sectors. (Crisanto et al., 2022)

Traditional financial skills such as accounting and risk management remain essential. However, the changing landscape requires supervisors to gain additional, non-traditional expertise. The substantial and widespread impact of ongoing technological disruption on banks necessitates that supervisors develop strong skills in areas like cybersecurity, data analytics, and artificial intelligence. This also challenges authorities to meet the high demand for professionals with these specialised qualifications across all sectors. (Crisanto et al., 2022)

According to a BIS study (Crisanto et al., 2022), supervisory authorities need to compete with the private sector to attract highly qualified professionals in these fields, which demands substantial increases in their budgets and possibly higher contributions from industry in the form of supervisory fees.

Given the growing demands on supervisory authorities, from recruiting and retaining qualified staff to investing in cutting-edge technologies, an essential question arises: how can these institutions sustainably fund their expanding mandates? One solution lies in the introduction or refinement of supervisory levies, a tool that is increasingly adopted in various jurisdictions and is regarded as a best practice for establishing resilient and proactive supervisory frameworks.

In what follows, the author examines the benefits and challenges of the supervisory fees mechanism, along with international experiences related to supervisory fees, giving special attention to the practices of both advanced economies and countries in transition.

Table 1.
Benefits and Challenges of supervisory fees mechanism

Benefits:	**Challenges**:
• Ensures stable and predictable funding. • Reduces political interference and dependency on state budgets. • Enables long-term investment in supervisory capacity, including digital tools and human capital.	• Requires transparency and accountability in fee-setting. • May be resisted by smaller institutions due to cost burdens. • Needs legal clarity and robust institutional governance.

Source: created by the author based on Carstens A. (2023)

Economists Michael W. Taylor and Marc G. Quintyn (2002) note in their article that industry-funded supervision can help reduce political interference and enable regulators to allocate resources more efficiently. „One of the disadvantages of fee-based funding for supervisory institutions is the potential conflict that may emerge when, during economic downturns or financial crises, more intensive supervision and monitoring require additional resources from the industry, which may struggle to raise these resources at such times (due to lower profits or a shrinking sector). In the worst-case scenario, this could lead to the lay-off of supervisors precisely when their services are most needed." (Taylor et al, 2002). One solution to such situations is for supervisory authorities to establish financial reserves specifically for these types of economic circumstances.

The paper „Who Pays for Banking Supervision? Principles and Trends" by Donato, M., Nieto, M. J., and Prast, H. highlights that the decision between public and private funding for banking supervision is influenced by a combination of institutional frameworks, historical developments, and geographical considerations. The authors contend that supervisors within central banks are more likely to receive public funding, whereas independent financial authorities typically depend on levies imposed on the regulated banks. Additionally, in bank-oriented financial systems, public funding is more common. (Donato et al, 2007).

COMPARATIVE ANALYSIS OF SUPERVISORY-FEE MECHANISMS

Supervisory fee systems are increasingly regarded as vital tools for ensuring the effectiveness, independence, and sustainability of banking supervision. This section offers a comparative overview of supervisory fee practices across selected jurisdictions. By systematically analysing these practices, the study highlights patterns, benefits, and limitations of various supervisory fee models. These insights aim to inform both international policy debates and the possible adoption of fee-based mechanisms in emerging economies, with particular relevance for Moldova.

Advanced economies are typically characterised by high GDP per capita, well-developed financial markets, strong institutional frameworks, and established regulatory systems. These features enable them to implement and sustain robust supervisory frameworks, often funded through supervisory fees charged to the institutions being overseen.

Transition and Emerging Economies encounter extra hurdles in funding effective supervision, such as limited fiscal space, political constraints, and underdeveloped financial markets, which make it more challenging to implement similar cost-recovery mechanisms. For these economies, adopting such mechanisms, tailored to their institutional capacity and market structure, can help ensure better alignment with EU standards, boost operational independence, and enhance systemic risk management.

