DOI: https://doi.org/10.62985/j.huit_ojs.vol26.no3E.581

THE ROLE OF INCLUSIVE INSTITUTIONS IN PROMOTING DIGITAL FINANCIAL INCLUSION AND HUMAN CAPITAL DEVELOPMENT: EVIDENCE FROM VIETNAM

Vuong Duc Hoang Quan[1], Lam Thi Anh Dao[2*]

[1]*Ho Chi Minh City Open University*

[2]*Dong Nai University*

[*]Email: *ltanhdao@gmail.com*

Received: 22 March 2026; Revised: 16 April 2026; Accepted: 14 May 2026

ABSTRACT

Digital transformation is reshaping access to finance and participation in economic life across developing economies, but its developmental benefits depend on the institutional conditions that support trust, accessibility, and effective use. This paper examines the role of inclusive institutions in promoting digital financial inclusion and human capital development, with Vietnam used as a policy-relevant illustrative case. Drawing on a qualitative integrative review of academic literature and contextual evidence from Vietnam, including national financial inclusion policy, fintech regulation, and governance evidence from PAPI reports, the paper develops an integrated framework in which inclusive institutions provide the enabling environment, digital financial inclusion functions as the transmission mechanism, and human capital development represents the broader developmental outcome. The analysis shows that institutional quality, expressed through regulatory quality, government effectiveness, rule of law, accountability, and implementation capacity, shapes whether digital financial services become trusted, usable, and inclusive. Digital financial inclusion may support human capital development through three main channels: improved access and affordability, stronger financial and digital capability, and greater resilience for household investment in education and skills. Insights from Vietnam suggest that policy commitment to financial inclusion and digital adaptation is strong, but uneven governance quality, digital divides, and differences in user readiness continue to limit broader developmental gains. The paper contributes by clarifying the conceptual links among institutions, digital finance, and human capability, while offering policy implications for Vietnam and other developing economies seeking more inclusive digital transformation.

Keywords: Inclusive institutions, digital financial inclusion, human capital development, institutional quality, digital economy.

1. INTRODUCTION

Digital transformation is changing the way people and firms access financial services in developing economies. Mobile payments, digital banking, online lending, and platform based financial services have expanded the reach of formal finance beyond traditional banking channels. These changes create new opportunities for financial inclusion, but wider access does not automatically lead to better development outcomes. Digital services may be available, yet remain difficult to use, unevenly distributed, or weakly trusted if the institutional environment and user capability are not strong enough.

This issue is important for developing economies, where digital progress often takes place alongside uneven governance capacity, regional disparities, and gaps in financial and digital literacy. The key question is therefore not only whether digital finance is expanding, but whether it is supported by inclusive institutions and translated into stronger human capability. From this perspective, digital financial inclusion should be understood as part of a broader development process, not merely as a technological change.

The existing literature provides useful insights, but it remains fragmented. Studies on institutions emphasize governance quality, regulatory credibility, trust, and accountability. Research on digital financial inclusion focuses on access to formal financial services through digital channels. Human capital studies highlight the role of education, skills, resilience, and productive participation. However, these three strands are still often discussed separately. As a result, the mechanisms linking inclusive institutions, digital financial inclusion, and human capital development remain insufficiently explained.

This paper addresses this gap by developing an integrated framework in which inclusive institutions provide the enabling environment, digital financial inclusion acts as the transmission mechanism, and human capital development represents the broader developmental outcome. The framework explains how institutional conditions shape the quality of digital financial inclusion and how digital inclusion may support human capability through access, affordability, financial and digital capability, and resilience.

Vietnam provides a relevant context for this discussion. The country has promoted financial inclusion and digital transformation through national policy initiatives, including the National Financial Inclusion Strategy and a controlled regulatory framework for selected fintech activities in banking. At the same time, governance evidence from PAPI reports shows that progress remains uneven across regions and population groups, with persistent digital divides and differences in user readiness. Vietnam, therefore, offers a useful case for understanding both the potential and the limits of digitally driven inclusion in a developing economy.

