AKUA: Jurnal Akuntasi dan Keuangan
https://journal.yp3a.org/index.php/AKUA
e-ISSN 2809-851X | p-ISSN 2810-0735
Vol. 5 No. 3 (Juli 2026) 920-926
DOI: 10.54259/akua.v5i3.8210

Shifts in the Dynamics of the Global Financial System: Implications for Macroprudential Policy in the Digital Era

BQ. Elok Nirwana[1*], Padli Pawaid Yahya[2], Lina Azizah[3]
[1,2,3]Institut Agama Islam Al-Manan NU Lombok Timur, Indonesia
Email: [1*]baiqnirwana8@gmail.com, [2]padliyahya16@gmail.com, [3]linaazizah2019@gmail.com

Abstract

This article examines the implications of the transformation of the global financial system on the implementation of macroprudential policy in the digital era, particularly during the period from 2019 to 2023. The study is motivated by the rapid development of financial globalization, deregulation policies, and technological innovation that have fundamentally reshaped the structure and dynamics of the global financial landscape. These developments have created significant opportunities, including broader access to funding sources, accelerated cross-border capital flows, improved financial inclusion, and deeper integration of international financial markets. However, at the same time, these structural changes have also introduced increasingly complex systemic risks, such as heightened financial interconnectedness, vulnerability to digital disruptions, cyber risks, market volatility, and the emergence of new financial actors driven by financial technology innovation. This research employs a descriptive qualitative approach through the analysis of literature, policy developments, and recent trends in the global financial system. The findings reveal that the rapid growth of digital finance has transformed economic behavior, financial institutions, and market structures, creating new challenges for financial regulation and supervision. Therefore, macroprudential policies need to become more adaptive and responsive in addressing emerging digital risks. The study highlights the importance of stronger regulatory coordination, effective monitoring systems, and innovative policy strategies to maintain sustainable financial stability in an increasingly dynamic global financial environment.

Keywords: *Global Financial System, Macroprudential Policy, Digital Age.*

Abstrak

Artikel ini mengkaji implikasi transformasi sistem keuangan global terhadap implementasi kebijakan makroprudensial di era digital, khususnya selama periode 2019 hingga 2023. Studi ini dilatarbelakangi oleh perkembangan pesat globalisasi keuangan, kebijakan deregulasi, dan inovasi teknologi yang telah secara mendasar mengubah struktur dan dinamika lanskap keuangan global. Perkembangan ini telah menciptakan peluang yang signifikan, termasuk akses yang lebih luas ke sumber pendanaan, percepatan arus modal lintas batas, peningkatan inklusi keuangan, dan integrasi pasar keuangan internasional yang lebih dalam. Namun, pada saat yang sama, perubahan struktural ini juga telah menimbulkan risiko sistemik yang semakin kompleks, seperti meningkatnya keterkaitan keuangan, kerentanan terhadap gangguan digital, risiko siber, volatilitas pasar, dan munculnya pelaku keuangan baru yang didorong oleh inovasi teknologi keuangan. Penelitian ini menggunakan pendekatan kualitatif deskriptif melalui analisis literatur, perkembangan kebijakan, dan tren terkini dalam sistem keuangan global. Temuan penelitian menunjukkan bahwa pertumbuhan pesat keuangan digital telah mengubah perilaku ekonomi, lembaga keuangan, dan struktur pasar, sehingga menimbulkan tantangan baru bagi regulasi dan pengawasan keuangan. Oleh karena itu, kebijakan makroprudensial perlu menjadi lebih adaptif dan responsif dalam menangani risiko digital yang muncul. Studi ini menyoroti pentingnya koordinasi regulasi yang lebih kuat, sistem pemantauan yang efektif, dan strategi kebijakan inovatif untuk menjaga stabilitas keuangan yang berkelanjutan dalam lingkungan keuangan global yang semakin dinamis.

Kata Kunci: Sistem Keuangan Global, Kebijakan Makroprudensial, Era Digital.

