

EVALUATION OF COMPETITION IN THE BANKING SECTOR OF THE REPUBLIC OF MOLDOVA IN THE CONDITIONS OF DIGITALIZATION

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Abstract: Technological advancements have significantly transformed the banking landscape, influencing competition and consumer behavior. Researchers explore the impact of innovations such as digital banking, mobile payments, and fintech solutions on the competitive landscape. They assess how banks leverage technology to enhance operational efficiency, customer experience, and product offerings, and examine the implications for market competition. Additionally, the entry of non-traditional players, such as fintech firms and tech giants, into the banking sector is analyzed in terms of its impact on traditional banks' competitiveness.

Competition in the banking sector influences access to financial services, particularly for underserved populations or regions. Researchers examine how competition drives innovation and expands the availability of financial products and services. They assess the impact of competition on pricing, fees, and the overall affordability of financial services, as well as its implications for financial inclusion and economic development.

The purpose of the article is to analyze and understand the competitive dynamics within Moldova's banking industry. To achieve this goal, we underline the following objectives: to analyze the level of concentration and market structure within Moldova's banking sector to understand the competitive landscape; to investigate the factors influencing competition, such as regulatory frameworks, technological innovation, and market conduct, to identify key drivers of competitiveness; to investigate the impact of digitization on competition within the banking sector, analyzing how technological advancements influence competitive dynamics.

Competition in the banking sector directly affects consumers by influencing the availability, affordability, and quality of banking products and services. Researching competition can help evaluate the impact of competitive forces on consumer welfare, including access to financial services, pricing, and innovation, thereby informing policies aimed at protecting consumer interests. The article was developed within the framework of Subprogram 030101 „Strengthening the resilience, competitiveness, and sustainability of the economy of the Republic of Moldova in the context of the accession process to the European Union”, institutional funding.

Keywords: digitalization, banking sector, competition, banking market concentration, competitive landscape, innovations.

JEL Classification: G21, K42, O33.

Introduction

The actuality of the subject. Technological advancements have significantly transformed the banking landscape, influencing competition and consumer behavior. Researchers explore the impact of innovations such as digital banking, mobile payments, and fintech solutions on the competitive landscape. They assess how banks leverage technology to enhance operational efficiency, customer experience, and product offerings, and examine the implications for market competition. Additionally, the entry of non-traditional players, such as fintech firms and tech giants, into the banking sector is analyzed in terms of its impact on traditional banks' competitiveness.

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The purpose of the article is to analyze and understand the competitive dynamics within Moldova's banking industry.

To achieve this goal, the following **objectives** were set:

- to investigate the factors influencing competition, such as regulatory frameworks, technological innovation, and market conduct, to identify key drivers of competitiveness;
- to evaluate the degree of competition within the banking sector in the Republic of Moldova, focusing on regulatory frameworks, competition indicators, and the role of systemic banks.
- to investigate the impact of digitization on competition within the banking sector, analyzing how technological advancements influence competitive dynamics.
- to investigate the impact of banking sector consolidation on competition in Moldova and explore how digitization and innovation contribute to competitive advantages for banks.

The scientific-methodological basis for the study is based on various research methods and techniques, which are used in a complementary way to obtain a comprehensive understanding of the subject, the methods that were used in the research of the study are: statistical analysis, documentary research, policy analysis, benchmarking.

Determining the elements of competition in the banking sector

Competition in the banking sector is a multifaceted phenomenon influenced by various factors that shape the landscape of financial services. Understanding these elements is crucial for stakeholders, including banks, regulators, policymakers, and consumers, as it provides insights into market dynamics, competitive strategies, and the overall health of the banking industry.

Table 1. Elements of competition of banking sector

Market Structure	The market structure of the banking sector plays a significant role in determining the level of competition. In many countries, the banking industry exhibits characteristics of an oligopoly, with a few large banks dominating the market. However, the emergence of fintech startups and online banks has introduced disruptive forces, challenging traditional incumbents and fostering a more competitive environment
	Banks compete through the offering of diverse financial products and services, including savings accounts, loans, credit cards, mortgages,

Product Differentiation	investment products, and wealth management services. Product differentiation strategies aim to attract customers based on factors such as interest rates, fees, convenience, and customer service quality.
Technology and Innovation	Technological advancements have transformed the banking sector, enabling the development of innovative products, delivery channels, and customer experiences. Banks leverage technologies such as artificial intelligence, blockchain, mobile banking apps, and biometric authentication to enhance efficiency, security, and customer engagement. Innovation-driven competition fosters continuous improvement and differentiation among market players.
Price Competition	Price competition revolves around interest rates, fees, and charges associated with banking products and services. Banks may adjust pricing strategies to attract customers, gain market share, or maximize profitability. Price wars can occur in competitive markets, leading to margin compression and the erosion of profitability for some banks.
Customer Service and Experience	Exceptional customer service and personalized experiences are crucial competitive differentiators for banks. Positive interactions with customers, efficient problem resolution, and tailored financial advice contribute to customer satisfaction and loyalty. Banks invest in training, technology, and service initiatives to deliver superior customer experiences and gain a competitive edge.
Regulatory Environment	Regulatory policies and frameworks significantly influence competition in the banking sector. Regulatory requirements related to capital adequacy, risk management, consumer protection, and anti-money laundering impose compliance costs and shape the competitive landscape. Moreover, regulatory changes, such as the entry of new players or the relaxation of licensing requirements, can impact market dynamics and competition.
Brand Reputation and Trust	Banks build and maintain brand reputation and trust through ethical business practices, transparency, and reliability. Positive brand perception enhances customer loyalty and attracts new business, while reputational damage due to scandals, data breaches, or misconduct can erode trust and competitiveness.
Geographic Reach and Market Segmentation	The geographic reach of banks, including branch networks, online presence, and international operations, influences their competitive positioning. Banks may target specific market segments, such as retail, corporate, or small and medium enterprises (SMEs), based on demographic, geographic, or psychographic factors, tailoring products and services to meet the unique needs of each segment.

Source: elaborated by the authors on the basis of information presented in the: (ILCHENKO, K.O., Конкуренція в банківській системі: визначення та види, pag. 387. ISBN 52369556.