The paper makes three contributions. First, it clarifies the distinction between inclusive institutions and institutional quality in the context of digital financial inclusion. Second, it develops an integrated framework linking institutions, digital finance, and human capital through explicit transmission channels. Third, it uses policy and governance evidence from Vietnam to provide context specific insights for developing economies facing similar digital transitions.

2. LITERATURE REVIEW

Human capital theory provides the main starting point for this study. G. S. Becker [1] argued that investment in education, training, health, and related capabilities raises productivity, earnings, and long run welfare. He also showed that human capital matters beyond the labor market, shaping family decisions, fertility, and broader development outcomes. In Human Capital Revisited, G. S. Becker [2] further emphasized that human capital is especially important under technological change because it strengthens the ability of individuals and firms to adapt. Becker et al. [3] extended this perspective by linking human capital, fertility, and growth, showing that higher returns to capability formation can support long term structural transformation. More recent evidence points in the same direction. N. Bharti et al. [4] found that education and health expenditure are strongly associated with productivity growth, especially in poorer economies, while D. H. Vedia-Jerez and C. Chasco [5] showed that both human capital and institutions support long run growth in South America. Taken together, these studies establish human capital as a central driver of development rather than a simple individual attribute.

A second stream of research focuses on digital transformation and financial inclusion. The World Bank [6] argued that digital technologies can improve inclusion, efficiency, and innovation, but only when they are supported by sound regulation, relevant skills, and accountable institutions. This view is reinforced by the Global Findex literature. Demirgüç Kunt et al. [7] documented a broad expansion in account ownership and digital payments across more than 140 economies. L. Klapper et al. [8] extended this evidence by showing that global account ownership rose from 51% in 2011 to 79% in 2024, with mobile money and digital connectivity playing an increasingly important role. At the same time, both studies highlighted persistent inequalities across gender, income, and location. These findings suggest that formal access alone does not guarantee effective inclusion.

Recent empirical studies show that digital financial inclusion can generate broader development effects. D. Basnayake et al. [9] found that digital financial inclusion supports economic growth across 30 Asia Pacific countries, although the effect is nonlinear and depends on threshold conditions. M. Ndione et al. [10] showed that e money channels were more effective than banks or microfinance institutions in expanding financial inclusion in the Waemu context. At the household level, T. Suri and W. Jack [11] provided strong causal evidence from Kenya that mobile money increased consumption, reduced poverty, and strengthened resilience, especially for female headed households. N. Del Sarto and P. K. Ozili [12], through a bibliometric review, confirmed that fintech-based inclusion has become a major research stream in emerging markets, especially through mobile banking, digital payments, and related digital services. Overall, this literature shows that digital financial inclusion is more than wider access to finance. It can also reshape participation, resilience, and economic opportunity.

A third strand places institutions at the center of inclusive financial development. For this paper, inclusive institutions refer to institutional arrangements that widen access to opportunity, protect users, strengthen accountability, and support broad participation in economic and social life. Institutional quality, by contrast, is used as a more operational and measurable concept, often reflected through regulatory quality, government effectiveness, rule of law, control of corruption, transparency, and accountability. Thus, inclusive institutions describe the broader developmental orientation of the institutional environment, while institutional quality captures the governance conditions through which that environment functions in practice.

This distinction matters because digital financial inclusion depends not only on technology, but also on whether the institutional environment makes digital finance trusted, usable, and protective of users. Peng et al. [13] found across 144 economies that stronger institutions, especially regulatory quality, rule of law, and government effectiveness, were associated with higher levels of account ownership, saving, borrowing, and digital payments. However, these gains weakened when barriers such as low trust, illiteracy, documentation constraints, and low income remained severe. H. Yousaf and K. Riaz [14] reached a similar conclusion across 64 former colonies, showing that institutional quality plays a decisive role in shaping financial inclusion even when geography is taken into account. These studies suggest that institutions do not simply accompany digital financial inclusion. They shape whether digital systems become trusted, usable, and development enhancing.