Submitted: 15-06-2026 | Accepted: 05-07-2026 | Published: 15-07-2026

1. INTRODUCTION

Over the past few decades, there has been an increase in the level of political and economic openness, which has largely been accompanied by greater financial integration. As global markets become increasingly interconnected, analysing and managing macroeconomic financial risks has become ever more important. Models capable of simplifying the topology or hierarchy of these systems are required due to the vastness of the markets and the multitude of products available [1]. For some time, it has been observed that changes in risk appetite across capital markets worldwide are highly similar across the global financial system. This pattern of alignment began to emerge in the early 2000s and intensified following the 2007–08 crisis, continuing for much of 2010[2]..

Next, the collapse of Lehman Brothers on September 15, 2008, is considered the point when the “credit crisis” turned into a global financial crisis, causing the collapse of global bank asset values worth trillions of dollars over the following year[3]. In addition, the economic growth of major countries worldwide generally slowed down, and wealth inequality increased. Geopolitical crises, such as the Russia-Ukraine conflict, further exacerbated turmoil in the global commodities market and volatility in international markets, thereby increasing economic and financial market risks day by day [4]. The global financial crisis has provided serious lessons for economies around the world. The global financial crisis (GFC) of 2007-2008 has made the need for financial regulation a prominent issue. The necessity and importance of introducing regulatory measures had emerged even before that, due to financial globalization, the increase in the trade of new derivative securities, and financial innovations, which represent significant changes in the financial sector since the 1970s [3].

The digitalization of finance has significantly reshaped the transmission channels and expanded the scope of systemic risks, further amplifying the possibility of such risks occurring. One key issue is the concentration of digital financial services. Large-scale defaults, capital flight, and the collapse of several online lending platforms, along with monopolies held by major digital financial companies, could make these entities central nodes of systemic risk. If problems arise, they could severely impact the entire financial system[5]. As a financial form that aligns with the digital economy, digital finance plays a positive role in boosting consumer spending, optimizing corporate investment, innovation, and entrepreneurship, and improving the efficiency of financial services. However, despite its importance as a pillar of the real economy, digital finance is still facing several challenges in its development [6].

Another significant change is the emergence of digital technology, which has revolutionized the way financial services are provided and consumed. New technologies such as fintech and cryptocurrencies offer new opportunities to improve efficiency and financial inclusion, but they also present new risks, such as money laundering and terrorism financing [7].

In this case, the term macroprudential has become very popular in the financial sector following the global financial crisis. The crisis occurred due to the absence of effective macroprudential policies in developed countries, which are policies related to financial sector dynamics stemming from the interaction between macro and microeconomic factors Bank [8]. Although macroprudential policies are relatively new, they have been implemented in over a hundred countries with various instruments. Many of these countries, particularly developing ones, have been using policy tools for some time, with their use for financial stability becoming widespread only in response to the global financial crisis[9].

In Indonesia, to safeguard the financial system, the country's central bank (Bank Indonesia) plays a crucial role in managing fluctuations, whether they arise from internal business and financial cycles or external shocks [10]. To maintain financial stability, a macroprudential approach has been implemented as part of the economic recovery following the Asian financial crisis in 1997/1998. The experience of that crisis has provided valuable lessons, so that during the 2007/2008 global financial crisis, triggered by the failure of subprime mortgage products in the United States, Bank Indonesia, with its microprudential and macroprudential policies, was more prepared with various measures to prevent the deterioration of economic conditions and the domestic financial system (Bank Indonesia, 2016).

Since the global financial crisis, policymakers have increasingly utilized macroprudential policies, recognizing their potential as important tools for maintaining financial stability. To date, most of their use has been directed at curbing the accumulation of vulnerabilities through tightening measures [9]. Based on the aforementioned research, this study shares the same goal, namely addressing future shocks related to the global financial system crisis by strengthening financial regulations. The difference in this research lies in the addition of macroprudential policies, their implementation, and realization in addressing the dynamics of the global financial system. Thus, based on previous studies, this research can provide references and evaluations for financial institutions in maintaining financial stability against disruptions, both internal and external, through macroprudential policies.

Previous studies have examined digital finance and financial stability in isolation. However, few studies have comprehensively analysed how shifts in the global financial architecture are reshaping macroprudential policy frameworks in the digital age, particularly from the perspective of policy adaptation.

