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The Role of Financial Technology (Fintech) in Enhancing Financial Inclusion Among MSMEs

Is Purwati [1*], Rachmad Ilham [2], Dini Ayu Pramitasari [3]
[1-3] Universitas Gresik, Indonesia

Jl. Arif Rahman Hakim No. 2, Gresik, Indonesia
Email: didikmuhammad722@gmail.com, da.pramitasari@gmail.com

Abstract. *The growing significance of financial technology (fintech) has reshaped how micro, small, and medium enterprises (MSMEs) access financial services, particularly in developing countries. This study explores the role of fintech in enhancing financial inclusion among MSMEs by investigating the influence of fintech adoption, digital literacy, and financial literacy, while considering the moderating role of government regulation. Using a descriptive qualitative approach, data were collected through semi structured in depth interviews with MSME owners, fintech service providers, and financial regulators in both urban and rural regions. Thematic analysis revealed that fintech significantly improves MSMEs' access to financial services, but its effectiveness depends largely on the users' digital and financial competencies. Additionally, inclusive regulatory frameworks facilitate broader adoption and trust in fintech. The study highlights the interplay between technology, education, and institutional context in driving inclusive financial systems. Findings suggest that policies aimed at expanding digital and financial literacy, alongside adaptive regulation, are critical to maximizing fintech's inclusive potential. This research offers valuable insights for policymakers, fintech developers, and scholars interested in advancing digital financial inclusion in emerging economies.*

Keywords: *Digital Literacy, Financial Inclusion, Financial Literacy, Fintech Adoption, Government Regulation*

1. INTRODUCTION

Financial inclusion has emerged as a pivotal element in promoting inclusive economic growth, particularly in developing economies where a significant portion of the population and businesses, especially micro, small, and medium enterprises (MSMEs), remain unbanked or underbanked. Financial inclusion refers to the process of ensuring access to appropriate financial products and services needed by individuals and businesses at affordable costs in a fair and transparent manner (Demirgüç-Kunt et al., 2020). For MSMEs, financial inclusion plays a crucial role in facilitating access to working capital, improving business resilience, and enabling participation in formal financial markets (Ozili, 2021). Despite its importance, many MSMEs continue to face structural and behavioral barriers in accessing financial services, such as collateral requirements, lack of credit history, and geographical constraints (Koomson et al., 2021). These persistent gaps highlight the need for innovative mechanisms to promote broader financial access, and one such mechanism is the adoption of financial technology (fintech). Thus, the growing significance of fintech in expanding financial services to underserved business segments sets the stage for this research.

The integration of fintech into the MSME financial ecosystem has gained momentum as a response to the global digital transformation and the limitations of traditional banking systems. Fintech innovations, including mobile payments, peer to peer lending, crowdfunding,

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and digital wallets, have introduced alternative models of financial intermediation that are more inclusive and accessible (Gomber et al., 2020). The relevance of this study lies in addressing the urgent need for empirical evidence on the impact of fintech adoption on financial inclusion within the MSME sector, especially in the post pandemic recovery phase where digital transformation has accelerated (Hasan et al., 2021). Although several studies have acknowledged the role of fintech in enhancing financial inclusion (Kou et al., 2021), few have explored the mechanisms through which digital tools influence inclusion outcomes, particularly among MSMEs in emerging markets. This research, therefore, addresses a critical knowledge gap by examining the relationship between fintech adoption and financial inclusion, while considering intervening factors such as digital and financial literacy, and moderating variables such as regulatory frameworks. Hence, this study is both timely and significant, contributing to the academic discourse and policy formulation.

Fintech adoption refers to the willingness and ability of individuals or enterprises to use technology based financial services for their financial needs (Jagtiani & Lemieux, 2021). Among MSMEs, fintech adoption has been linked to increased access to credit, more efficient payment systems, and greater business scalability (Kou et al., 2021). Digital platforms enable MSMEs to overcome barriers such as lack of collateral and geographical remoteness, thereby facilitating access to capital through alternative channels like peer to peer lending and crowdfunding (Vives, 2020). However, the rate and effectiveness of fintech adoption among MSMEs are influenced by factors such as technological readiness, perceived usefulness, ease of use, and trust in digital platforms (Yoon et al., 2020). Moreover, disparities in adoption levels between urban and rural MSMEs persist, indicating the need for further exploration. Therefore, investigating fintech adoption as a determinant of financial inclusion is crucial in understanding how digital finance can serve as an inclusive growth driver.