A smaller but important body of research links digital finance more directly to human capital. Guan and Xue [15] found that digital financial inclusion promoted green innovation in China and that human capital acted as a partial mediator. This is an important insight because it suggests that human capital is not only a background condition, but also part of the mechanism through which digital inclusion generates broader development effects. Still, this line of work remains limited, particularly outside the Chinese context.

Vietnam provides useful policy and contextual evidence for this framework. Decision 149/QĐ TTg [16] approved the National Financial Inclusion Strategy to 2025 with orientation to 2030 and emphasized broader, safer, and more convenient access to financial services, especially for vulnerable and underserved groups. Decree 94/2025/NĐ CP [17] established a controlled testing mechanism for selected fintech activities in banking, including credit scoring, open API based data sharing, peer to peer lending, and related fintech solutions. These policy instruments show that Vietnam is attempting to connect financial inclusion with regulatory adaptation.

At the same time, supporting data from PAPI reports show that institutional and digital readiness remain uneven. PAPI 2024 [18] is based on the views of 18,894 respondents across 61 provinces and assesses governance and public administration performance through citizen experience. The report shows improvements in several dimensions, including control of corruption and e -governance, but also notes persistent disparities across gender, ethnicity, migration status, and regions. It also highlights that e- governance expansion still faces digital divide and implementation challenges, especially among rural and ethnic minority communities. PAPI 2023 [19] similarly shows that internet access at home increased from 31% in 2016 to 80% in 2023, but digital gaps remained across gender, residence, ethnicity, and household registration status. These findings support the argument that digital expansion alone is insufficient unless it is accompanied by inclusive institutions and stronger user capability.

Overall, the literature points to three broad conclusions. First, human capital is fundamental to long term development. Second, digital financial inclusion can widen access, reduce exclusion, and support broader economic participation. Third, institutional quality plays a decisive role in determining whether those gains are deep and sustainable. Yet these three strands are still rarely brought together within a single analytical framework. In particular, the literature still lacks a clear explanation of how inclusive institutions enable digital financial inclusion and how digital financial inclusion, in turn, contributes to human capital development in developing countries. This is the gap that the present study addresses, with Vietnam used as a policy relevant illustrative case

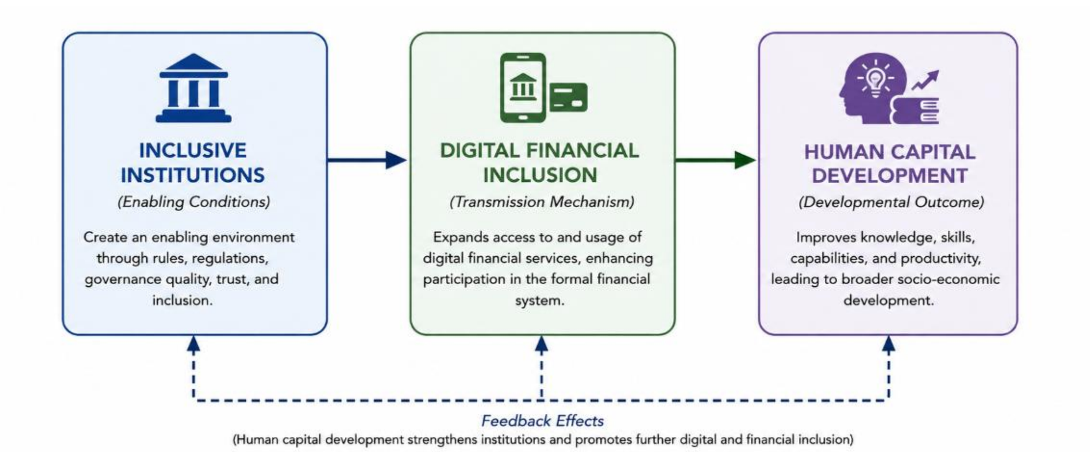

Figure 1. Analytical framework linking inclusive institutions, digital financial inclusion, and human capital development

Source: Authors' synthesis.