Overall, competition in the banking industry is multifaceted and influenced by a combination of market forces, regulatory frameworks, technological advancements, and consumer dynamics. Banks must continuously adapt and innovate to stay competitive in this dynamic environment.

Table 2. Measurable indicators of competition analysis in the banking sector

Indicators	Description
The volume of credits	Evaluating the total volume of loans granted can provide an understanding of the bank's participation in the credit market and its potential for growth.
The rate of non-performing loans	It measures the proportion of loans that are not repaid regularly or are considered non-performing in a bank's total loan portfolio. A lower NPL ratio may indicate higher asset quality and, by implication, healthier competition.
The volume of deposits	Comparing a bank's volume of deposits to the total volume of deposits in the market can provide an understanding of its market share and its competitive position relative to other players in the banking sector.
Number of ATMs, POS terminals and subsidiaries	Comparing the geographic distribution of ATM and branch networks can indicate a bank's accessibility and potential to attract customers.
Number of cards issued	This indicator can provide insight into the market size and penetration of various bank card products such as credit and debit cards.
Number of transactions for actual users of the web-banking application	This is an indicator that measures the count of individuals or accounts regularly accessing and utilizing a bank's online banking application to perform various banking operations.
Number of cash operations within banks in Republic of Moldova	It refers to the total count of financial transactions involving cash that are conducted within the banking sector of the Republic of Moldova within a specific period.
Number of customers	The more customers a bank has, the more competitive it can be considered. However, it is important to also assess customer satisfaction to get a complete picture of the competition.
The degree of innovation	Assessing a bank's level of innovation by measuring the number of new products and services introduced to the market or investments in technology and research and development can provide insight into its ability to remain competitive in a constantly changing environment.
Collaboration partners	These are entities or organizations that work together with banks to provide various products, services, or solutions to customers. These partnerships can take different forms and can be mutually beneficial for both parties involved.
The number of sanctions applied	These refers to the count of penalties, fines, or regulatory actions imposed on a bank by regulatory authorities or government agencies due to violations of laws, regulations, or industry standards. These sanctions can vary in severity and may include financial penalties, license revocation or suspension, consent orders, cease and desist orders, enforcement actions, or reputational damage.

Source: elaborated by the authors on the basis of information presented in the: Competitive Environment in the Banking Sector in the Republic of Moldova: Characteristics and Perspectives. [online]. Available: <https://ibn.idsi.md/sites/default/files/imag_file/S-27_S-36.pdf>.

In conclusion, competition in the banking sector is a multifaceted phenomenon influenced by various factors such as market structure, product differentiation, technological innovation, pricing strategies, customer service, regulatory environment, brand reputation, geographic reach, and market segmentation. Banks compete vigorously to attract and retain customers by offering competitive interest rates, minimizing fees, providing convenient digital banking solutions, delivering excellent customer service, and enhancing brand reputation and trust.

The impact of digitization on competition in the banking sector

The digital revolution is dramatically changing the business environment and the financial services industry is no exception. Although a basic assumption of technology improvement is the ability to make things simpler, from a strategic point of view, many financial institutions are facing digitalization as a conundrum. There is a wide array of alternatives that can be chosen as new services or information processing channels. This transformation has been around in some form for decades. Information processing systems and digital-related activities have been evolving intensively since the 1980s but they are now invading almost each and every single aspect of business and, in the next ten years we will be probably witness more innovations in financial services than in the previous fifty (Santiago).

Network economies and customer-company engagement become crucial. This is an essential component of the financial services sector since lending connections have long been a differentiator in the market. However, a lot of the new connections are (and will be) made through channels that are built on multi-sided networks and platforms. A shift in the total cost of production is shared by producers and consumers (price adjustment) in a traditional (one-sided) market, and/or it is accompanied by corresponding changes in demand (volume adjustment). Network economics causes an enormous decrease in marginal costs in multi-sided markets, such as the majority of digital channels for banks, and prices and quantities on one side of the platform affect prices and quantities on other sides of the platform.

Nowadays, it is easy to see that banks are managing these new information technologies while also dealing with risks and changes that are typical of many other businesses. The two most significant risks that banks deal with are possibly cyber-risks and the change of human capital. In recent years, banks are actively investing in cybersecurity.

Banks need to understand what Digital Reinvention means for them based on their specific strategy and readiness to compete in the digital arena. Their efforts will need to be strategic to reach desired business goals with available capital and within an acceptable time frame.

In the banking industry, technologies are tearing down barriers to entry and opening doors for new financial service providers. Competition from startups, internet giants and industries outside of banking, along with increased regulations, are forcing banks to accelerate their Digital Reinvention. Banks need to understand what Digital Reinvention means for them based on their specific strategy and readiness to compete in the digital arena. Their efforts will need to be strategic to reach desired business goals with available capital and within an acceptable time frame. All this brings us to digital banking frameworks (which we refer to here as “DBFs”).

Numerous banks introduce digital alterations as separate endeavors, lacking a comprehensive roadmap that incorporates all the necessary changes essential for competing effectively in the digital sphere. A key element is a reference model that defines the digital capabilities that banks must deploy to compete in the digital space.

Table 3. Areas of Digital capabilities

<i>Value chain digitization</i>	Digitize processes, and adapt products and services to take advantage of the digital context.
<i>Advanced customer experience</i>	Provide customers with advanced interaction mechanisms, such as personalization, chatbots and consistent omnichannel coverage
<i>Responsiveness</i>	Offer real-time interactions supported by streamlined operations and real-time automated decisions based on actionable insight
<i>Trust and transparency</i>	Banks should have an ethical mission and social commitments. Transparency has to be part of banks’ principles, vision, mission, culture and compliance
<i>Ecosystems enabled</i>	In the platform-oriented economy, banks can benefit from participating in open financial ecosystems
<i>Social media enabled</i>	Use social platforms to create specific communities that deliver value to digital customers
<i>Solid foundation</i>	Digital banks require an agile, flexible and scalable information system that can respond quickly to changing business needs
<i>Innovative digital culture</i>	Banks’ organizations and culture depends on a context of continuous and open innovation.

