***Review Article***

**STRATEGIES FOR ENHANCING THE RESILIENCE OF COMMUNITY BANKS IN THE USA**

**ABSTRACT**

Community banks are vital to local economies, particularly in underserved and rural areas, as they give small businesses and individuals access to loans and other necessary financial services. The long-term survival of these organizations has been questioned, nevertheless, due to the growing trend of financial consolidation, regulatory changes, technology disruptions, and economic uncertainties. With an emphasis on digital transformation, regulatory compliance, strategic alliances, and important risk mitigation techniques, this study looks at ways to improve the resilience of community banks in the US. The impact of developing financial technologies, such as blockchain, digital banking, and artificial intelligence (AI), on the sustainability and operational efficiency of community banks is highlighted by this study through an analysis of case studies and current literature. While technological advancements present opportunities for cost reduction and service enhancement, they also introduce cybersecurity threats and regulatory complexities that must be managed effectively. The study further evaluates the effectiveness of resilience strategies such as capital adequacy measures, enterprise risk management (ERM), and diversified revenue models in mitigating financial risks. Case studies of successful community banks demonstrate how institutions leveraging technology and sound financial practices have sustained operations despite industry challenges. The findings emphasize the need for continuous adaptation to technological and economic shifts, proactive regulatory compliance, and strong financial governance to ensure the long-term stability of community banks. Ultimately, strengthening community banks' resilience is not only vital for their survival but also for the broader financial stability and economic inclusion of local communities in the United States**.**