Digital literacy is another critical determinant of financial inclusion in the digital era. It encompasses the ability to effectively use digital tools and platforms to access, manage, and evaluate financial information (UNCTAD, 2021). MSMEs with higher digital literacy are more likely to leverage fintech platforms to conduct transactions, apply for credit, and manage their finances (Ndayizigamiye et al., 2021). On the other hand, a lack of digital skills poses a significant barrier to accessing and utilizing fintech services, thereby exacerbating financial exclusion (Alalwan et al., 2022). Digital literacy not only facilitates adoption but also enhances the confidence and security perception of users when engaging with fintech systems. This highlights the necessity of embedding digital literacy programs within broader financial inclusion strategies targeting MSMEs. Consequently, digital literacy is positioned in this study as an enabling factor that amplifies the impact of fintech adoption on financial inclusion.

Financial literacy serves as a mediating variable in this study, bridging the gap between fintech adoption and financial inclusion. Financial literacy is defined as the knowledge and ability to make informed and effective financial decisions (Lusardi, 2020). Even when fintech solutions are accessible, users with inadequate financial knowledge may mismanage credit, fall into debt cycles, or be unable to assess financial risks, undermining the benefits of inclusion (OECD, 2020). Among MSMEs, financial literacy has been positively correlated with business performance, access to credit, and financial planning (Nguyen et al., 2021). Furthermore, financial literacy enables MSME owners to understand fintech offerings, compare financial products, and use digital services responsibly (Chatterjee et al., 2022). As such, this study posits that financial literacy enhances the translation of fintech usage into meaningful financial inclusion outcomes.

Finally, government regulation is positioned as a moderating variable that shapes the effectiveness of fintech adoption in improving financial inclusion. Regulatory frameworks influence the trust, accessibility, and stability of fintech systems (Feyen et al., 2021). Supportive regulations such as digital ID policies, e-KYC procedures, and fintech licensing facilitate fintech expansion while protecting consumer rights (Arner et al., 2020). Conversely, restrictive or unclear regulations can limit innovation and deter participation from both providers and users. In the context of MSMEs, tailored regulatory approaches are required to ensure that fintech products meet the needs of small businesses without imposing excessive compliance burdens (Zetzsche et al., 2020). Therefore, this study examines government regulation as a contextual factor that strengthens or weakens the fintech inclusion relationship.

In light of the above, this study aims to analyze the role of financial technology in enhancing financial inclusion among MSMEs, with fintech adoption and digital literacy as independent variables, financial literacy as a mediating variable, and government regulation as a moderating variable. The study contributes theoretically by expanding the fintech financial inclusion literature with an MSME centered perspective and contributes empirically by offering insights into policy formulation and digital financial literacy development for small enterprises in developing countries.

Despite the growing interest in fintech as a driver of financial inclusion, especially for micro, small, and medium enterprises (MSMEs), existing studies often fall short in exploring the complex interplay of technological, individual, and institutional factors that determine its effectiveness. While fintech is recognized for its ability to bypass traditional banking barriers such as the need for physical infrastructure and collateral (Gomber et al., 2020; Ozili, 2021) the level of adoption among MSMEs remains uneven. This signals the presence of underlying factors like digital and financial literacy that have not been sufficiently incorporated into empirical models. Although some research has explored fintech's relationship with financial inclusion (Kou et al., 2021; Hasan et al., 2021), there remains a lack of integrated frameworks that consider both digital competencies and behavioral responses. Furthermore, the literature has largely overlooked how regulatory environments moderate the fintech inclusion nexus, despite growing evidence that government policies can either enable or constrain digital financial service adoption (Arner et al., 2020; Feyen et al., 2021).

This study addresses these gaps by proposing a comprehensive framework that incorporates fintech adoption and digital literacy as independent variables, financial literacy as a mediating variable, and government regulation as a moderating variable in determining financial inclusion among MSMEs. Unlike previous studies that have treated these factors in isolation, this research investigates their combined impact, offering a more nuanced understanding of how digital finance translates into inclusive financial outcomes. It also contextualizes the analysis within developing economies where MSMEs often face dual barriers of access and capability. The novelty of this study lies in its integrative approach to model design and its focus on the often overlooked interaction between regulatory frameworks and digital capabilities, thus contributing both to the theoretical expansion of fintech literature and the practical formulation of inclusion driven policy interventions.