Source: elaborated by the authors on the basis of information presented in the: DIAMOND, S., LIPP, A., DRURY, N., MARSHALL, A., Realizing tomorrow today: Digital Reinvention in banking. IBM Institute for Business Value. [online]. Available <<https://www-935.ibm.com/services/us/gbs/thoughtleadership/drbanking/>>.

In an increasingly digitalized world, the banking sector stands at the forefront of technological innovation, providing convenient and efficient financial services to individuals and businesses. However, with the proliferation of online transactions and interconnected systems, banks face unprecedented cybersecurity risks that threaten the security and integrity of their operations. The importance of cybersecurity in banking cannot be overstated, as financial institutions are entrusted with safeguarding sensitive customer data, protecting against fraudulent activities, and ensuring the stability of the global financial system.

Cyber threats targeting banks come in various forms, ranging from sophisticated cybercrime syndicates to opportunistic hackers and insider threats. Data breaches, phishing attacks, malware and ransomware incidents, insider risks, and vulnerabilities stemming from third-party dependencies are among the most prevalent challenges faced by financial institutions. Moreover, the rapid expansion of mobile banking services introduces new security considerations, while supply chain attacks pose additional complexities for banks reliant on interconnected ecosystems of service providers and partners.

Addressing cybersecurity risks in banking requires a multifaceted approach that combines technological solutions, robust policies and procedures, ongoing employee training and awareness programs, and collaboration with cybersecurity experts and regulatory authorities. Moreover, compliance with industry regulations and standards, such as the Payment Card Industry Data Security Standard (PCI DSS) and the General Data Protection Regulation (GDPR), is paramount to maintaining trust and credibility in the eyes of customers and stakeholders.

By understanding the challenges posed by cyber threats and implementing effective mitigation measures, banks can fortify their defenses, mitigate potential losses, and uphold the confidentiality, integrity, and availability of financial services for customers worldwide.

As more and more digital banks enter the market, it is important to understand how modern digital banking solutions enable them to offer better and cheaper services than traditional competitors.

Over the long term, tech advances such as artificial intelligence (AI) and blockchain will clearly play a role in the evolution of banking. However, modernizing the infrastructure backbone—that is, the core banking systems which handle the backbone of a bank’s activities, such as deposits and credits—is arguably the most important step banks will need to take.

In order to remain competitive, banks will need to update technology on the back end in order to deliver a seamless experience on the front end since customers will have little tolerance for glitchy apps no matter how sleek the user interface.

Analysis of competition indicators in the banking sector

The banking sector in the Republic of Moldova is characterized by a mix of domestic and foreign-owned banks operating in a relatively small market. Despite facing significant challenges such as money laundering, corruption, and weak governance, the sector has undergone reforms aimed at enhancing stability, transparency, and efficiency. The 2014 banking crisis prompted regulatory interventions and stricter supervision by the National Bank of Moldova (NBM), leading to improvements in the sector's resilience. Foreign ownership plays a significant role, bringing expertise, capital, and access to international markets, although there have been instances of withdrawals due to economic and regulatory concerns. Digital transformation is underway, with banks investing in technology to improve customer experience and offer innovative products and services. Efforts to promote financial inclusion and support economic growth through increased access to finance, particularly for SMEs and individuals, are ongoing priorities. Collaboration with international organizations and partners is crucial for addressing remaining challenges and fostering sustainable development in Moldova's banking sector.

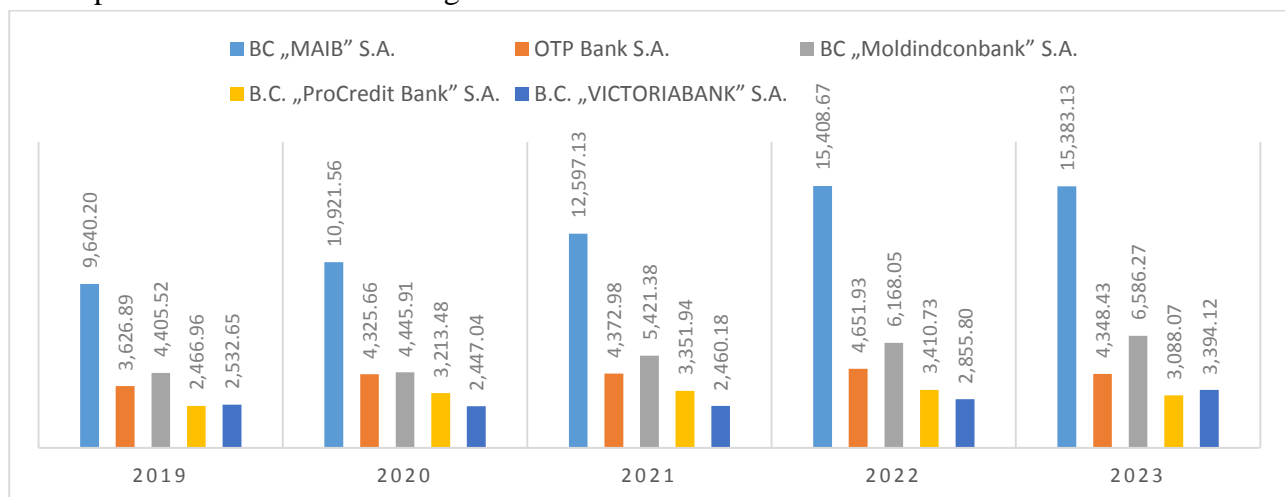


Figure 1. The share of loans granted to legal entities by banks in the RM.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online].

Available: < <https://www.bnm.md/bdi/pages/reports/drsb/DRSB8.xhtml> >.

According to Figure 1, the biggest share was registered by the CB “Moldova-Agroindbank” JSC with 9 640.20 mil MDL in 2019, and with 15 383.13 mil MDL, that have increased by 5 742.93 mil MDL during 5 years. On the second place is CB “Moldindconbank” JSC with 4 405.52 mil MDL in 2019, and 6 586.27 mil MDL in 2023, that has increased by 2 180.75 mil MDL. On the third place is OTP Bank JSC with 3 626.86 mil MDL in 2019, and with 4 348.43 mil MDL, that has increased by 721.57mil MDL during 5 years. Also, one of the top banks in Republic of Moldova is CB “ProCredit Bank” with 2 466.96 mil MDL in 2019 and with 3 088.07 mil MDL in 2023, that has increased its portfolio with 621.11 mil MDL during 5 years.