Table 1. Summary of studies

Authors	Focus / Context	Method / Approach	Results
G. S. Becker [1]	Human capital theory, broad conceptual relevance	Theoretical and empirical synthesis	Investment in education, training, health, and family input raises productivity, earnings, and long run development. Human capital is a core driver of economic advancement.
G. S. Becker et al [3]	Human capital, fertility, and growth	Dynamic theoretical model	Human capital accumulation is central to long run growth and interacts with fertility and family decisions in shaping development paths.
G. S. Becker [2]	Human capital and adaptability	Theoretical reflection	Human capital improves productivity, health, family decisions, and adaptability to technological change.
N. Bharti et al. [4]	Global historical perspective	Historical database and macro historical analysis	Human capital expenditure remains highly unequal across regions, but public spending on education and health is strongly associated with productivity growth, especially in poorer countries.
World Bank [6]	Global digital development	Conceptual and cross-country development analysis	Digital technologies can generate inclusion, efficiency, and innovation, but benefits depend on regulation, skills, and accountable institutions.
Demirgüç Kunt et al. [7]	Global financial inclusion	Global Findex descriptive analysis	Digital payments, mobile finance, and account ownership expanded globally, but major gender, income, and geographic gaps remained.
L. Klapper et al. [8]	141 economies worldwide	Global Findex 2025 analysis	Account ownership reached 79% by 2024, with mobile money and digital connectivity as important drivers, although women and poorer adults still lag behind.
T. Suri and W. Jack [11]	Kenya	Household panel analysis using spatial variation in M PESA rollout	Mobile money improved consumption, reduced poverty, and strengthened resilience, especially for female headed households.
D. Basnayake et al. [9]	30 Asia Pacific countries	PCA based DFI index, fixed effects, 2SLS, threshold model	Digital financial inclusion has a positive and significant effect on economic growth, with nonlinear threshold effects.
M. Ndione et al. [10]	WAEMU, 8 West African countries	Panel model using service point data	E money services significantly improve total financial inclusion, while banks and MFIs do not show similar significance in the sample.

N. Del Sarto and P. K. Ozili [12]	Emerging markets literature	Bibliometric analysis of 313 Scopus indexed studies	FinTech is increasingly recognized as a driver of financial inclusion in emerging markets, especially through mobile banking, peer to peer lending, blockchain, and digital payments.
Peng et al. [13]	144 economies	Cross country analysis using four financial inclusion dimensions and institutional measures	Stronger governance, rule of law, and regulatory quality are associated with higher account ownership, saving, borrowing, and digital payments, though the effect weakens when structural barriers remain high.
H. Yousaf and K. Riaz [14]	64 former colonies	Historical institutional analysis	Institutional quality has a strong positive effect on financial inclusion, while geography also matters directly.
Dao and Nguyen [20]	157 banks in 8 ASEAN countries	GMM on bank level panel data	Financial inclusion may weaken bank stability on its own, but stronger institutional quality improves this relationship, especially through corruption control, government effectiveness, and rule of law.
Wu et al. [21]	China	Quasi natural experiment, staggered DiD	Flexible fintech regulation increases both the quantity and quality of corporate digital innovation by easing financing constraints and improving information transparency.
Guan and Xue [15]	285 Chinese prefecture level cities	Panel analysis, IV, mediation analysis	Digital financial inclusion significantly enhances government green innovation, and human capital acts as a partial mediator, especially in lower human capital regions.
Decision 149/QĐ-TTg [16]	Vietnam	National policy strategy	Sets the National Financial Inclusion Strategy to 2025 with orientation to 2030, emphasizing broader, safer, and more convenient access to financial services, especially for vulnerable and underserved groups.
Decree 94/2025/NĐ-CP [17]	Vietnam	Regulatory framework for controlled testing in banking	Establishes a controlled testing mechanism for selected fintech activities in banking.
PAPI 2024 [18] / PAPI 2023 [19]	Vietnam	Large scale citizen-based governance survey	Reports improvements in e - governance and corruption control, but also persistent disparities across gender, ethnicity, migration status, and region.