Table 2.
Experience with Supervisory Fees: Advanced Economies vs. Transition and Emerging Economies

Advanced Economies	**United Kingdom:** The Prudential Regulation Authority (PRA) is entirely funded through a levy on the firms it supervises. The PRA fee structure is determined by firm size and risk profile, which promotes fairness and lessens cross-subsidisation. This method ensures budget stability and maintains supervisory independence. (Bank of England, 2025)
	Netherlands: De Nederlandsche Bank (DNB) introduced supervisory levies in 2013. The fees are used not only to finance routine supervision but also investments in IT infrastructure, data analytics, and skills development. DNB emphasizes transparency by publishing the cost structure annually. (DNB, 2025)
	Switzerland: The Financial Market Supervisory Authority (FINMA) also functions under a fee-based system. FINMA covers between 80 and 90% of its total expenditure, including allocations to its statutory reserves, through supervisory levies (FINMA, 2025). According to the FINMA Annual Report (2022), this levy model is crucial for maintaining an appropriate staff-to-bank ratio and for funding ongoing staff training and supervisory technology. (FINMA, 2022)
Transition and emerging economies	**Slovakia**: National Bank of Slovakia (NBS) is part of the EU's banking union, that is based on the Single Supervisory Mechanism (SMM). For the purposes of the SSM banks (credit institutions) are categorised as: significant – subject to direct supervision by the ECB in cooperation with NBS (detailed bellow in „EU Framework" chapter; or less significant – remaining subject to supervision by NBS. NBS finances its supervisory activities through a mix of operating revenues defined by Act on financial market supervision (2004), which include: (a) annual contributions paid by supervised entities, (b) fees for supervisory actions and proceedings, and (c) special contributions in the form of surcharges on annual contributions to cover expenses related to financial consumer protection. This framework ensures stable and rule-based financing for supervisory functions while supporting institutional independence. (NBS, 2025)
	Poland: The Polish Financial Supervision Authority (KNF) is funded through supervisory fees calculated as a percentage of supervised institutions' total assets. This model guarantees scalability and sustainability, enabling KNF to adapt to sectoral growth. (KNF, 2023)
	Romania: The National Bank of Romania (NBR) implements a system of administrative fees for licensing and authorisations, but ongoing supervision is still funded by the central bank's operational budget. Discussions have arisen about the possible introduction of a more comprehensive levy-based framework to bolster independence (NBR, 2015).
	Georgia: As part of post-crisis financial sector reforms, Georgia's National Bank (NBG) implemented modest supervisory fees. Although relatively limited in scope, the fees are regarded as a step towards enhancing supervisory capacity. (NBG, 2025)

Source: created by author based on Bank of England (2025), DNB (2025), FINMA (2022, 2025), NBS (2004, 2025), KNF (2023), NBR (2015), NBG (2025)

EU FRAMEWORK

The ECB funds its supervisory duties by imposing an annual fee on all supervised banks. The 2019 Decision (EU) 2019/2158 (ECB/2019/38) provides a clear, standardised framework for calculating supervisory fees across Eurozone institutions under the ECB's Single Supervisory Mechanism.

The fee is calculated according to the bank's importance and risk profile. The total fee for each bank consists of two elements:

1. **Minimum Fee Component**

- Representing 10% of the total fee amount for each category (significant and less significant banks).
- This fixed portion is equally split among institutions in each category.
- Banks with total assets under 10 billion euros (for significant) or 1 billion euros (for less significant) receive a 50% discount on this portion.

2. **Variable Fee Component**

- Constitutes the remaining 90% of the fee pool (after minimum fees and discounts).
- Allocated based on each bank's size (total assets) and risk exposure, meaning larger or higher-risk banks pay more. (ECB, 2025)

Financial institutions submit fee data to the National Competent Authorities (NCAs), which then forward it to the ECB. The ECB performs quality checks and allows institutions to comment on their data before finalising the fee basis (ECB, 2019).