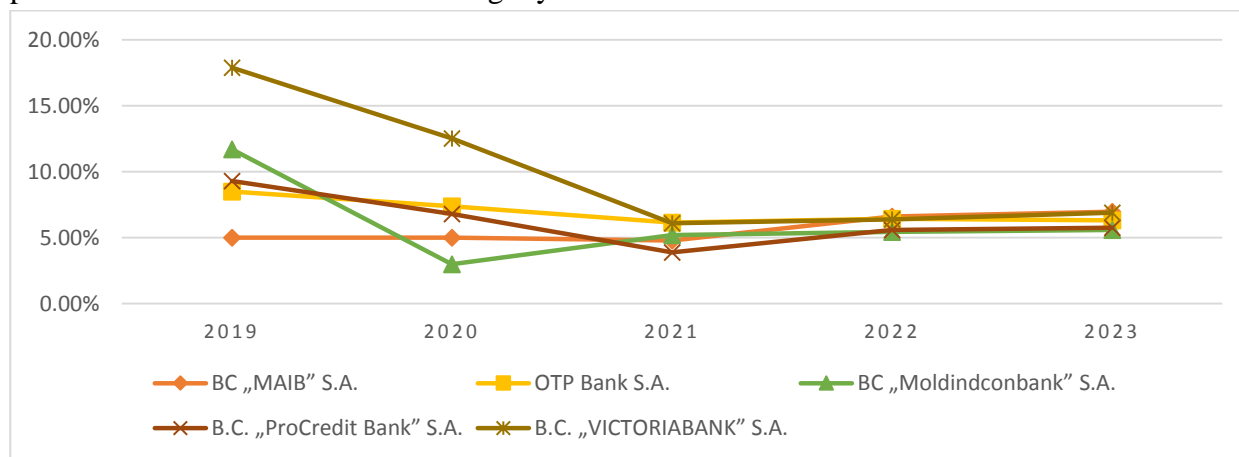


Figure 2. The share of non-performing loans in the banks of the RM.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/drsb/DRSB8.xhtml>>.

According to Figure 2, **maib** maintained a relatively stable share of non-performing loans throughout the period, ranging from 4.80% in 2021 to 6.98% in 2023. While there was a slight increase in 2022 and 2023. OTP Bank showed a declining trend in the share of non-performing loans over the five-year period, with the ratio decreasing from 8.49% in 2019 to 6.32% in 2023. This indicates improving loan quality and risk management practices within OTP Bank. Moldindconbank experienced fluctuations in its NPL ratio over the years, with a significant decrease from 11.70% in 2019 to 3.00% in 2020, followed by slight increases in subsequent years. Despite the fluctuations, Moldindconbank's NPL ratio remained relatively low compared to other banks. ProCredit Bank demonstrated a decreasing trend in its share of non-performing loans throughout the period, dropping from 9.31% in 2019 to 5.75% in 2023. This indicates effective risk management and credit assessment practices within ProCredit Bank. Victoriabank witnessed a significant reduction in its NPL ratio from 17.90% in 2019 to 6.89% in 2023. This substantial decrease suggests successful efforts in loan portfolio restructuring and improving asset quality within Victoriabank.

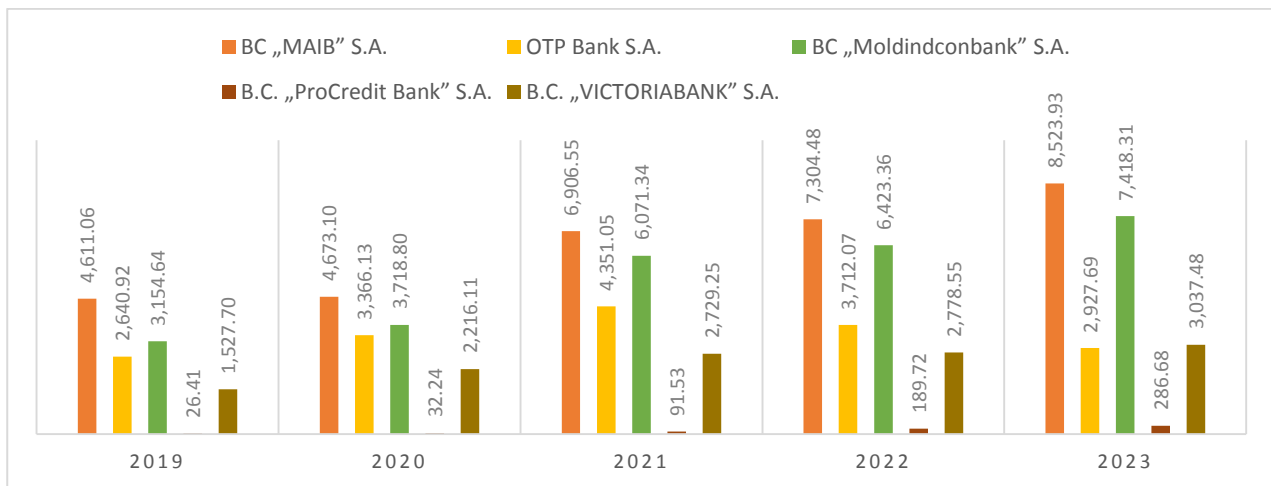


Figure 3. The share of loans granted to individuals by banks in the RM.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/drsb/DRSB8.xhtml>>.

According to Figure 3, there is an overall increasing trend in the total amount of loans granted to individuals by banks from 2019 to 2023, indicating a growing demand for personal financing products in the country. BC “**maib**” JSC consistently holds the largest share of loans granted to individuals among the listed banks throughout the years, showing its significant presence in the personal lending market. Other banks such as B.C. “Moldindconbank” S.A., OTP Bank S.A., and B.C. “Victoriabank” S.A. also demonstrate substantial shares of loans granted to individuals, reflecting their active involvement in providing personal loans to customers.