3. METHODOLOGY

This study employs a qualitative integrative review design to examine the relationship among inclusive institutions, digital financial inclusion, and human capital development. The purpose is not to estimate a narrow causal effect, but to develop a coherent framework explaining how institutional conditions shape the developmental effects of digital financial inclusion. This design is consistent with the research gap identified in results, where these three constructs are often discussed separately rather than as part of an integrated development process.

The review followed a structured search strategy to ensure a transparent and defensible selection of sources. It combined peer reviewed studies with policy and governance documents related to institutions, digital financial inclusion, human capital development, fintech regulation, digital transformation, and Vietnam. Recent studies from 2016 to 2026 were prioritized to reflect current debates in digital finance and governance, while foundational works on human capital were retained for their theoretical relevance.

Sources were selected based on conceptual relevance, empirical rigor, contextual relevance to developing and emerging economies, and direct contribution to the paper's analytical focus. The review included studies on institutions and financial inclusion, digital financial inclusion and development outcomes, human capital in economic or digital transformation, and Vietnam related policy and governance evidence. Sources outside these themes were excluded.

Each selected source was assessed by research scope, geographical context, study period, method, and main findings. This process supports comparison, thematic synthesis, and gap identification rather than simple narrative description. The final body of literature combines foundational theory, global development and financial inclusion reports, recent empirical studies, and Vietnam specific policy and governance evidence.

The analytical framework is organized around three constructs. Inclusive institutions are treated as enabling conditions because they shape regulatory credibility, accessibility, trust, accountability, and implementation effectiveness. Digital financial inclusion is treated as the transmission mechanism through which digital technologies expand access to and use of formal financial services. Human capital development is treated as the broader outcome, reflected in stronger skills, financial capability, digital competence, resilience, and productive participation.

Vietnam is used as a policy relevant illustrative case rather than a statistically tested setting. This distinction is important because the paper does not claim to provide econometric evidence from Vietnam. Instead, Vietnam related policy and governance evidence is used to contextualize the framework. Decision 149/QĐ TTg [16] illustrates the country's strategic orientation toward financial inclusion. Decree 94/2025/NĐ CP [17] shows regulatory adaptation for selected fintech activities in banking. PAPI 2023 [19] and PAPI 2024 [18] provide citizen-based evidence on governance performance, e - governance, transparency, corruption control, digital access, and disparities across population groups and regions.

This case-based contextualization strengthens the policy relevance of the paper while remaining consistent with its integrative and conceptual design. It allows the study to explain how inclusive institutions, digital financial inclusion, and human capital development may interact in practice without overstating Vietnam as an econometrically tested case.

4. RESULTS AND DISCUSSION

The integrative review yields three main findings. First, the developmental effects of digital financial inclusion are institutionally conditioned. Digital technologies do not produce inclusive outcomes by themselves. Their effects depend on regulatory quality, government effectiveness, transparency, accountability, and rule of law. These conditions determine whether digital financial services are trusted, accessible, and usable. This finding is consistent with the World Bank [6], Peng et al. [13], and Yousaf and Riaz [14], who show that institutional quality strengthens financial inclusion, while barriers such as low trust, low income, illiteracy, and documentation constraints weaken its impact.

Vietnam illustrates this point clearly. The country has adopted important policy instruments to promote financial inclusion and fintech development, including Decision 149/QĐ TTg [16] and Decree 94/2025/NĐ CP [17]. However, policy commitment does not automatically remove implementation gaps. PAPI 2024 [18] shows improvements in e - governance and corruption control, but also reports persistent disparities across gender, ethnicity, migration status, and regions. PAPI 2023 [19] further shows that internet access at home rose from 31% in 2016 to 80% in 2023, while digital gaps remained across rural and urban areas, ethnic groups, gender, and household registration status. These findings suggest that Vietnam’s digital transition is advancing, but its inclusive effects still depend on governance quality and user readiness.