**Keywords:** *Community Banks, Financial Resilience, Digital Transformation, Risk Management*

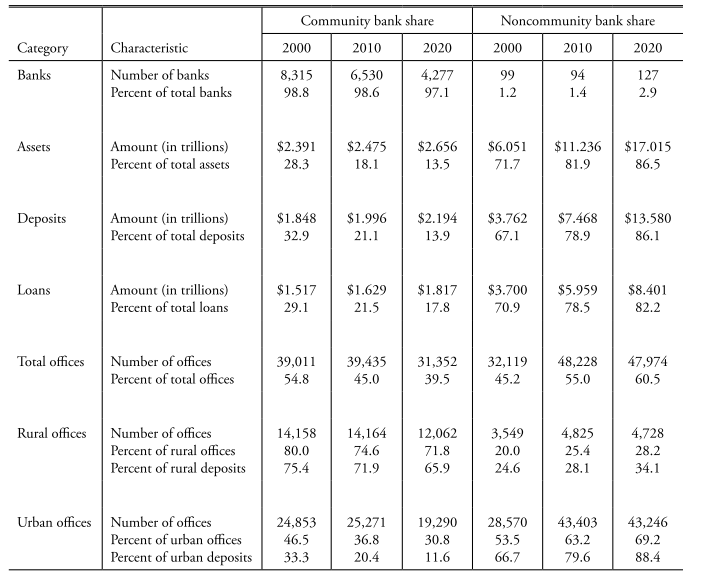
# **Introduction**

Community banks' future has been scrutinized due to the banking industry's ongoing consolidation. The number of community banks in the US has rapidly declined over the last few decades (Hanauer et al., 2021). Schneiberg & Parmentier, (2022) claim that during the 1970s, American finance saw significant transformation, which has had disastrous effects on jobs and the overall economy. The size and significance of finance concerning the rest of the economy increased as officials deregulated the industry. The bulk of banks and savings organizations in the majority of developed nations are still small, neighborhood-based businesses (Deyoung et al., 2004). However, the environment has become less friendly for community banks due to deregulation, greater competition, new financial instruments, information technology advancements, and innovations in bank production processes. In the majority of nations, the number of community banks is declining along with their market shares for deposits and loans. For instance, according to some metrics, community banks' market share and number have roughly decreased by half since 1980. It is reasonable to question whether the community bank business model will remain sustainable in light of these trends. The community bank is a uniquely American business, with more of them than almost anywhere else in the world (Deyoung et al., 2004; Gandhi & Lustig, 2015). According to Mark Roe of Harvard Law School, it is a type of financial institution that has been influenced by the political trends in the United States toward local control and decentralization (Lux Robert Greene et al., 2015). However, for more than 40 years, the prominence of these small, locally held lenders to local consumers and businesses has decreased, first as a result of the 1980s savings and loan crisis, then as a result of the removal of obstacles to bank consolidation, and finally as a result of economic downturns. At the same time, community banks' proportion of U.S. banking assets has significantly decreased as the nation's biggest banks have grown more dominant, helped by economies of scale and a broad geographic reach. Changing demographics, quickly evolving financial technologies, and greater economic consolidation present community banks with increasing problems in addition to competition from larger banking institutions. In spite of their diminishing market share, community banks continue to be essential suppliers of financial services and credit in the US. Community banks are essential to maintaining local economies and are the main suppliers of banking services in rural areas of the nation. Community banks are particularly large lenders to commercial and agricultural borrowers, even in times of economic strain, as evidenced by the comparatively stable business lending provided by small banks during the global financial crisis (GFC) and the important role they played in emergency lending (Hanauer et al., 2021). However, consumer demands for digital banking have made things more difficult to operate, necessitating large expenditures in digital transformation that many smaller banks find too expensive. Additionally, continuing concerns about their financial stability include interest rate changes, cybersecurity attacks, and economic downturns (Gandhi & Lustig, 2015; Shashikala, 2019). The goal of this study is to investigate methods that can strengthen community banks' resilience in light of these difficulties, guaranteeing their long-term viability and ongoing support of regional economies. Key resilience solutions, such as capital sufficiency measures, risk management frameworks, digital transformation initiatives, regulatory compliance adjustments, and strategic collaborations, are the focus of this research article. Through an analysis of extant literature and case studies, this research will offer valuable perspectives on how community banks might adjust to evolving financial environments while upholding their fundamental objective of assisting local communities. This study's importance stems from its capacity to educate financial regulators, banking executives, and policymakers on the measures required to protect and fortify community banks against changing technical and economic obstacles. Enhancing community banks helps not only their immediate stakeholders but also promotes sustained local growth, economic inclusion, and wider financial stability.

# **Community Banks' Role in Financial System and Consolidation**

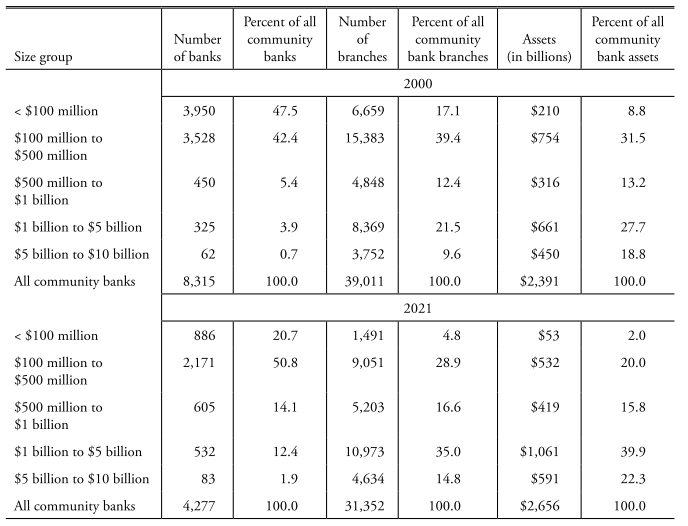
According to Hanauer et al., (2021), community banks are often categorized based on the size of their assets; those with less than $10 billion are classified as such, while those with $10 billion or more are classified as noncommunity banks. Community banks, sometimes known as "Main Street banks," are comparatively small organizations that are primarily concerned with offering basic financial services to local communities, according to Lux Robert Greene et al., (2015). They differ greatly in their operations and architecture, nevertheless. Many community banks run branches or ATMs to broaden their reach, but some are stand-alone businesses. They might also be affiliated with other community banks or have locations in neighboring towns. Community banks were historically run and operated locally by boards that personally approved loans based on their familiarity with the company's clientele. However, external investors and board members, including financial and legal experts, are frequently included in contemporary community banks. As a reflection of their varied operations, community banks also have a wide range of assets. Over the past four decades, the U.S. banking sector has experienced significant transformation, particularly in the number of commercial and community banks. Between 1984 and 2020, the total number of commercial banks declined by nearly 70%, from 14,376 to 4,404, with the most substantial decrease occurring between 2000 and 2020. During this period, community banks also saw a sharp decline, decreasing from over 8,300 to 4,277 by June 2020. While community banks still make up 97% of all banking charters, their share of total banking assets, deposits, and loans has diminished considerably as shown in Table 1. Currently, they account for only 40% of bank branches, 14% of deposits, 18% of loans, and just over 13% of total banking assets.