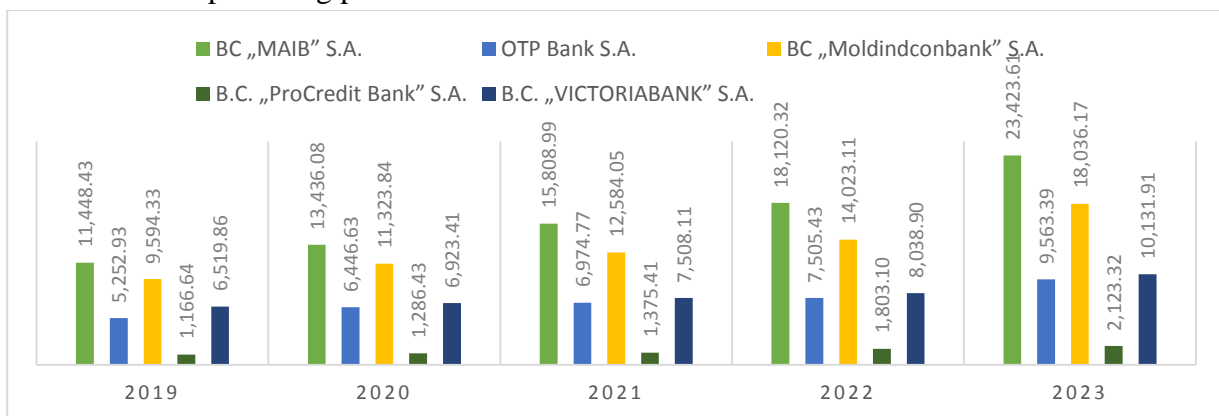


Figure 4. The share of deposits granted by banks in Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/drsb/DRSB10.xhtml>>.

According to Figure 4, we see that there is an overall increasing trend in the total amount of deposits granted by banks from 2019 to 2023, indicating a growing volume of funds being deposited in the banking sector. BC “**maib**” JSC consistently holds the largest share of deposits granted among the listed banks throughout the years, indicating its strong presence and popularity among depositors. Other banks such as B.C. “Moldindconbank” S.A., OTP Bank S.A., and B.C. “Victoriabank” S.A. also demonstrate substantial shares of deposits granted, reflecting their attractiveness to depositors. B.C. “ProCredit Bank” S.A., show noticeable increases in their share of deposits granted over the

years, indicating potential growth strategies or increased trust among depositors. While some banks exhibit fluctuations in their share of deposits granted from year to year, the overall trend suggests a steady increase in deposit activity across the banking sector in Moldova.

Through ATMs, customers benefit from flexibility and autonomy in managing their finances, avoiding the need to visit a bank branch and saving time. Additionally, ATMs are often equipped with additional features such as bill payments and international money transfers to cater to customers' diverse needs.

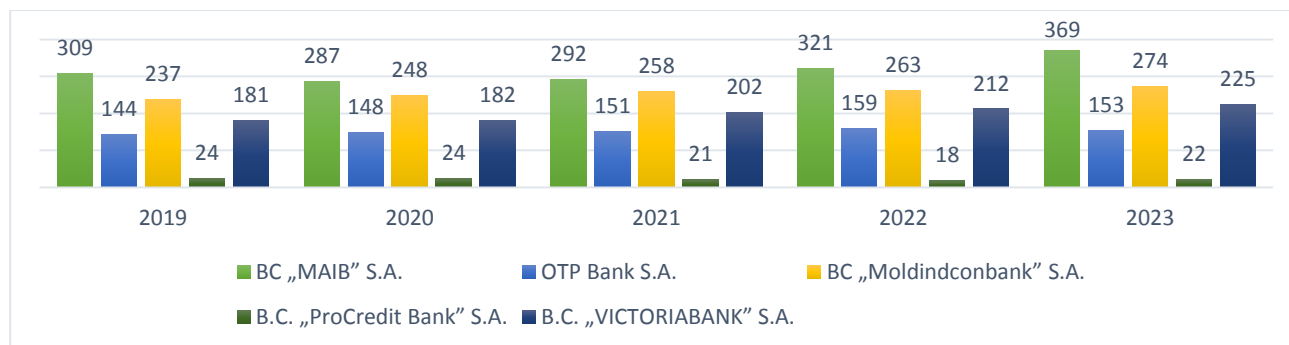


Figure 5. The number of ATMs of banks in the Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml>>.

The total number of ATMs across all banks in Moldova has shown a general increasing trend over the years, indicating growth and expansion in banking services accessibility. Different banks have experienced varying trajectories in their ATM counts over the years. Some banks have consistently increased their number of ATMs, while others have seen fluctuations or slight decreases. According to Figure 5, **maib** is on the first place. By 2023, **maib** significantly expanded its ATM network to 369 units, indicating steady growth over the period. The number of ATMs of OTP Bank JSC increased gradually over the years, reaching 153 units by 2023. Although the growth was modest compared to other banks, OTP Bank JSC maintained a consistent presence in the market. The CB “Moldindconbank” JSC experienced steady growth in its ATM network each year, reaching 274 ATMs by 2023. CB “Victoriabank” JSC began with 181 ATMs in 2019. The bank consistently expanded its ATM network, reaching 225 ATMs by 2023. The growth was steady, with a notable increase from 2021 to 2023, indicating proactive efforts to improve accessibility for customers.

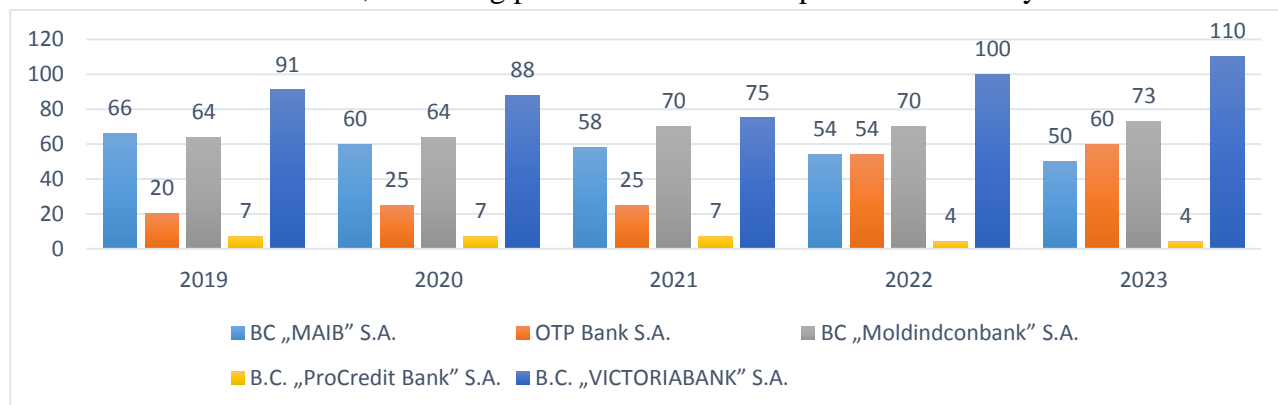


Figure 6. The number of subsidiaries of banks in the Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml>>.