The ECB provides an interactive calculator that enables banks to estimate their annual fee using preliminary cost estimates and commonly available data from the previous year. The calculator is for indicative purposes only; actual fees are based on confirmed data and final costs. Directive 2013/36/EU (CRD IV) allows national competent authorities to levy fees to cover supervisory costs. Many EU member states have aligned their approaches with this principle. The European Central Bank's Single Supervisory Mechanism (SSM), which has been operating since 2014, is fully funded through an annual supervisory fee charged directly to significant institutions and to less significant institutions via national authorities.

CASE STUDY OF MOLDOVA'S SUPERVISORY MECHANISM

In recent years, the Republic of Moldova has taken significant steps to align its financial sector with international standards, particularly following the systemic banking crisis of 2014. Regulatory reforms, ownership restructuring in systemically important banks, and the alignment of prudential requirements with EU and Basel III frameworks represent notable progress. However, modernisation has brought increasing demands that challenge institutional capacity and oversight structures. The IMF's diagnostic review emphasises a key challenge: Moldova's mandates for financial stability, macroprudential surveillance, and crisis preparedness have shifted faster than the resources available to supervisory institutions. Both the National Bank of Moldova (NBM) and the National Commission for Financial Markets (NCFM) continue to face persistent understaffing and limited funding, which restricts their ability to keep pace with heightened regulatory and analytical requirements.

One of the main recommendations highlighted in the IMF Report (2022) is the enhancement of supervisory practices. „Given the progress on the regulatory framework, the NBM should continue to focus on supervision, covering risk assessment, supervisory planning/supervisory stance and allocation of resources, including to systemically important banks, evaluation of governance (including the „independence of mind" test where technical assistance is required) and risk management frameworks. Specialist supervisory resources, including on governance issues, should be increased to support the further development of risk-based supervision." (IMF Report, 2022).

For instance, the Financial Stability Department of the NBM reportedly operates with only 4–6 analysts responsible for macroprudential monitoring and stress testing, significantly below what is needed for effective risk analysis and timely policy design. Despite this, Moldova's supervisors are tasked with implementing complex regulatory frameworks and responding to a volatile macro-financial environment.

According to the latest report by the IMF (2025), although Moldova's banking supervision framework has improved, there is a significant gap between regulatory ambition and operational capacity. The NBM continues to face staffing and resource limitations.

Furthermore, in its 2025 Central Bank Transparency Code Review, the IMF recognised recent progress in institutional governance and transparency, while highlighting the need for improved internal communication and accountability mechanisms. These developments indicate not only a changing governance culture but also the need for sustainable investments in supervisory infrastructure and human capital.

Additional concerns arose during the IMF's Extended Credit Facility (ECF) reviews. The abrupt dismissal of NBM leadership in December 2023 raised alarms about central bank independence – a vital pillar for credible financial oversight. Strengthening institutional autonomy must go hand in hand with improved operational capacity and predictable budgetary support. Ultimately, Moldova's experience shows that regulatory ambition must be matched by supervisory resources. Without adequate staffing, training, and funding—whether through internal revenues, public budgets or supervisory fees—the effectiveness of financial oversight risks being compromised, regardless of the regulatory framework in place. As Moldova continues its reform journey, ensuring a reliable, rule-based financing mechanism for supervision will be crucial for maintaining trust, resilience, and long-term financial stability.