**Table 1: Community and Noncommunity Banks' Share of All Banking Activity in the United States (Hanauer et al., 2021)**



This decline has been driven by increased consolidation in the banking sector as shown in Table 2, leading to a concentration of financial assets among larger institutions. While in 2000, nearly half of all community banks had assets below $100 million, that number has now dropped to 21%. Meanwhile, those with assets between $1 billion and $5 billion—though making up just 12% of community banks—account for 35% of branches and 40% of assets. Despite these shifts, community banks continue to play an essential role in providing financial services to individuals, small businesses, and rural communities that lack access to larger commercial banks. Community banks differ from their larger counterparts through their emphasis on relationship-based banking, which allows them to offer personalized financial solutions tailored to the needs of local economies. They are instrumental in supporting small and medium-sized enterprises (SMEs), agriculture, and first-time homebuyers by providing flexible and customized lending. Unlike large banks, which often rely on automated credit assessments, community banks develop in-depth knowledge of their customers, enabling them to lend to those who may not meet the rigid criteria of bigger institutions. This direct lending approach fosters economic development and stability, particularly in underserved regions.

**Table 2: Community Bank Distribution by Organization Size (Hanauer et al., 2021)**



In addition to financial inclusion, community banks serve as economic stabilizers during financial crises. During the 2008 financial crisis, many large banks reduced lending due to capital constraints and regulatory pressures, whereas community banks continued to provide credit, helping sustain local economies. This resilience underscores their importance in maintaining financial stability, particularly during periods of economic uncertainty. However, community banks face mounting challenges that threaten their long-term viability. Regulatory burdens, technological advancements, and competition from large financial institutions and fintech firms have contributed to an ongoing trend of consolidation. The Dodd-Frank Act of 2010 introduced stricter compliance requirements, disproportionately impacting smaller banks with fewer resources. As a result, many community banks have merged or been acquired by larger institutions to reduce costs and improve efficiency. Between 2000 and 2020, community banks in the U.S. declined by nearly 50% due to mergers, acquisitions, and closures. While consolidation can lead to operational efficiency and better access to technology, it also raises concerns about reduced competition and decreased access to banking services in rural and underserved areas. The decline of locally owned banks has led to credit shortages for small businesses and farmers, as larger institutions may not prioritize relationship-based lending. Additionally, consolidation often results in job losses, branch closures, and reduced community engagement, which can negatively impact local economies.

# **2.1 Importance and Key Risk Factors Affecting Community Bank Resilience**

Local economies are supported by community banks, but they are subject to risks such as credit, liquidity, cybersecurity, regulatory changes, market volatility, and economic downturns. Community banks play a crucial role in supporting local economies by providing essential financial services, fostering small business growth, and maintaining financial inclusion in underserved areas (Hanauer et al., 2021). Rural towns in the United States have historically relied mostly on community banks for financial services, and this is still the case today. According to Table 3, as of June 30, 2020, community bank branches owned nearly two-thirds of rural deposits and accounted for over 71% of all bank branches in rural areas.