According to Figure 6, in 2019 **maib** had 66 subsidiaries. The number of subsidiaries decreased gradually over the years, reaching 50 by 2023. This decline suggests a strategic restructuring or consolidation of the bank's branch network. OTP Bank JSC started with 20 subsidiaries in 2019. The number of subsidiaries increased to 25 in 2020 and remained stable until 2021. There was a significant surge in subsidiaries in 2022, jumping to 54, and further increasing to 60 by 2023. This rapid expansion indicates a strategic push for market penetration and growth by OTP Bank JSC. CB "Moldindconbank" JSC had 64 subsidiaries in 2019. The bank continued to maintain 70 subsidiaries in 2022 and 2023, indicating a consistent presence in the market. CB "ProCredit Bank" JSC started with 7 subsidiaries in 2019. However, there was a notable decrease in subsidiaries to 4 in 2022, which remained the same in 2023. This reduction may reflect a strategic decision to streamline operations or focus on core markets. CB "Victoriabank" JSC began with 91 subsidiaries in 2019, growing to 110 by 2023. This fluctuation suggests a dynamic approach to branch network management and expansion by Victoriabank.

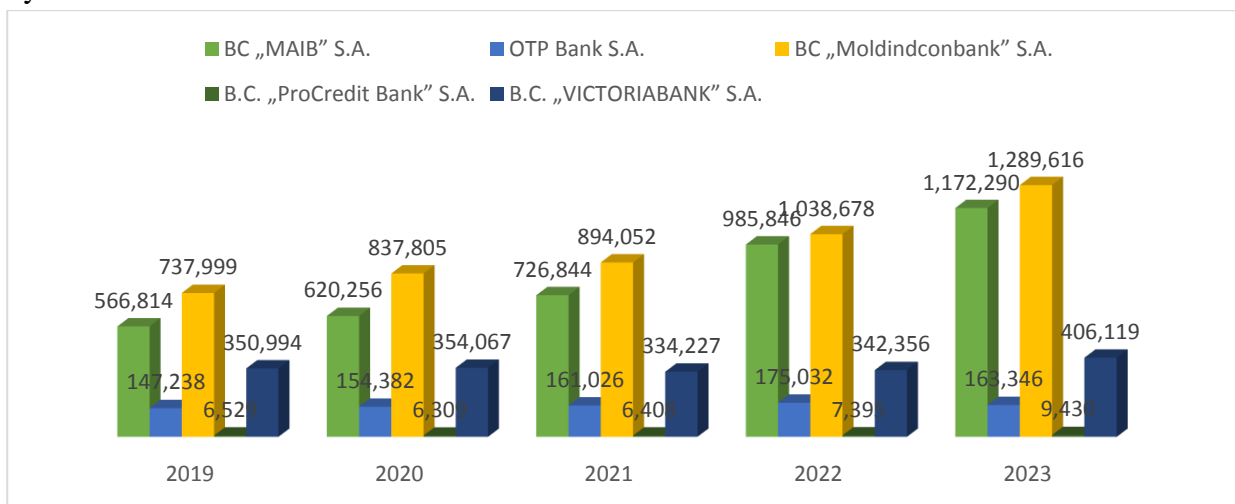


Figure 7. The number of cards issued of banks in the Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available: <<https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml>>.

According to Figure 7, for **maib** the number of cards issued increased steadily over the years, reaching 1,172,290 by 2023. This significant growth indicates a proactive approach to expanding the bank's customer base and promoting card usage. CB "Moldindconbank" JSC issued 737,999 cards in 2019, increasing up to 1,289,616 by 2023. For CB "Victoriabank" JSC the number of cards issued remained relatively stable until 2021, with a slight decrease in 2020 and a slight increase in 2021. However, there was a significant rebound in card issuance in 2023, reaching 406,119 cards. This fluctuation suggests variations in the bank's card issuance strategy or marketing efforts over the years.

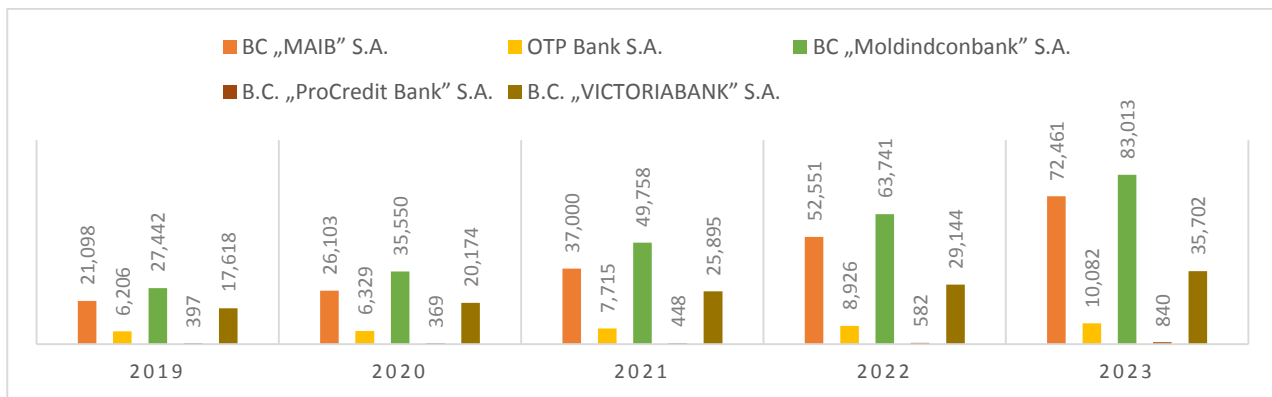


Figure 8. Number of transactions for actual users of the web-banking application.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available:< <https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml> >.