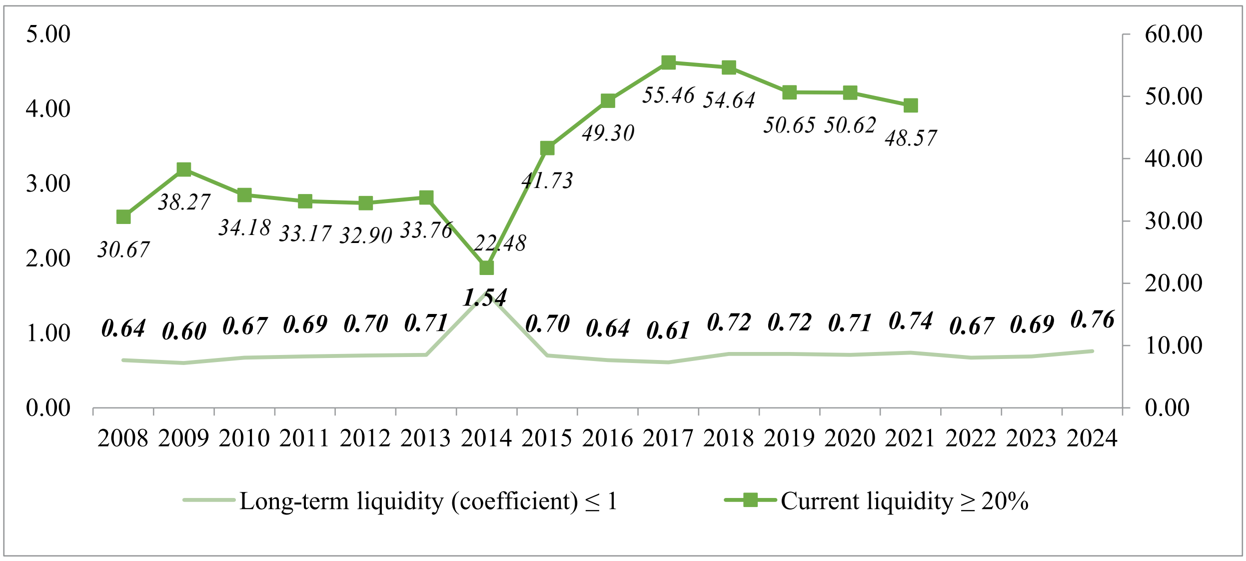
Unlike supervisory authorities that rely directly on state budget allocations, the National Bank of Moldova (NBM, 2024) enjoys a degree of financial autonomy, operating based on its own revenues. Currently, the NBM does not implement a structured fee-based approach for supervised entities; instead, its supervisory function is financed through internal resources, while its annual profit is distributed partly or entirely to the state budget depending on the statutory capital ratio, as required by the Law on the National Bank of Moldova.

Due to the lack of publicly available data on the costs incurred by the NBM in supervising activities, such as staff expenses, technical resources, and other supervisory efforts, the assessment of the appropriateness of supervisory fees in the Moldovan banking sector is based on the IMF's conclusions. It is therefore assumed that the NBM continues to operate under limited staffing and resource constraints.

The NBM currently supervises a banking sector comprising 10 banks, including 4 systemically important institutions. Since 2023, in addition to banks, the NBM's supervisory scope has been extended to non-bank financial entities, including insurance companies and credit unions. This broad scope of supervision, combined with the implementation of complex regulatory frameworks like Basel III and macroprudential tools, places significant demands on the central bank's resources and capacity. To justify introducing a supervisory fee, it is vital to assess whether the sector has the financial strength to bear such a cost, which can be analysed through the banking system's profitability, capital adequacy, and liquidity indicators.

The analysis of liquidity indicators shows that banks in the Republic of Moldova have adhered to the regulatory requirements (Principle I and Principle II of liquidity), even during crisis years (2008-2009 and 2020), maintaining adequate or surplus liquidity levels. Over the period from 2008 to 2024, the long-term liquidity ratio remained around 0.7. The only exception was in 2014, when the maximum regulated level of 1 was exceeded due to the liquidity reports of three troubled banks—Banca de Economii, Banca Socială, and Unibank—each of which ultimately failed in the same year. Regarding current liquidity, the ratio ranged between 20% and 40% from 2008 to 2013. In 2014, due to the same three problematic banks, the current liquidity ratio dropped to 22.5%. From 2015 onwards, it exceeded 40%, peaking at 55.5% in 2017 and remaining close to 50% until 2021. From January 2022, the liquidity principle II was replaced by the liquidity coverage ratio (LCR), with a minimum regulatory requirement of 100%. Moldovan banks greatly exceeded this benchmark, recording an LCR of 235.47% in 2022, 282.12% in 2023, and 274.13% in 2024.