**Table 3: Distribution and Financial Significance of Community Banks in Rural and Urban Communities (Hanauer et al., 2021)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Community Type** | **Number of Community Bank Branches** | **Percent of All Branches in Community Type** | **Deposits at Community Bank Branches** | **Percent of Deposits in Community Type** |
| Rural | 12,062 | 71.8% | $628.5 | 65.9% |
| Urban | 19,290 | 30.8% | $1,561.0 | 11.6% |

Furthermore, more than half of bank branches in 22 U.S. states are community banks. The predominance of community banks by state as of June 30, 2020, is displayed in Table 4. In states where a larger proportion of the population resides outside of metropolitan areas, community banks are especially important providers of financial services. An average of 56 percent of all commercial bank branches are community bank branches in the 25 states with the largest rural population shares, while only 28 percent are in the 25 states with the lowest rural population shares (Hanauer et al., 2021).

Table 4. Predominance of community banks by state as of June 30, 2020

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Share of Population in Rural Areas (percent)** | **Number of Community Bank Branches** | **Percent of All Bank Branches** | **Deposits at Community Bank Branches (in billions)** | **Percent of Deposits at All Bank Branches** |
| Maine | 61.3% | 131 | 53.3% | $9.3 | 43.5% |
| Vermont | 61.1% | 54 | 30.2% | $2.6 | 18.0% |
| West Virginia | 51.3% | 370 | 63.1% | $18.2 | 47.7% |
| Mississippi | 50.6% | 636 | 57.5% | $28.9 | 45.0% |
| Montana | 44.1% | 207 | 55.2% | $12.1 | 42.3% |
| South Dakota | 43.8% | 778 | 58.6% | $34.9 | 42.3% |
| Kentucky | 43.3% | 313 | 70.3% | $28.0 | 58.6% |
| North Dakota | 41.6% | 1,054 | 68.0% | $55.5 | 56.9% |
| Iowa | 41.0% | 681 | 47.3% | $33.7 | 26.1% |
| Wyoming | 40.1% | 317 | 83.0% | $25.4 | 78.8% |
| Alaska | 39.7% | 74 | 28.5% | $4.5 | 13.7% |
| North Carolina | 36.0% | 1,242 | 53.5% | $75.7 | 56.7% |
| Oklahoma | 35.2% | 119 | 56.4% | $9.7 | 40.3% |
| South Carolina | 34.0% | 57 | 84.1% | $5.6 | 6.2% |
| Tennessee | 33.9% | 1,053 | 69.2% | $30.5 | 61.7% |
| Wisconsin | 33.8% | 1,028 | 60.0% | $63.4 | 17.7% |
| Missouri | 33.7% | 1,524 | 25.0% | $18.3 | 34.2% |
| Idaho | 33.6% | 932 | 52.6% | $64.8 | 39.1% |
| Indiana | 33.5% | 813 | 77.1% | $66.7 | 45.7% |
| Nebraska | 29.8% | 803 | 60.3% | $91.9 | 20.0% |
| Louisiana | 29.6% | 1,032 | 65.9% | $61.9 | 34.3% |
| Minnesota | 29.4% | 112 | 52.6% | $43.3 | 25.6% |