According to Figure 8, **maib** experienced significant growth in the number of web-banking application users, with a steady increase from 21,098 in 2019 to 72,461 in 2023. This substantial growth indicates the bank's effective digital banking strategies and the increasing adoption of online banking services by its customers. Moldindconbank experienced significant growth in the number of web-banking application users, with a substantial increase from 27,442 in 2019 to 83,013 in 2023. This indicates a strong demand for digital banking services among Moldindconbank's customer base, possibly driven by the bank's digitalization efforts and enhanced online banking features. ProCredit Bank observed a steady increase in the number of web-banking application users throughout the years, though the numbers remained relatively low compared to other banks. Victoriabank experienced consistent growth in the number of web-banking application users, with an increase from 17,618 in 2019 to 35,702 in 2023. This demonstrates the bank's efforts in promoting online banking services and meeting the evolving preferences of its customer base.

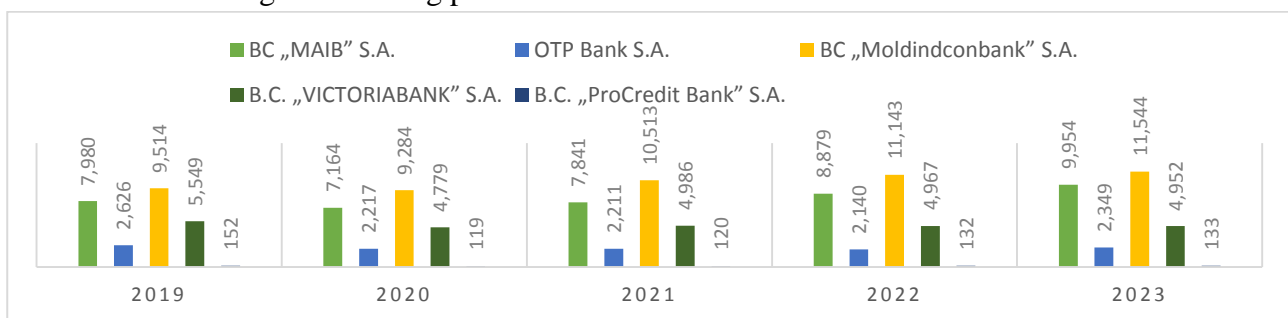


Figure 9. The number of cash operations within banks in the Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available:< <https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml> >.

According to Figure 9 several trends can be observed. There is a general upward trend in the number of cash operations for most banks over the five-year period. CB "maib" JSC, CB "Moldindconbank" JSC, and CB "Victoriabank" JSC all experienced overall increases in the number of cash operations from 2019 to 2023. This indicates a potential growth in banking activity and demand for cash services during this period. This could suggest varying factors influencing the cash operations of these banks, such as changes in customer behavior, economic conditions, or banking strategies. CB "Moldindconbank" JSC consistently has the highest number of cash operations among the listed

banks throughout the five-year period. This indicates its significant role in handling cash transactions within the banking sector of the Republic of Moldova.

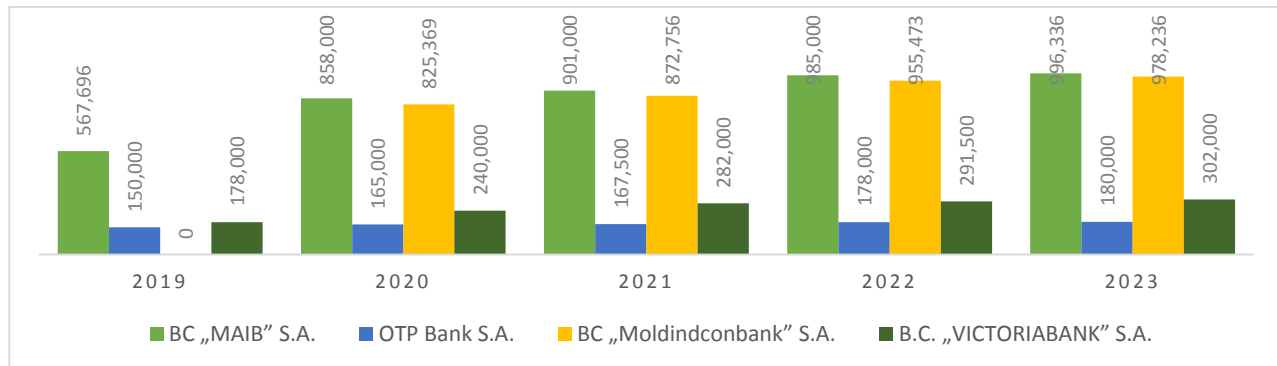


Figure 10. The number of customers in the top banks in Republic of Moldova.

Source: elaborated by the authors on the basis of information presented in the: National Bank of Moldova. [online]. Available:< <https://www.bnm.md/bdi/pages/reports/dsp/DSP2.xhtml>>.

According to Figure 10, **maib** experienced significant growth in its customer base over the five-year period, with the number of customers increasing from 567,696 in 2019 to 996,336 in 2023. This substantial growth indicates **maib** 's successful efforts in attracting and retaining customers, possibly through effective marketing strategies and a wide range of banking products and services. Moldindconbank saw moderate growth in its customer numbers throughout the period, with the number of customers rising from 800,000 in 2019 to 978,236 in 2023. This indicates a steady increase in customer trust and satisfaction with Moldindconbank's products and services. Victoriabank experienced consistent growth in its customer base over the five years, with the number of customers increasing from 178,000 in 2019 to 302,000 in 2023. This significant growth highlights Victoriabank's effective customer acquisition strategies and the bank's ability to meet the diverse needs of its customer segments.

In conclusion, the banking sector in the Republic of Moldova has undergone significant developments and reforms aimed at enhancing stability, transparency, and efficiency, despite facing challenges such as money laundering, corruption, and weak governance. The 2014 banking crisis prompted regulatory interventions and stricter supervision by the National Bank of Moldova (NBM), leading to improvements in the sector's resilience.