2. THEORETICAL STUDY

This study is anchored in several interrelated theories that collectively explain the dynamics of fintech adoption and its role in enhancing financial inclusion among micro, small, and medium enterprises (MSMEs). The Diffusion of Innovations Theory (Rogers, 2003) serves as a foundational framework, elucidating how technological innovations like fintech are adopted across different social and economic groups. In the MSME context, this theory is instrumental in understanding the rate and pattern of fintech adoption, influenced by innovation attributes such as relative advantage, compatibility, complexity, trialability, and observability. Fintech services that are perceived as more compatible with existing MSME practices and easier to use are more likely to be adopted. This theory also aligns with the observed disparities in adoption across rural and urban enterprises, as the diffusion process is affected by contextual variables such as infrastructure, peer influence, and support systems.

Complementing this is the Technology Acceptance Model (TAM) proposed by Davis (1989), which further deepens the understanding of user behavior toward technology. TAM posits that two main factors perceived usefulness and perceived ease of use significantly influence an individual's intention to adopt a technology. In this research, TAM is relevant in explaining how MSMEs evaluate fintech platforms. A fintech application that offers tangible benefits like easier credit access or reduced transaction costs, and is easy to operate, is more likely to be adopted. Digital literacy strengthens this process, as higher digital competency enhances both perceived ease and actual usability. Moreover, Financial Literacy Theory (Lusardi & Mitchell, 2014) underlines the role of financial knowledge and behavior in shaping effective financial decision making. In the fintech context, financial literacy is not only a facilitator of better financial outcomes but also a safeguard against misuse, over indebtedness, or fraud a common risk among less informed users.

Additionally, the Institutional Theory (Scott, 2008) offers a lens to analyze how regulatory environments influence organizational behavior and technology deployment. Fintech innovation does not evolve in a vacuum; rather, it is significantly shaped by governmental policies, legal standards, and institutional norms. Supportive regulations, such as simplified digital ID systems, electronic Know Your Customer (e-KYC) processes, and sandbox initiatives, can accelerate fintech adoption among MSMEs. Conversely, rigid or ambiguous regulatory structures may suppress innovation or discourage usage due to compliance burdens. In this study, government regulation is conceptualized as a moderating variable that determines the strength and direction of the relationship between fintech adoption and financial inclusion outcomes.

By integrating these theoretical perspectives, the study constructs a conceptual framework that positions fintech adoption and digital literacy as independent variables, financial literacy as a mediating factor, and government regulation as a moderating factor. The model seeks to provide a holistic explanation of how and under what conditions fintech can effectively enhance financial inclusion for MSMEs in developing economies. This approach not only bridges the gap in the current literature but also provides a comprehensive theoretical base for future empirical validation.

3. RESEARCH METHODS

This study employs a descriptive qualitative approach to explore in depth how financial technology (fintech) contributes to enhancing financial inclusion among micro, small, and medium enterprises (MSMEs). The qualitative approach is deemed appropriate as it allows the researcher to interpret complex social realities from the perspective of MSME actors and consider the cultural and contextual factors influencing fintech adoption (Aspers & Corte, 2019). This research is not merely about identifying facts but understanding the meanings that MSMEs attach to their fintech experiences.

The object of this study includes MSMEs that utilize fintech services such as digital wallets, peer to peer lending, crowdfunding platforms, and digital payment systems. The primary focus is to uncover their experiences in accessing financial services through fintech, along with the challenges and opportunities they encounter. Data were collected using in depth interviews, conducted in a semi structured format to allow participants to elaborate their views freely while keeping the discussion aligned with the research objectives (Palinkas et al., 2015).

Participants in the study were drawn from three key groups: (1) MSME owners using fintech services, (2) representatives of fintech service providers, and (3) financial sector regulators or policymakers. Participants were selected using a purposive sampling strategy, ensuring that informants possess relevant experiences and perspectives based on specific criteria, such as level of fintech usage, business type, and geographic location (Etikan et al., 2016). The sample included MSMEs from both urban and rural areas to gain a comprehensive view of fintech inclusion.