2. RESEARCH METHODOLOGY

To study the changes in the global financial system and their impact on macroprudential policy in the digital era, this study uses a qualitative descriptive research design with a literature review approach [11]. The qualitative approach was chosen because it allows an in-depth understanding of the complex financial policy changes, particularly in analyzing how technological change, systemic financial risk, and regulatory changes relate to each other. Articles in academic journals and institutional reports published by Bank Indonesia and the Financial Services Authority (OJK) are the data sources used in this study, policy documents, books, and international financial publications. The selection of these sources was based on three main criteria: relevance to the study topic, credibility of the publication source, and publication period between 2019 and 2023 in order to capture contemporary developments related to digital financial transformation.

Data collection was conducted through document review by systematically identifying, selecting, and classifying literature related to global financial system transformation, digital finance development, and macroprudential regulatory policy. The collected literature was then organized according to its contribution to understanding the structural changes occurring in the financial sector. The study applied thematic content analysis as the primary analytical technique. The analysis process consisted of three stages[12]. First, data reduction was conducted by selecting the most relevant literature based on the research objectives. Second, data categorization was carried out by grouping key themes, including digital financial transformation, systemic financial risk, financial market integration, and macroprudential policy adaptation. Third, interpretative analysis was performed to identify patterns, relationships, and policy implications emerging from the changing structure of the global financial system.

The analytical framework of this study focuses on three main dimensions: technological transformation in financial systems, emerging systemic risks associated with digital finance, and the adaptation of macroprudential policy frameworks in response to these structural changes. This approach is expected to provide a comprehensive understanding of how policymakers should respond to evolving challenges in maintaining financial system stability in the digital era.

3. RESULT AND DISCUSSION

3.1 Technological Transformation in the Financial System

Digital technologies such as blockchain, fintech, and artificial intelligence have overhauled traditional financial systems. The use of these technologies has enhanced transaction efficiency, transparency, and accessibility of financial services [13]. However, these technologies also bring new risks, such as cyber threats and systemic instability, which require adjustments in macroprudential policies. The rapid adoption of digital financial technologies has fundamentally transformed the structure of financial intermediation. Unlike conventional banking systems, where financial transactions are centralized and highly regulated, digital finance creates decentralized transaction networks that weaken the effectiveness of traditional supervisory mechanisms. From the perspective of systemic risk theory, this transformation increases regulatory blind spots and creates new channels for financial contagion that conventional macroprudential frameworks were not originally designed to address. Although fintech and cryptocurrency innovations improve financial inclusion, these technologies simultaneously reduce the ability of central financial authorities to monitor liquidity movement and cross-border capital flows. In this context, technological innovation creates a paradox: financial inclusion increases, but regulatory visibility decreases. This condition challenges the traditional assumption that greater financial access automatically contributes to stronger financial stability.

Consequently, leisure time and time outside working hours have increased as a result of the use of financial technology and the reduction in the time required to provide financial services. This benefits the public, the business sector, and individuals (households). In their previous research, Vardo Matskya, Kuznetsova, and Plotnikov noted that, in addition to this factor, there are other requirements for the adoption of digital technology in the financial sector.[14]. Specifically:

1. Based on a new computing paradigm, the shift in information technology economics has resulted in a new phase of economic growth, including the digital economy, in which technology that uses cryptography is a key component.
2. Most economic growth trends, particularly digitalisation, run counter to the dominance of conventional financial instruments.
3. Banks must embrace digital technology because new entrants to the financial market, such as information technology companies, have made it easier for customers to access services. If they fail to do so, they will lose out to the competition.

The transformation of the global financial system cannot be understood solely as technological innovation, but rather as a structural shift in financial architecture. Financial globalization accelerates digital innovation, while digital innovation itself increases interconnectedness among financial institutions. According to systemic risk theory, greater interconnectedness increases contagion vulnerability, meaning that technological progress simultaneously expands efficiency and systemic fragility. Consequently, macroprudential policy must evolve beyond conventional banking supervision toward ecosystem-based financial regulation.

Globalization and financial market integration have accelerated the spread of digital technology in the financial sector. The growth of fintech platforms and digital currencies is influencing the dynamics of traditional banking and global payment systems [15]. This shift creates significant regulatory challenges for financial authorities around the world. This shift has important implications for macroprudential policies aimed at maintaining the overall stability of the financial system. In the digital era, macroprudential policies must be more adaptive and responsive to emerging new risks. Additionally, macroprudential policies also need to consider the impact of digital technology on the behavior of economic agents and market structures [16].