Figure 1.
Liquidity Principle I and Principle II, evolution in the period 2008-2024 (%)



Source: prepared by author based on National Bank of Moldova data [online] [cited March 22, 2025]. Available: http://bnm.md.

To harmonise the legislation of the Republic of Moldova with that of the European Union, Principle III - Liquidity by maturity bands (>1) was introduced in 2016. Until then, there were some gaps in the NBM's regulatory acts concerning liquidity indicators, especially due to the lack of liquidity requirements for the period between 1 month and 2 years. Since banking operations have varying and often uncertain maturities, matching bank liabilities to assets is a complex task. Principle III was introduced to fill these regulatory gaps.

According to data on the economic and financial activity of banks in the Republic of Moldova for the period 2016-2024, the liquidity principle III has exceeded the regulatory threshold of 1 across all maturity bands, remaining well above the minimum required level (Table 1).

Table 1.

Principle III - Liquidity by maturity bands (>1)

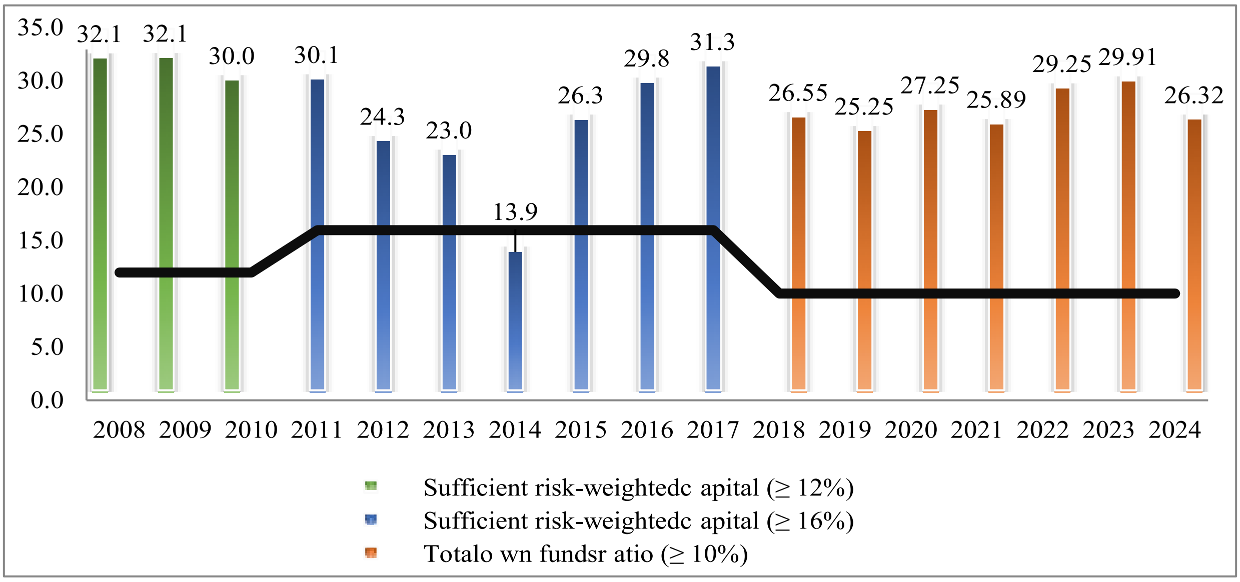
	2016	2017	2018	2019	2020	2021	2022	2023	2024
≤1 month	2.91	2.72	2.94	2.67	2.28	1.89	2.17	2.19	1.79
1-3 months inclusive	14.85	18.40	19.09	18.14	19.86	19.64	20.42	16.07	12.69
3-6 months inclusive	4.75	2.74	3.12	12.90	14.74	14.43	12.10	12.55	12.29
6-12 months inclusive	4.22	3.06	2.37	8.83	9.97	9.92	7.48	9.47	8.33
>12 months	5.32	4.74	4.34	8.74	7.97	8.35	7.25	8.36	8.14