The data analysis process employed thematic analysis, following the six phases proposed by Braun and Clarke (2021): (1) data familiarization, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. The data were analyzed to identify key patterns and thematic categories that explain the relationship between fintech adoption and financial inclusion. NVivo software was used to support coding and managing qualitative data systematically.

To ensure data credibility and reliability, the study employed source triangulation and member checking. Triangulation was done by comparing data obtained from different types of informants and secondary documents, while member checking involved allowing informants to review the interview transcripts and interpretations to ensure accuracy (Birt et al., 2016).

4. RESULTS AND DISCUSSION

This section presents the results of the study and discusses their relevance in light of existing theories and previous research findings. It begins with an overview of the data collection process, including the timeframe and geographical locations involved in the fieldwork. This context is essential for understanding the heterogeneity of the research participants and the external factors influencing the adoption of financial technology (fintech) among micro, small, and medium enterprises (MSMEs). The section continues by analyzing the empirical data obtained through thematic analysis, highlighting the patterns and themes that emerged from the perspectives of fintech users, service providers, and regulators. These findings are then interpreted using relevant conceptual frameworks, including the Technology Acceptance Model (TAM), Diffusion of Innovations Theory, Financial Literacy Theory, and Institutional Theory.

The discussion synthesizes how fintech adoption, digital literacy, and financial literacy interact to influence the level of financial inclusion among MSMEs. Moreover, it explores the moderating role of government regulation in facilitating or constraining these relationships. The section compares the current findings with previous studies, identifying both areas of agreement and divergence, and elaborates on the implications for policy and practice. Where applicable, the findings are supported by visual aids, such as tables and figures, to enhance clarity and illustrate key patterns. Finally, this section critically reflects on the study's contributions, theoretical significance, practical applications, and potential limitations.

Fintech Adoption and Its Impact on MSME Financial Access

The first major finding of this study reveals a strong positive relationship between fintech adoption and improved access to financial services among MSMEs. Participants from urban areas frequently reported using peer to peer lending platforms and digital wallets to overcome traditional credit barriers such as collateral requirements and limited banking networks. These services not only enabled faster and more flexible funding access but also simplified transaction processes, improving overall business efficiency. In contrast, MSMEs in rural areas demonstrated slower adoption due to digital infrastructure limitations and technological unfamiliarity. Nonetheless, even in these contexts, when access and training were available, fintech platforms significantly expanded financial access.

This finding reinforces prior literature emphasizing the transformative potential of fintech in marginalized communities (Gomber et al., 2020; Kou et al., 2021). The thematic analysis also highlighted that fintech adoption is driven not only by necessity but by perceived usefulness and ease of use core components of the Technology Acceptance Model (Davis, 1989). Therefore, increasing MSMEs' awareness of fintech's practical benefits, particularly in underserved areas, is essential to deepening financial inclusion. A targeted approach that aligns with MSMEs' operational needs and constraints can accelerate adoption and magnify its positive financial outcomes.

The Role of Digital and Financial Literacy in Enabling Inclusion

A second key theme involves the enabling role of both digital and financial literacy in determining the effectiveness of fintech tools. MSMEs with high digital literacy were more adept at navigating platforms, comparing financial products, and utilizing features efficiently, whereas those with lower digital literacy often misused applications or avoided them altogether due to fear of error or fraud. Similarly, financial literacy emerged as a mediating variable enabling users to assess interest rates, manage digital credit responsibly, and make informed decisions. These findings underscore the dual importance of digital competence and financial knowledge in converting fintech access into meaningful inclusion.

This aligns with Ndayizigamiye et al. (2021) and Lusardi (2020), who argue that digital and financial literacy are foundational to inclusive digital finance ecosystems. Furthermore, digital literacy improved not only functionality but also users' trust and perceived security in fintech tools. MSMEs with limited literacy levels expressed concerns over data privacy and cyber fraud, suggesting that financial education initiatives must address both technical skills and behavioral confidence. Integrating digital and financial literacy programs into fintech policy frameworks may significantly amplify their inclusionary effects.