The financial market is increasingly dominated by large technology companies offering financial services, challenging the traditional business model of banks [17]. Fragmentation and disintermediation of the financial market lead to changes in market liquidity and volatility. Macroprudential policies must adapt to this more complex and fragmented market structure. Technological advancements also pose a significant issue for Bank Indonesia (BI). The development of a secure and efficient electronic payment system requires investment in advanced technology. Furthermore, cyberattacks are a major concern, forcing BI to continuously update its information security systems. A concrete example is the development of digital payment systems such as the Quick Response Code Indonesian Standard (QRIS), which requires substantial efforts in technological infrastructure development and protection [12].

In addition, digital technology also enhances financial inclusion by providing access to financial services to previously underserved populations. Although financial inclusion is increasing, there are risks related to data security and consumer protection [18]. Macroprudential policies need to ensure that the increase in inclusion does not come at the expense of financial system stability.

3.2 Implications for Macroprudential Policy in the Digital Era

This study argues that macroprudential policy can no longer rely exclusively on conventional banking indicators such as capital adequacy ratios or liquidity coverage ratios. Digital financial ecosystems have introduced non-bank actors, algorithmic financial services, and decentralized transactions that operate outside traditional regulatory boundaries. Therefore, regulatory adaptation is not optional but structurally necessary to preserve long-term financial stability. Macroprudential policies must be more adaptive and responsive to technological changes and global market dynamics [19]. Financial authorities need to develop a flexible regulatory framework to accommodate technological innovations without compromising financial stability. This includes updating regulations on capital, liquidity, and risk management to encompass fintech entities and large tech companies operating in the financial sector [20].

The implementation of digital technology requires enhanced oversight to detect and mitigate cyber and operational risks. Stricter regulation of digital financial service providers is necessary to protect consumers and maintain the integrity of the financial system. International collaboration in regulation is needed to manage risks that are cross-border in nature [21] [21]. Financial authorities must encourage innovation in macroprudential policies to address emerging risks from digital technology. The development of new tools and indicators capable of monitoring and evaluating systemic risks within the digital financial ecosystem is crucial. Data-driven policy research and development are becoming increasingly important in this digital era [22]. The shifting dynamics of the global financial system require better coordination among international financial institutions. Strengthening institutions like the IMF, World Bank, and BIS in supporting effective macroprudential policies is essential. The formation of forums and international cooperation networks that can share information and best practices in managing global financial risks is necessary [23].

As explained above, the emergence of digital finance has fundamentally altered the mechanisms of systemic financial risk transmission. Unlike the traditional banking system, where systemic risk is concentrated within regulated institutions, digital finance decentralises financial activities, thereby creating regulatory gaps that were not originally designed to be addressed by conventional macroprudential frameworks. This has facilitated the rise of large technology firms in the financial services sector, signalling a structural transformation in global financial intermediation [24]. It is clear that traditional banking institutions have historically served as the primary channels for credit allocation and monetary transmission. However, the emergence of fintech platforms and large technology firms has disrupted this structure, reducing the effectiveness of conventional supervisory instruments. From a macroprudential perspective, this transformation requires regulators to extend supervision beyond traditional banking institutions to the broader digital financial ecosystem.

Table 1. Literature Synthesis on Global Financial System Dynamics and Macroprudential Policy

No	Author(s)	Year	Research Focus	Main Findings	Method Used	Research Limitation	Relevance to Current Study
1	Ding & Ding	2024	Analysis of macroprudential policy effectiveness in digital finance development	Digital finance increases systemic financial risk and requires stronger macroprudential supervision	Quantitative Policy Analysis	Limited to China's financial system	Shows that digital finance creates new systemic vulnerabilities requiring regulatory adaptation
2	Gong & Zhao	2024	Digital inclusive finance and economic resilience	Digital financial inclusion improves economic resilience and expands financial accessibility	Empirical Quantitative Analysis	Regional focus limited to Northwest China	Supports argument that digital finance provides opportunities while creating regulatory challenges
3	Araujo et al.	2021	Impact of macroprudential policy on financial stability	Macroprudential policy effectively reduces financial vulnerability and stabilizes financial markets	Meta-Analysis	Focuses on conventional banking sector	Demonstrates importance of macroprudential policy but does not address digital financial transformation
4	Arkhipov	2023	Fragmentation of the global financial system and stock market integration	Global financial fragmentation increases interconnectedness and market volatility	Computational Financial Analysis	Limited focus on stock market structure	Explains how global financial integration contributes to systemic instability
5	Arner, Barberis, & Buckley	2015	Evolution of fintech in modern financial systems	Fintech transforms traditional financial intermediation and disrupts conventional banking institutions	Conceptual Regulatory Analysis	Limited discussion on macroprudential policy implications	Provides theoretical foundation regarding structural transformation caused by fintech innovation