Source: author based on data from the National Bank of Moldova [online] [cited March 22, 2025]. Available: http://bnm.md.

Thus, the banking sector of the Republic of Moldova does not face challenges related to liquidity, indicating that it has sufficient resources to meet its obligations and could absorb the impact of a supervisory fee mechanism. At the same time, the sector demonstrates increased resilience to potential external shocks. The persistent over-liquidity observed in the Moldovan banking sector implies a significant opportunity cost, as resources remain underutilised. In this light, implementing a supervision fee represents a reasonable mechanism to internalise the cost of regulation, exerting mild pressure on institutions to optimise liquidity management. This aligns with the theory of efficient resource allocation in financial intermediation (Diamond et al, 1983) and supports a shift from passive reserve accumulation to proactive sector development. The average risk-weighted capital adequacy ratio of the banking system during 2008-2017, shown graphically in Figure 2, consistently exceeded the regulatory level of ≥ 12% - in the period 2008-2010 and ≥ 16% - in the period 2011-2017. An exception occurred in 2014, when this indicator amounted to 13.92%, falling below the minimum regulatory level. The situation in 2014 was not indicative of systemic vulnerability, but was caused by Banca de Economii and Banca Socială - both of which reported critically low capital adequacy ratios, slightly above 3%.

Figure 2.

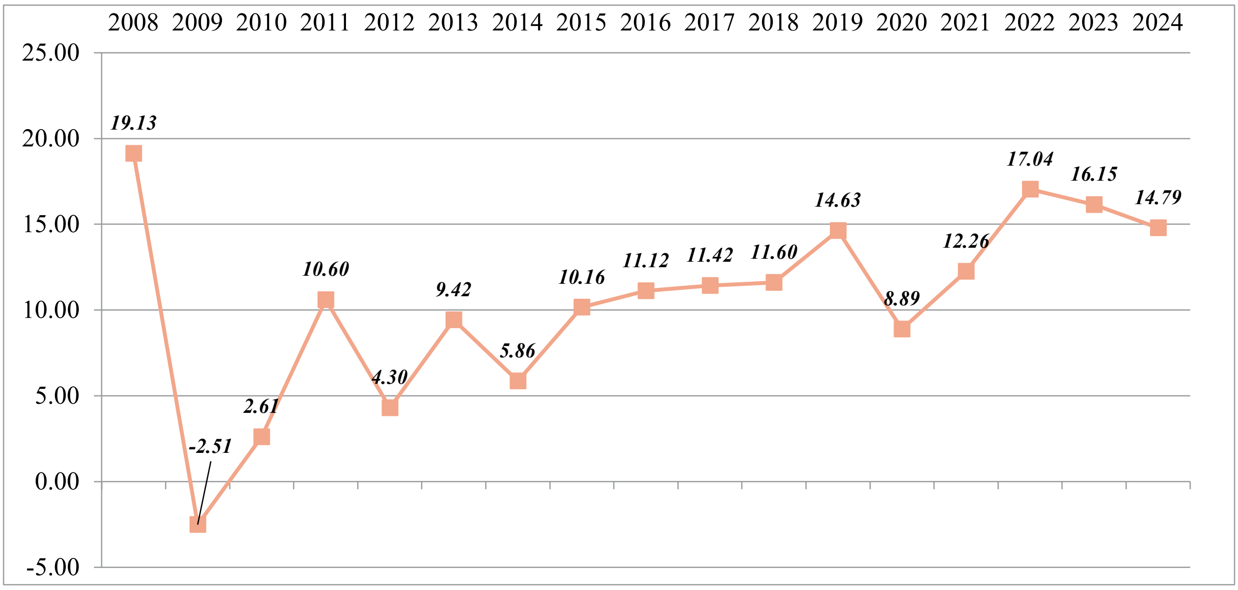
System-wide evolution of risk-weighted capital adequacy between 2008-2017 and total own funds ratio between 2018 and 2024 (%)