These banks serve as a primary source of credit for small businesses, farmers, and individuals, often establishing strong relationships with local customers and tailoring financial products to meet community needs (Taiwo et al., 2016). Their localized decision-making processes and deep community ties enable them to respond more effectively to the unique financial demands of their regions compared to larger financial institutions. However, community banks face several key risk factors that threaten their resilience and long-term sustainability. Credit risk is a significant challenge, as these banks tend to have concentrated loan portfolios in specific geographic areas or industries, making them vulnerable to economic downturns and defaults (Gandhi & Lustig, 2015; Lux Robert Greene et al., 2015). Due to their heavy reliance on core deposits, community banks may find it difficult to get alternative funding sources during times of financial strain, making liquidity risk another significant worry. Community banks' stability is also greatly influenced by regulatory risk because adhering to changing financial laws, such as the Dodd-Frank Act, places a heavy operational and financial load on them. Market risk, which includes changes in interest rates and drops in asset values, can affect capital adequacy and profitability, especially when community banks depend on conventional banking operations like lending and deposit-taking (Baily et al., 2017; Barth et al., 2014; Regehr & Sengupta, 2016). Furthermore, community banks are increasingly in danger from cybersecurity threats since financial institutions are increasingly the target of sophisticated and frequent cyberattacks, which calls for significant expenditures in cybersecurity infrastructure and risk management techniques (Adedoyin Tolulope Oyewole et al., 2024). Community banks' vulnerabilities have been further brought to light by economic downturns and external shocks like the COVID-19 pandemic and the 2008 financial crisis, which frequently result in a rise in loan defaults, a decline in customer deposits, and general financial instability. Community banks must implement strong risk management techniques, such as diverse loan portfolios, careful liquidity planning, regulatory compliance frameworks, and investments in cybersecurity and technology, to increase resilience (Blank et al., 2020; Ngo, 2020). Furthermore, ensuring long-term sustainability and reducing external shocks can be achieved by cultivating robust capital buffers and practicing sensible financial management. Community banks may keep playing a crucial role in promoting regional economic growth and preserving financial stability in their communities by taking proactive measures to address these major threats (Elkhishin & Mohieldin, 2021; Kothari et al., 2020; Siregar et al., 2021).

# **2.2 Efficiency and Technological Disruption**

Banks carry out essential tasks that contribute to the economy. They take in short-term deposits and provide long-term loans as part of their main responsibilities, which include maturity transformation and liquidity provision (Shashikala, 2019). It is also the duty of banks to keep an eye on complicated loans that may not be funded by the market because of their opacity. Offering transaction and payment services, which both depend on information processing, is another important role. This comprises both relationship-based soft information and reliable, organized hard information. With the advent of digital technology, the need for organized, codifiable data has grown dramatically, as have sophisticated techniques that use big data, such as artificial intelligence (AI) and machine learning (ML). As a result, technological improvements are more likely to affect banking operations that rely substantially on information processing, such as payment and transaction services (D. K. Nguyen et al., 2023). Technological disruption has had a significant impact on how financial institutions, particularly community banks, function, and efficiency in the banking industry is essential for maintaining financial stability, profitability, and competitiveness (Jagatheesaperumal et al., 2022). How effectively financial organizations distribute resources, cut expenses, and improve service delivery while preserving financial stability is referred to as banking efficiency. Blockchain, artificial intelligence, and digital banking have transformed traditional banking operations, increasing productivity through improved data analytics, process automation, and customer service. Chatbots and robo-advisors with AI capabilities, for instance, save operating costs and offer automated financial support. Blockchain technology ensures more secure transactions and increases efficiency by speeding up payment settlements and lowering reliance on middlemen (Onabowale, 2025; Patil & Kulkarni, 2019). Comparably, by facilitating remote transactions, eliminating the need for physical branches, and lowering operating expenses, digital banking and smartphone apps have revolutionized traditional banking. But these developments also bring with them new problems, like cybersecurity risks, complicated regulations, and the possibility of digital exclusion for some clients. Additionally, the swift advancement of technology demands ongoing investment in innovation, which can be costly, especially for smaller community banks (Adedoyin Tolulope Oyewole et al., 2024). Despite these challenges, implementing new technology is essential to preserving productivity and competitiveness in a changing financial landscape. By effectively incorporating technology into their operations, banks may improve risk management, cut expenses, and improve service quality—all of which contribute to long-term financial stability.