Second, digital financial inclusion acts as the main transmission mechanism between institutions and development outcomes. The literature shows that financial inclusion is no longer limited to account ownership. It increasingly depends on the actual use of digital payments, mobile money, online banking, and digitally enabled financial services. Evidence from D. Basnayake et al. [9], M. Ndione et al. [10], and T. Suri and W. Jack [11] show that digital financial inclusion can support growth, reduce transaction costs, strengthen resilience, and widen economic participation. Its contribution therefore lies not only in expanding access, but in converting access into practical use.

This mechanism is especially relevant for Vietnam. The expansion of digital banking, mobile payments, and fintech services has created new channels for financial participation. Yet the PAPI evidence shows that access to digital systems remains uneven, particularly for rural residents, ethnic minorities, migrants, and groups with weaker digital capability. This means that digital financial inclusion cannot be assessed only by the availability of digital services. It should also be assessed by usability, affordability, trust, and the ability of users to benefit from these services.

Third, human capital development represents the broader developmental outcome of this process. G. S. Becker [1] established the role of education, training, and health in productivity and long-term development. More recent studies show that human capital also matters in digital transformation because people need skills, knowledge, and confidence to use technology effectively. Guan and Xue [15] provide relevant evidence by showing that human capital mediates the relationship between digital financial inclusion and innovation outcomes. This supports the argument that digital finance contributes to development only when it strengthens capability formation.

The original contribution of this paper lies in connecting these three findings into a single framework. Previous studies have examined institutions, digital financial inclusion, and human capital separately. This paper positions inclusive institutions as the enabling condition, digital financial inclusion as the transmission mechanism, and human capital development as the broader outcome. This framework clarifies why digital finance may generate different results across developing economies. Where institutions are stronger and user capability is higher, digital inclusion is more likely to support human development. Where governance quality, trust, and digital skills remain uneven, the benefits of digital finance are likely to be limited.

Vietnam provides a useful policy relevant case for this framework. Its experience shows that digital financial inclusion requires more than technology adoption or service expansion. It also requires institutional coordination, effective regulation, public trust, digital literacy, and user centered implementation. In this sense, Vietnam’s main challenge is not only to expand digital financial services, but to ensure that those services are institutionally supported and capability enhancing. This is the condition under which digital financial inclusion can contribute more meaningfully to human capital development.

5. CONCLUSION

This paper examined how inclusive institutions can support digital financial inclusion and human capital development in a developing economy context. The analysis shows that digital inclusion should not be viewed as a purely technological process. Its value depends on institutional conditions that build trust, regulatory credibility, implementation quality, and user protection.

The paper contributes by linking three strands of literature that are often discussed separately. Inclusive institutions provide an enabling environment. Digital financial inclusion serves as the transmission mechanism. Human capital development represents the broader outcome when digital access is converted into financial capability, digital competence, resilience, and productive participation.

Vietnam offers a useful policy relevant case for this framework. The country has shown strong commitment to financial inclusion and fintech regulation through national policy initiatives. However, governance and public service evidence also points to digital divides, uneven user readiness, and differences in local implementation. These constraints suggest that expanding digital services is necessary, but not sufficient.

For Vietnam, policy priorities should focus on three areas. First, digital financial inclusion should be supported by stronger regulatory coordination, consumer protection, transparency, and accountability. Second, digital services should be designed around usability, affordability, and trust, especially for rural residents, ethnic minorities, migrants, and other underserved groups. Third, financial and digital literacy should be treated as part of human capital policy rather than as separate technical support measures.

Overall, digital financial inclusion is more likely to support human capital development when it is grounded in inclusive institutions and accompanied by capability building. Without these conditions, digital expansion may increase access, but its wider benefits for people and development will remain limited.