Source: author based on data from the National Bank of Moldova [online] [cited January 22, 2025]. Available: http://bnm.md.

The evolution of the total own funds ratio during 2018-2024 indicates that banks in the Republic of Moldova remain well capitalised for their risk profile, demonstrating that the sector has adequate financial strength to absorb additional regulatory costs. This strong capitalisation provides a solid foundation for implementing a supervisory fee mechanism that could ensure sustainable funding for effective oversight without placing excessive pressure on banks' financial stability. The author will use the Return on Equity (ROE) indicator to analyse financial performance. The figure illustrates that in 2009 – the year of the global financial crisis – the banking system experienced losses, resulting in negative ROE values. However, in the post-crisis years, banks significantly improved their profitability ratios, except in 2014 – the year marked by the collapse of problematic banks – and 2020 – the pandemic year. By 2024, the ROE had increased to 14.8%.

Figure 3.
Return on Equity evolution 2008-2024 (%)



Source: author based on data from the National Bank of Moldova [online] [cited March 22, 2025]. Available: http://bnm.md.

The above analysis shows that banks in the Republic of Moldova are well-capitalised, maintain high liquidity levels, and have strong profitability ratios. Consequently, introducing supervisory fees, adjusted according to each institution's systemic importance, is unlikely to disturb the stability of the banking sector. Furthermore, since the Moldovan financial system is relatively small and bank-centric, implementing a hybrid model that combines modest supervisory fees, with support from the central bank's own budget, could enhance the operational independence of the supervisory authority without compromising sector stability. Such an approach would also promote compliance with international best practices and EU standards, supporting gradual alignment with regional regulatory frameworks.

Despite the characteristics of the banking sector that allow for the introduction of supervisory fees, this funding mechanism can bring notable benefits in terms of transparency and governance A fee-based supervision framework would strengthen the institutional autonomy of the NBM by reducing potential reliance on state budgetary transfers and ensuring a stable, predictable source of funding for supervisory activities. Importantly, the additional financial resources can be allocated towards strengthening the NBM's capacities – facilitating investments in modern IT tools, expanding staffing, and improving training programs. These measures would have a direct impact on the quality and effectiveness of financial sector oversight.

DISCUSSION

Our study demonstrated that the introduction of supervisory fees in Moldova could provide a sustainable and predictable funding source, thereby enhancing the institutional independence of the supervisory authority. This result is consistent with the findings of Taylor and Quintyn (2002), who argue that industry-funded supervision reduces political interference and strengthens regulators' ability to allocate resources effectively. Similarly, Donato, M., Nieto, M. J., and Prast, H. (2007) emphasise that supervisory independence is reinforced when financing relies on supervision fees rather than state budgets, particularly in bank-oriented systems.

At the same time, the analysis highlights that Moldova's particular circumstances—specifically, the limited resources of the National Bank of Moldova (NBM) and the expansion of its supervisory mandates—make such a mechanism both feasible and necessary. This observation aligns with IMF technical reports (2022, 2025), which highlight persistent gaps in staffing and resources at the NBM, despite progress in regulatory reform and bank capitalisation. In this respect, Moldova shares common challenges with other small or emerging economies but also demonstrates unique structural vulnerabilities.