Foreign ownership has played a crucial role in bringing expertise, capital, and access to international markets, although there have been instances of withdrawals due to economic and regulatory concerns. Digital transformation is underway, with banks investing in technology to improve customer experience and offer innovative products and services.

Efforts to promote financial inclusion and support economic growth through increased access to finance, particularly for SMEs and individuals, are ongoing priorities. Collaboration with international organizations and partners is crucial for addressing remaining challenges and fostering sustainable development in Moldova's banking sector.

Analyzing specific indicators such as the share of loans and deposits, non-performing loans, ATM networks, number of subsidiaries, cards issued, web-banking application users, cash operations, and customer base across top banks in Moldova provides insights into the sector's performance and trends. For instance, there is a steady increase in loans and deposits, indicating growing demand and

confidence in the banking system. Additionally, the decline in non-performing loans and the expansion of digital banking services suggest improvements in risk management and customer engagement strategies. Partnerships with various companies and promotional campaigns offered by banks further enhance customer benefits and engagement, reflecting the sector's commitment to meeting evolving consumer needs and preferences.

Moreover, while challenges persist, Moldova's banking sector is making notable strides towards greater stability, transparency, and customer-centricity, supported by regulatory reforms, technological advancements, and strategic partnerships. Continued collaboration and proactive measures will be essential for sustaining momentum and driving further growth and development in the sector.

In recent times, the banking sector in Moldova has embarked on a comprehensive journey of automating its institutions. This initiative has enabled them to streamline operational processes, offer contemporary customer services, and expand their presence in the market. Throughout the digitalization of banking operations, the exploration and implementation of digital solutions have facilitated thorough research into customer preferences and requirements, as well as the efficient promotion of products and services. Consequently, financial institutions are showing growing interest in allocating resources towards technology and digitization.

In conclusion, the evolution of digitalization and innovation within the banking sector has become imperative in today's landscape, reshaping how financial services are delivered, consumed, and managed. As evidenced by various banks in Moldova, including MAIB, Victoriabank, and ProCredit Bank, embracing digital transformation is key to staying competitive and meeting evolving customer expectations.

Ensuring competition and transparency of the banking sector of Moldova

Ensuring competition and transparency in the banking sector in Moldova is crucial for fostering a healthy financial environment, promoting economic growth, and protecting the interests of consumers. To achieve this goal, it is essential for regulatory authorities to implement and enforce robust regulations and oversight mechanisms that promote fair competition, prevent anti-competitive behavior, and ensure transparency in banking operations. This includes measures such as enforcing strict licensing requirements, promoting open banking practices, and conducting regular audits and assessments of banks' financial health and compliance with regulatory standards.

Moreover, promoting competition and transparency requires fostering a culture of accountability and integrity within the banking sector, encouraging banks to adhere to high ethical standards and disclose relevant information to stakeholders. This can be achieved through initiatives such as promoting financial literacy among consumers, enhancing whistleblower protections, and providing channels for public feedback and complaints. By prioritizing competition and transparency, Moldova can build a banking sector that is more resilient, innovative, and responsive to the needs of its citizens, while also contributing to the overall stability and development of the economy.

The banking reforms carried out in recent years have contributed to the consolidation of the banking system in the Republic of Moldova. The current banking system is very different from what it was three years ago, being strong, robust, healthy and transparent. Thus, all banks operating on the banking market of the Republic of Moldova are well capitalized, viable and have sufficient liquidity to successfully withstand this period and continue to serve their customers.

The consolidation of the banking sector refers to the process by which banks merge with or acquire other banks, resulting in fewer and larger institutions in the market. This consolidation can occur through mergers, acquisitions, or other forms of corporate restructuring.

The consolidation of the banking sector in Moldova is a complex process with both potential benefits and challenges. On one hand, consolidation can lead to stronger, more efficient banks that are better positioned to compete in the market, improve financial stability, and attract investment. It can also promote economies of scale, diversification, and innovation within the sector.

However, consolidation may also raise concerns about reduced competition, potential job losses, and the risk of creating institutions that are "too big to fail." Additionally, there is a need to ensure that the process of consolidation is transparent, fair, and regulated effectively to protect the interests of consumers, maintain financial stability, and prevent anti-competitive behavior. Ultimately, the success of the consolidation process in Moldova will depend on careful planning, robust regulatory oversight, and proactive measures to mitigate potential risks while maximizing the benefits for the banking sector, the economy, and the population as a whole.

Conclusions

Based on the researched presented in the article, we would present for following conclusions and recommendations:

- Establish and enforce a regulatory framework that fosters competition within the banking sector by ensuring that banking regulations are transparent, consistent, and conducive to market diversity and innovation.
- Encourage the establishment of new banking institutions in Moldova to enhance market competition and provide consumers with a broader range of banking options and services.
- Reduce barriers to entry for new players in the banking sector by simplifying licensing procedures, lowering capital requirements, and providing support for startups and emerging financial institutions.
- Enhance regulatory oversight and enforcement mechanisms to detect and address anti-competitive behavior, such as price-fixing or market manipulation, and promote fair competition and market integrity.
- Improve transparency in banking operations by requiring banks to disclose information about their pricing, fees, and terms and conditions in a clear and accessible manner, thereby empowering consumers to make informed decisions and promoting competition based on price and quality.
- Invest in digital infrastructure and technology solutions to improve access to banking services, especially in underserved areas, and promote competition by reducing barriers to entry and increasing market penetration.
- Encourage banks to invest in customer-centric technologies and digital platforms to enhance the overall banking experience and attract new customers, thereby promoting competition based on innovation and customer satisfaction.
- Foster collaboration between banks and non-bank financial institutions to expand the range of financial products and services available to consumers, thereby increasing competition and choice in the market.
- Promote competition in payment systems by fostering interoperability between different payment providers and encouraging the adoption of innovative payment technologies, thereby increasing efficiency and reducing costs for consumers and businesses.

- Support the development of alternative financing channels, such as peer-to-peer lending platforms or crowdfunding, to provide additional options for businesses and consumers and promote competition in the financing market.
- Continuously evaluate and adjust competition policies and regulations to ensure a level playing field and promote a healthy and vibrant banking ecosystem that benefits consumers, businesses, and the overall economy of Moldova.

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