No	Author(s)	Year	Research Focus	Main Findings	Method Used	Research Limitation	Relevance to Current Study
6	Philippon	2019	Fintech development and financial inclusion	Fintech expands financial inclusion but weakens conventional banking business models	Economic Policy Analysis	Limited explanation of systemic regulatory impact	Supports argument that technological disruption changes financial market structure
7	Peterson & Ozili	2020	Global financial inclusion research trends	Financial inclusion improves accessibility but raises consumer protection and regulatory concerns	Literature Review	Broad conceptual discussion without specific policy focus	Demonstrates dual impact of financial inclusion on development and regulatory complexity
8	You, Hu, & Guo	2023	Relationship between macroprudential policy and economic crisis	Strong macroprudential policy reduces economic vulnerability during crisis periods	Econometric Analysis	Focuses on crisis management rather than digital finance	Reinforces importance of macroprudential policy in maintaining financial stability

Previous studies have examined digital finance, financial inclusion, fintech innovation, and macroprudential policy separately. However, limited studies have comprehensively analyzed how structural changes in the global financial system, accelerated by digital transformation, collectively reshape macroprudential policy frameworks. Therefore, this study seeks to fill this gap by integrating discussions on global financial transformation, emerging systemic risk, and the adaptation of macroprudential policy in the digital era within a single analytical framework.

4. CONCLUSION AND RECOMMENDATION

Shifts in the dynamics of the global financial system have significant implications for macroprudential policy in the digital era. Policymakers must be more adaptive, responsive, and focused on systemic stability. They also need to integrate macroprudential and microprudential instruments, engage multiple stakeholders, and address challenges such as data gaps, cross-border coordination, and regulatory capacity. New opportunities available to policymakers include leveraging digital technology, developing new instruments, and enhancing collaboration. Additionally, these findings indicate that macroprudential policy needs to be more adaptive and responsive to emerging risks in the digital era. These policies should also consider the impact of digital technology on the behavior of economic actors and market structures.

Recommendation The statement contains several tangible and feasible recommendations for practitioners, regulators, and further research. For practitioners and regulators, it highlights the need for more adaptive and responsive macroprudential policies, urging them to focus on systemic stability while incorporating both macroprudential and microprudential tools. It suggests a proactive approach to addressing data gaps, enhancing cross-border coordination, and strengthening regulatory capacity. Additionally, leveraging digital technology and developing new financial instruments are recommended as practical steps for enhancing collaboration and policy effectiveness.

For further research, the statement suggests exploring how digital technologies impact economic behavior and market structures, identifying new risks, and examining ways to integrate innovative approaches into existing regulatory frameworks. These recommendations offer clear directions for policymakers and researchers working to navigate the evolving financial landscape

REFERENCES

[1] F. Moshirian, “Financial services in an increasingly integrated global financial market,” *J. Bank. Financ.*, vol. 32, no. 11, pp. 2288–2292, 2008, doi: 10.1016/j.jbankfin.2008.03.003.

[2] A. Arkhipov, “Fragmentation of the world financial system: evidence from stock markets,” *Procedia Comput. Sci.*, vol. 221, pp. 1099–1101, 2023, doi: 10.1016/j.procs.2023.08.093.

[3] E. Solt, “The Quest for the Stability of the Global Financial System,” *Procedia Econ. Financ.*, vol. 34, no. 15, pp. 485–492, 2015, doi: 10.1016/s2212-5671(15)01658-5.

[4] Y. You, X. Hu, and H. Guo, “Macroprudential policy, economic crises and economic growth,” *Digit. Econ. Sustain. Dev.*, vol. 1, no. 1, pp. 1–23, 2023, doi: 10.1007/s44265-023-00014-1.