Our findings also align with Carstens (2023), who underlines the need for well-funded, proactive, and technologically equipped supervision to anticipate shocks and protect financial stability. However, some aspects appear specific to Moldova. The persistent over-liquidity of the Moldovan banking sector creates an opportunity rarely emphasised in advanced economies: supervisory fees could not only secure financial independence for the supervisory authority but also internalise the cost of regulation and indirectly encourage banks to optimise liquidity management.

Furthermore, international experience shows that many central banks, including those in the European Union, rely on supervisory fees to cover the costs of financial oversight independently of government budgets. These institutions typically apply a cost-recovery principle based on actual or budgeted expenditures, with fees allocated according to institution size, complexity, or risk level (ECB, 2019; FINMA, 2022). By contrast, the NBM currently does not implement a structured fee-based model; its supervisory function remains funded through internal resources. Adopting supervisory fees in Moldova would therefore represent a significant step towards aligning with international best practices.

The comparative analysis also showed that while some jurisdictions apply fees solely to banks, others extend the levy to non-banking financial institutions, broadening the revenue base and reducing reliance on public funds (Donato et al, 2007). In Moldova, where the financial system is relatively small and bank-centric, a hybrid model—combining modest supervisory fees with the NBM's own budgetary resources—could enhance operational independence without compromising stability. This solution would also mitigate risks of fee volatility and reduce the potential burden on smaller banks, consistent with recommendations from IMF (2025).

In sum, the Moldovan case supports the broader global trend toward fee-based supervision, while also highlighting the importance of tailoring such mechanisms to the institutional realities of small emerging economies. By integrating sustainable financing into the supervisory framework, Moldova could not only strengthen the independence and efficiency of the NBM but also contribute to the long-term viability and resilience of its banking system.

CONCLUSIONS

The recent bank failures originate from the institutions themselves, not from regulatory actions or rising interest rates. Institutions have no justification for mismanaging interest rate risk or neglecting to address persistent structural weaknesses in their business models. However, banking supervision must enhance its role to protect the stability of financial institutions across different macro-financial scenarios in today's evolving technological environment. This entails supervisors being proactive and assertive. With adequate resources and technological support, supervisors will be able to identify vulnerabilities early and intervene before problems escalate and become too difficult to manage. While such efforts cannot prevent all future bank failures, they can considerably reduce their likelihood and potential impact on financial stability. After the 2008 financial crisis, there has been increasing recognition that effective banking supervision requires not only strong regulatory frameworks but also adequate and stable funding mechanisms. Some jurisdictions have introduced supervisory levies—fees collected from supervised institutions—to ensure the operational independence and financial sustainability of supervisory authorities. Concerning the situation in the Republic of Moldova, it can be concluded that financial supervisory reform remains incomplete. Persistent challenges include insufficient human resources and limited financial autonomy to match the scope of its expanding supervisory mandates. Despite progress in aligning regulatory frameworks with European Union standards and improving transparency, the effectiveness of supervision continues to be limited by resource constraints and potential political interference. The current funding model of the NBM, based primarily on its own revenues, restricts both scalability and flexibility of supervisory functions. Given Moldova's strategic goal of deeper integration with EU regulatory norms, implementing a supervisory fee mechanism is a vital step towards strengthening domestic financial stability and demonstrating compliance with internationally accepted best practices. A fee-based financing model would ensure predictable and sustainable revenues for supervisory activities, supplementing the NBM's internal resources and minimising vulnerabilities related to their fluctuations. Such financial stability is essential for enabling the NBM to expand its operational capacities and effectively manage increasing regulatory complexity. For successful deployment, the supervisory fee system must be based on a solid legal framework and accompanied by transparent engagement with all relevant stakeholders to build trust and ensure equitable application. Moreover, broadening the scope of fee collection to include non-banking financial institutions could improve regulatory coverage and foster fairness across the financial sector. By adopting these measures, Moldova would align with international supervisory standards, thereby strengthening the institutional independence of the NBM and contributing to the resilience and robustness of its financial system.

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