# **Enhancing Resilience in Community Banks**

Local economies depend heavily on community banks, but financial dangers, regulatory obstacles, and technological advancements continually put their resiliency to the test. Several resilience techniques, such as strong risk management frameworks, capital adequacy measures, revenue stream diversification, and digital banking investments, have been used by community banks to guarantee long-term sustainability (H. L. Q. Nguyen, 2019; Rezvani et al., 2023; Rød et al., 2020). Present resilience tactics emphasize strengthening capital buffers, enhancing liquidity management, and complying with legal mandates like the Basel III framework, which places a strong emphasis on having enough capital to withstand financial crises (Ma, 2016; Petrovi & Trifunović, 2024; Vousinas, 2015). In order to reduce their susceptibility to economic downturns, community banks also employ stress testing, stringent credit screening guidelines, and diversified loan portfolios. Community banks' stability has been strengthened by risk mitigation techniques, especially those that prioritize proactive risk assessment, improved cybersecurity, and dynamic regulatory compliance frameworks (Adusei, 2015; Maskrey, 2011). For instance, community banks have been able to include risk assessment into their overall strategy and lessen their susceptibility to financial instability by implementing enterprise risk management (ERM).

Technology has become a major force behind resilience, enabling small banks to save expenses, increase operational effectiveness, and improve customer service. Banks may now more successfully compete with larger financial institutions thanks to digital banking platforms, mobile payment systems, and AI-driven risk management tools (Adedoyin Tolulope Oyewole et al., 2024). But even as adopting new technology increases productivity, it also poses cybersecurity concerns, necessitating significant investments in IT security infrastructure. A number of case studies demonstrate effective resilience tactics used by community banks. For example, Live Oak Bank, a community bank with headquarters in North Carolina, has used technology to focus on lending to small businesses. To reduce credit risk and enhance loan underwriting, the bank uses AI-driven risk assessment tools. By using prudent lending policies, having a solid capital foundation, and making smart investments in digital banking, Frost Bank in Texas has also been able to retain its financial stability (Hanauer et al., 2021). As demonstrated by these instances, resilience solutions that integrate technology adoption and responsible risk management improve sustainability. Lessons learned from previous financial crises indicate that relying too much on one tactic may make people more vulnerable. According to (Ngoc Huy, 2015), the 2008 financial crisis, for instance, revealed flaws in risk management and emphasized the significance of keeping substantial liquidity reserves. In the future, community banks' prospects will be influenced by shifting consumer preferences, developing regulatory frameworks, and developments in financial technology, or fintech. Community banks must embrace digital transformation while striking a balance between cybersecurity risks and regulatory compliance if they want to stay competitive. Furthermore, community banks can gain access to cutting-edge technologies through strategic alliances with fintech companies without having to make significant infrastructure investments. The competitive landscape may change even more as a result of the ongoing shift toward open banking and blockchain-based financial services, requiring constant adaptability. Community banks will ultimately be in a better position to handle upcoming financial difficulties and preserve long-term growth if they successfully incorporate technological advancements, uphold strong risk management frameworks, and cultivate strong client relationships.

# **Conclusion**

Community banks remain integral to the financial ecosystem, providing critical credit and banking services to local economies, yet their resilience is increasingly challenged by financial consolidation, regulatory pressures, technological advancements, and evolving customer expectations. The study highlights that while community banks face significant risks, implementing robust resilience strategies—including capital adequacy measures, risk management frameworks, digital transformation, and strategic collaborations—can enhance their long-term sustainability. The adoption of AI, blockchain, and mobile banking has improved efficiency but has also introduced cybersecurity risks, requiring substantial investments in risk mitigation and regulatory compliance. Case studies of institutions such as Live Oak Bank and Frost Bank illustrate how leveraging technology and prudent financial management can help community banks navigate challenges and remain competitive. However, lessons from past financial crises underscore the need for maintaining strong liquidity buffers and avoiding over-reliance on any single strategy. Looking ahead, the future of community banks will be shaped by technological advancements, regulatory policies, and market competition. To thrive, community banks must strike a balance between digital innovation, cybersecurity, and personalized banking services that differentiate them from larger financial institutions. By embracing continuous adaptation and fostering resilient financial practices, community banks can sustain their crucial role in promoting local economic growth, financial inclusion, and overall banking stability.