Regulatory Context as a Catalyst or Constraint

The third analytical theme explores how government regulation acts as a moderating factor in the fintech financial inclusion relationship. Interviews with regulators and fintech providers indicated that inclusive and adaptive policies, such as simplified electronic Know Your Customer (e-KYC) procedures and digital identity systems, facilitated onboarding processes and trust in digital finance. Conversely, restrictive or ambiguous regulations were cited as barriers, especially for fintech startups or rural MSMEs navigating complex compliance requirements. The presence of enabling regulations was particularly crucial in fostering equitable fintech development across urban and rural divides.

This observation supports findings by Arner et al. (2020) and Feyen et al. (2021), who emphasize the pivotal role of institutional frameworks in shaping fintech innovation and diffusion. Institutional Theory (Scott, 2008) provides a useful lens to understand these dynamics, suggesting that fintech cannot thrive independently of its regulatory environment. Thus, for fintech to serve as a sustainable vehicle for financial inclusion, policy interventions must not only protect consumers but also proactively support innovation that meets the diverse needs of small enterprises. Government collaboration with the fintech industry and MSME networks is essential to align regulatory strategies with practical implementation realities.

Comparative Perspectives with Previous Studies

This study's findings are largely consistent with previous research emphasizing the positive role of fintech in advancing financial inclusion among MSMEs. For instance, the improved credit access facilitated by peer to peer lending and digital wallets mirrors results reported by Hasan et al. (2021) and Ozili (2021), who noted fintech's capacity to circumvent conventional banking limitations. However, unlike prior studies that often treat technological access in isolation, this research highlights the critical interdependence between fintech usage and MSMEs' digital and financial competencies. In this regard, the study extends existing literature by providing a more nuanced, integrated model where fintech is not a stand alone solution but part of a broader ecosystem.

Additionally, the study diverges from some earlier works by emphasizing regulatory influence not as a static context but as a dynamic moderator. While Kou et al. (2021) recognized policy as an enabling factor, this research empirically confirms that inconsistent or restrictive regulations can significantly diminish fintech's potential, especially in rural areas. Moreover, the adoption patterns observed here reaffirm Gomber et al.'s (2020) claim that socio demographic and geographic factors remain pivotal in digital transformation outcomes. Thus, this research both corroborates and enriches the discourse on inclusive fintech through its integrative, context sensitive approach.

Implications and Limitations of the Study

The implications of these findings are substantial for both theory and practice. Theoretically, the study validates the application of multiple frameworks TAM, Financial Literacy Theory, and Institutional Theory in explaining MSMEs' fintech adoption and inclusion outcomes. The results support the proposition that digital and financial literacies are not just complementary but interdependent in maximizing fintech benefits. Practically, the research suggests that policy efforts should move beyond infrastructure provision and focus on literacy building programs tailored to MSMEs' specific needs. Regulators and fintech developers should collaborate in creating user centric, low barrier platforms, supported by digital literacy outreach and flexible compliance models.

However, several limitations should be acknowledged. First, the study's qualitative design, while rich in context, limits generalizability. The findings are based on selected informants and may not represent all MSME segments across Indonesia. Second, the absence of a longitudinal approach restricts the ability to track behavioral change over time. Future research could adopt a mixed method or longitudinal design to quantify causal relationships and temporal dynamics in fintech usage and financial inclusion. Despite these limitations, the study offers a comprehensive, timely, and policy relevant contribution to the discourse on inclusive digital finance.

5. CONCLUSION AND SUGGESTIONS

This study concludes that the adoption of financial technology (fintech) significantly contributes to enhancing financial inclusion among micro, small, and medium enterprises (MSMEs), particularly by improving access to credit and increasing transactional efficiency. However, the effectiveness of fintech adoption is not uniform across all contexts. The findings reveal that digital literacy and financial literacy are critical enabling and mediating factors, respectively. MSMEs with higher literacy levels were more capable of using fintech tools effectively, leading to better financial decision making and outcomes. Furthermore, government regulation acts as a crucial moderating factor; policies that support digital identity verification and user protection can significantly facilitate inclusive fintech growth. Therefore, fintech's role in financial inclusion is not merely technological but multidimensional dependent on digital competencies, educational support, and institutional frameworks.