[5] H. Ding and N. Ding, “Analysis of the effectiveness of macro-prudential policy regulation in China in the context of digital finance,” *Technol. Forecast. Soc. Change*, vol. 201, p. 123195, 2024.

[6] X. Gong and L. Zhao, “Does Digital Inclusive Finance Help County Level Governance in the Five Provinces of Northwest China, from the Perspective of Economic Resilience?,” *Sustainability*, vol. 16, no. 10, p. 4034, 2024.

[7] F. Bachri, “Studi Pengembangan Model Ekonomi Makro Dan Kebijakan Ekonomi Regional Kota Pagar Alam,” *J. Ekon. Pembang. J. Econ. Dev.*, vol. Vol. 5 No., pp. 21–34, 2007.

[8] B. Indonesia, *Mengupas Kebijakan Makroprudensial*. Jakarta: Bank Indonesia, 2016.

[9] J. Araujo, M. Patnam, A. Popescu, F. V. Valencia, and W. Yao, “Effects of Macroprudential Policy: Evidence from Over 6,000 Estimates,” *SSRN Electron. J.*, 2021, doi: 10.2139/ssrn.3630156.

[10] S. M. Juhro, “Fiscal Policy Stance , Central Bank Digital Currency , and the Optimal Monetary-Macroprudential Policy Mix Fiscal Policy Stance , Central Bank Digital Currency , and the Optimal Monetary-Macroprudential Policy Mix,” *Bank Indones. Bank Sent. Republik Indones.*, pp. 1–45, 2022.

[11] M. P. Assalam, J. Jelita, and H. H. Widagdo, “Phenomenological Study: The Role Of The Financial Services Authority In Resolving Islamic Banking Customer Problems,” *EKOMBIS Rev. J. Ilm. Ekon. dan Bisnis*, vol. 12, no. 3, pp. 3025–3032, 2024, doi: 10.37676/ekombis.v12i3.5938.

[12] A. Oktania, D. Silfani, N. P. Nainggolan, and H. Hasyim, “Transformasi Kebijakan Pengendalian dan Pemantauan Risiko dalam Navigasi Bank Indonesia Selama Kurun Waktu 5 Tahun Terakhir,” vol. 2, no. 3, 2024.

[13] D. W. Arner, J. Barberis, and R. P. Buckley, “The evolution of Fintech: A new post-crisis paradigm,” *Geo. J. Int’l L.*, vol. 47, p. 1271, 2015.

[14] L. Vardomatskya, V. Kuznetsova, and V. Plotnikov, “The financial technologies transformation in the digital economy,” vol. 10046, pp. 1–8, 2021.

[15] B. Artha, “Fintech : A Literature Review,” vol. 7, no. 2, pp. 59–65, 2020.

[16] M. F. Fad, A. Imron, U. Islam, N. Walisongo, U. Islam, and N. Walisongo, “Journal of Islamic Economics Lariba,” vol. 8, pp. 229–241, 2022, doi: 10.20885/jielariba.vol8.iss1.art14.

[17] T. Philippon, “On Fintech and Financial Inclusion,” 2019.

[18] K. Peterson and P. K. Ozili, “Munich Personal RePEc Archive Financial inclusion research around the world : a review Financial inclusion research around the world : a review,” no. 101809, 2020.

[19] H. M. Anwar *et al.*, *Manajemen Perbankan Syariah*. Cendikia Mulia Mandiri, 2023.

[20] H. Kuncoro, *Ekonomi Moneter: Studi Kasus di Indonesia*. Bumi Aksara, 2021.

[21] R. Anwar, “Tantangan Hukum Dan Regulasi Terhadap Pertumbuhan Digital Banking Di Indonesia,” *J. Manaj. dan Kewirausahaan*, vol. 1, no. 3, pp. 121–132, 2024.

[22] J. Agung and C. A. Harun, *Kebijakan Makroprudensial di Indonesia: Konsep, Kerangka, dan Implementasi-Rajawali Pers*. PT. RajaGrafindo Persada, 2021.

[23] M. Ismail and Y. Indrawati, *Paradigma Baru Kebijakan Moneter: Menakar Pelajaran Krisis Keuangan Global*. Pustaka Abadi, 2020.

[24] D. Curran, “Connecting risk: Systemic risk from finance to the digital,” *Econ. Soc.*, vol. 49, no. 2, pp. 239–264, 2020.