# **References**

Adedoyin Tolulope Oyewole, Chinwe Chinazo Okoye, Onyeka Chrisanctus Ofodile, & Chinonye Esther Ugochukwu. (2024). Cybersecurity risks in online banking: A detailed review and preventive strategies applicatio. *World Journal of Advanced Research and Reviews*, *21*(3), 625–643. https://doi.org/10.30574/wjarr.2024.21.3.0707

Adusei, M. (2015). The impact of bank size and funding risk on bank stability. *Cogent Economics and Finance*, *3*(1). https://doi.org/10.1080/23322039.2015.1111489

Agbeve, V. (2025). Corporate governance and firm performance: A comparative study on listed and unlisted companies in Ghana. *International Journal of Research Publication and Reviews, 6*(2), 1778-1787. Retrieved from [www.ijrpr.com](http://www.ijrpr.com)

Baily, M. N., Klein, A., & Schardin, J. (2017). The impact of the dodd-frank act on financial stability and economic growth. *Rsf*, *3*(1), 20–47. https://doi.org/10.7758/rsf.2017.3.1.02

Barth, J. R., Prabha, A. P., & Wihlborg, C. (2014). The Dodd-Frank Act: Key Features, Implementation Progress, and Financial System Impact. *SSRN Electronic Journal*, 1–44. https://doi.org/10.2139/ssrn.2490037

Blank, M., Hanson, S. G., Stein, J. C., & Sunderam, A. V. (2020). How Should US Bank Regulators Respond to the COVID-19 Crisis? *Hutchins Center Working Paper n. 63*.

Deyoung, R., Hunter, W. C., & Udell, G. F. (2004). The past, present, and probable future for community banks. *Journal of Financial Services Research*, *25*(2–3), 85–133. https://doi.org/10.1023/b:fina.0000020656.65653.79

Elkhishin, S., & Mohieldin, M. (2021). External debt vulnerability in emerging markets and developing economies during the COVID-19 shock. *Review of Economics and Political Science*, *6*(1), 24–47. https://doi.org/10.1108/REPS-10-2020-0155

Gandhi, P., & Lustig, H. (2015). Size Anomalies in U.S. Bank Stock Returns. *Journal of Finance*, *70*(2), 733–768. https://doi.org/10.1111/jofi.12235

Hanauer, M., Lytle, B., Summers, C., & Ziadeh, S. (2021). Community Banks’ Ongoing Role in the U.S. Economy. *The Federal Reserve Bank of Kansas City Economic Review*, 37–81. https://doi.org/10.18651/er/v106n2hanauerlytlesummersziadeh

Jagatheesaperumal, S. K., Rahouti, M., Ahmad, K., Al-Fuqaha, A., & Guizani, M. (2022). The Duo of Artificial Intelligence and Big Data for Industry 4.0: Applications, Techniques, Challenges, and Future Research Directions. *IEEE Internet of Things Journal*, *9*(15), 12861–12885. https://doi.org/10.1109/JIOT.2021.3139827

Kothari, S. P., Blass, D., Cohen, A., & Rajpal, S. (2020). *US Credit Markets Interconnectedness and the Effects of the COVID-19 Economic Shock*.

Lux Robert Greene, M., Lux, M., Greene, R., Bair, S., Fondiller, D., Getter, D., Hadley, R., Haigh, J., Harris-Gibson, C., Jorde, T., Leland, S., Mills, K., Nash, J., Peirce, H., Perdue, P., Scott, H., Segel, J., & Zeckhauser, R. (2015). *M-RCBG Associate Working Paper Series | No. 37 The State and Fate of Community Banking The State and Fate of Community Banking*. *37*. www.hks.harvard.edu/mrcbg

Ma, T. (2016). Basel III and the Future of Project Finance Funding. *Michigan Business & Entrepreneurial Law Review*, *6*(6.1), 109. https://doi.org/10.36639/mbelr.6.1.basel

Maskrey, A. (2011). Revisiting community-based disaster risk management. *Environmental Hazards*, *10*(1), 42–52. https://doi.org/10.3763/ehaz.2011.0005

Ngo, C. N. (2020). *Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ’ s public news and information website . Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories , such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source . These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active . Foundations of Rural Resiliency : America during the COVID-19 Pandemic*. *January*.