Based on these findings, several recommendations can be proposed. Policymakers and financial service developers should integrate digital and financial literacy programs into fintech expansion strategies, especially in rural areas where adoption remains low. Educational interventions must go beyond technical training and foster behavioral confidence in digital finance. Moreover, regulatory frameworks must be both adaptive and inclusive, reducing entry barriers while maintaining consumer protections. Despite the valuable insights offered, this study has certain limitations. The qualitative approach restricts the generalizability of results and may not capture dynamic behavioral changes over time. Future research should consider longitudinal or mixed method designs to validate these relationships across broader MSME populations and contexts. Expanding the scope to include comparative studies between countries or fintech modalities may also enhance the theoretical and practical relevance of the findings.

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REFERENCE

Alalwan, A. A., Baabdullah, A. M., Rana, N. P., Dwivedi, Y. K., & Raman, R. (2022). Adoption of mobile banking in Jordan: Exploring demographic differences on customers' perceptions. *Information Systems Frontiers*, *24*(1), 217–239. https://doi.org/10.1007/s10796-020-10025-2

Arner, D. W., Barberis, J., & Buckley, R. P. (2020). Fintech and regtech: Impact on regulators and banks. *Journal of Banking Regulation, 21*(3), 299–307. https://doi.org/10.1057/s41261-020-00111-4

Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative Sociology, 42*(2), 139–160. https://doi.org/10.1007/s11133-019-9413-7

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26*(13), 1802–1811. https://doi.org/10.1177/1049732316654870

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology, 18*(3), 328–352. https://doi.org/10.1080/14780887.2020.1769238

Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). Adoption of FinTech services by SMEs: A cross country study. *Technological Forecasting and Social Change, 178*, 121599. https://doi.org/10.1016/j.techfore.2022.121599

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2020). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution.* World Bank Publications. https://doi.org/10.1596/978-1-4648-1259-0

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M. (2021). Fintech and the digital transformation of financial services: Implications for market structure and public policy. *Bank for International Settlements Working Papers*, 117. https://www.bis.org/publ/bppdf/bispap117.htm

Gomber, P., Koch, J. A., & Siering, M. (2020). Digital finance and fintech: Current research and future research directions. *Journal of Business Economics, 90*(8), 1009–1041. https://doi.org/10.1007/s11573-020-00952-1

Hasan, M., Mollah, S., & Bhuiyan, M. B. (2021). Fintech and SME financing: A systematic literature review. *Small Business Economics, 57*(2), 709–735. https://doi.org/10.1007/s11187-020-00338-1

Jagtiani, J., & Lemieux, C. (2021). The roles of alternative data and machine learning in fintech lending: Evidence from the LendingClub consumer platform. *Journal of Financial Services Research, 59*(1), 1–33. https://doi.org/10.1007/s10693-020-00317-2

Koomson, I., Villano, R. A., & Hadley, D. (2021). Financial inclusion and the gender gap: Evidence from Ghana. *International Journal of Social Economics, 48*(1), 43–61. https://doi.org/10.1108/IJSE-04-2020-0224

Kou, G., Akdeniz, Ö. A., Dinçer, H., & Yüksel, S. (2021). Fintech investments in European banks: A hybrid IT2 fuzzy decision making approach. *Financial Innovation, 7*(1), 1–25. https://doi.org/10.1186/s40854-021-00234-7

Lusardi, A. (2020). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics, 156*(1), 1–8. https://doi.org/10.1186/s41937-020-00046-3

Ndayizigamiye, P., Kaura, S., & Ditsa, G. (2021). Investigating the effect of digital literacy on the adoption of mobile banking applications. *Electronic Journal of Information Systems in Developing Countries, 87*(4), e12189. https://doi.org/10.1002/isd2.12189

Nguyen, T. H., Nguyen, H. M., & Le, T. T. (2021). Financial literacy and financial inclusion: Empirical evidence from SMEs in Vietnam. *Journal of Asian Business and Economic Studies, 28*(2), 138–152. https://doi.org/10.1108/JABES-07-2020-0080

Ozili, P. K. (2021). Financial inclusion research around the world: A review. *Forum for Social Economics, 50*(4), 457–479. https://doi.org/10.1080/07360932.2020.1715238

Yoon, H., Lee, S., & Suh, A. (2020). Prediction of fintech innovation adoption: The moderating effect of institutional support. *Industrial Management & Data Systems, 120*(9), 1683–1706. https://doi.org/10.1108/IMDS-10-2019-0570