Ngoc Huy, D. T. (2015). The critical analysis of limited south asian corporate governance standards after financial crisis. *International Journal for Quality Research*, *9*(4), 741–764.

Nguyen, D. K., Sermpinis, G., & Stasinakis, C. (2023). Big data, artificial intelligence and machine learning: A transformative symbiosis in favour of financial technology. *European Financial Management*, *29*(2), 517–548. https://doi.org/10.1111/eufm.12365

Nguyen, H. L. Q. (2019). Are credit markets still local? Evidence from bank branch closings. *American Economic Journal: Applied Economics*, *11*(1), 1–32. https://doi.org/10.1257/app.20170543

Onabowale, O. (2025). *The Rise of AI and Robo-Advisors : Redefining Financial Strategies in the Digital Age International Journal of Research Publication and Reviews The Rise of AI and Robo-Advisors : Redefining Financial Strategies in the Digital Age*. *February 2024*. https://doi.org/10.55248/gengpi.6.0125.0640

Patil, K., & Kulkarni, M. S. (2019). Artificial intelligence in financial services: Customer chatbot advisor adoption. *International Journal of Innovative Technology and Exploring Engineering*, *9*(1), 4296–4303. https://doi.org/10.35940/ijitee.A4928.119119

Petrovi, N., & Trifunović, D. (2024). *Basel III as a regulatory framework for risk management Bazel III kao regulatorni okvir za upravlјanje rizicima*.

Regehr, K., & Sengupta, R. (2016). Has the Relationship between Bank Size and Profitability Changed? *Economic Review*, *16*(2), 49–72. https://ideas.repec.org/a/fip/fedker/00040.html

Rezvani, S. M. H. S., Falcão, M. J., Komljenovic, D., & de Almeida, N. M. (2023). A Systematic Literature Review on Urban Resilience Enabled with Asset and Disaster Risk Management Approaches and GIS-Based Decision Support Tools. *Applied Sciences (Switzerland)*, *13*(4). https://doi.org/10.3390/app13042223

Rød, B., Lange, D., Theocharidou, M., & Pursiainen, C. (2020). From Risk Management to Resilience Management in Critical Infrastructure. *Journal of Management in Engineering*, *36*(4). https://doi.org/10.1061/(asce)me.1943-5479.0000795

Schneiberg, M., & Parmentier, E. (2022). Banking structure, economic resilience and unemployment trajectories in US counties during the great recession. *Socio-Economic Review*, *20*(1), 85–139. https://doi.org/10.1093/ser/mwaa039

Shashikala, K. (2019). Digital disruption in banking industry. *International Journal of Social and Economic Research*, *9*(3), 56. https://doi.org/10.5958/2249-6270.2019.00019.9

Siregar, R. Y., Gunawan, A. H., & Saputro, A. N. (2021). Impact of the Covid-19 Shock on Banking and Corporate Sector Vulnerabilities in Indonesia. *Bulletin of Indonesian Economic Studies*, *57*(2), 147–173. https://doi.org/10.1080/00074918.2021.1956397

Taiwo, J. N., Yewande, O. A., Edwin, A. M., & Benson, K. N. (2016). The role of microfinance institutions in financing small businesses. *Journal of Internet Banking and Commerce*, *21*(1), 1–20.

Vousinas, G. L. (2015). Supervision of financial institutions: The transition from Basel I to Basel III. A critical appraisal of the newly established regulatory framework. *Journal of Financial Regulation and Compliance*, *23*(4), 383–402. https://doi.org/10.1108/JFRC-02-2015-0011