REFERENCES

[1] G. S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd ed. Chicago, IL, USA: University of Chicago Press, 1993, doi: https://doi.org/10.7208/chicago/9780226041223.001.0001

[2] G. S. Becker, "Human capital revisited," in *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd ed. Chicago, IL, USA: University of Chicago Press, 1993, pp. 15–28

[3] G. S. Becker, K. M. Murphy, and R. Tamura, "Human capital, fertility, and economic growth," *Journal of Political Economy*, vol. 98, no. 5, pt. 2, pp. S12–S37, 1990, doi: https://doi.org/10.1086/261723

[4] N. Bharti, A. Gethin, T. M. Jenmana, Z. Mo, T. Piketty, and L. Yang, "Human capital, unequal opportunities and productivity convergence: A global historical perspective, 1800–2100," *Journal of Public Economics*, vol. 255, Art. no. 105578, 2026, doi: https://doi.org/10.1016/j.jpubeco.2026.105578

[5] D. H. Vedia-Jerez and C. Chasco, “Long-run determinants of economic growth in South America,” *Journal of Applied Economics*, vol. 19, no. 1, pp. 169–192, 2016, doi: https://doi.org/10.1016/S1514-0326(16)30007-1

[6] World Bank, *World Development Report 2016: Digital Dividends*. Washington, DC, USA: World Bank, 2016, doi: https://doi.org/10.1596/978-1-4648-0671-1

[7] A. Demirgüç-Kunt, L. Klapper, D. Singer, S. Ansar, and J. Hess, *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC, USA: World Bank, 2018, doi: https://doi.org/10.1596/978-1-4648-1259-0

[8] L. Klapper, D. Singer, L. Starita, and A. Norris, *The Global Findex Database 2025: Connectivity and Financial Inclusion in the Digital Economy*. Washington, DC, USA: World Bank, 2025, doi: https://doi.org/10.1596/978-1-4648-2204-9

[9] D. Basnayake, A. Naranpanawa, S. Selvanathan, and J. S. Bandara, “Financial inclusion through digitalization and economic growth in Asia-Pacific countries,” *International Review of Financial Analysis*, vol. 96, Art. no. 103596, 2024, doi: https://doi.org/10.1016/j.irfa.2024.103596

[10] M. Ndione, A. Ashta, and B. B. B. Liba, “Banks, microfinance institutions and fintech: How the ratio of male and female entrepreneurs moderates their capacity for financial inclusion,” *Cogent Economics & Finance*, vol. 12, no. 1, Art. no. 2402031, 2024, doi: https://doi.org/10.1080/23322039.JJJJ2024.2402031

[11] T. Suri and W. Jack, “The long-run poverty and gender impacts of mobile money,” Science, vol. 354, no. 6317, pp. 1288–1292, 2016, doi: https://doi.org/10.1126/science.aah5309

[12] N. Del Sarto and P. K. Ozili, “FinTech and financial inclusion in emerging markets: A bibliometric analysis and future research agenda,” *International Journal of Emerging Markets*, vol. 20, no. 13, pp. 270–290, 2025, doi: https://doi.org/10.1108/IJOEM-08-2024-1428

[13] Y. Peng, N. Hermes, and R. Lensink, “Formal institutions and financial inclusion: Evidence from cross-country analysis,” *Research in International Business and Finance*, vol. 87, Art. no. 103407, 2026, doi: https://doi.org/10.1016/j.ribaf.2026.103407

[14] H. Yousaf and K. Riaz, “Geography, institutions and financial inclusion: A counterfactual approach,” *Economic Systems*, vol. 50, Art. no. 101341, 2026, doi: https://doi.org/10.1016/j.ecosys.2025.101341

[15] L. Guan and Y. Xue, “Digital financial inclusion and corporate green innovation,” *Finance Research Letters*, vol. 85, Art. no. 108112, 2025, doi: https://doi.org/10.1016/j.frl.2025.108112

[16] Prime Minister of Vietnam, Decision No. 149/QĐ-TTg Approving the National Financial Inclusion Strategy to 2025, with Orientation to 2030. Hanoi, Vietnam, Jan. 22, 2020. Available: https://chinhphu.vn/default.aspx?pageid=27160&docid=198928

[17] Government of Vietnam, Decree No. 94/2025/NĐ-CP on the Regulatory Sandbox Mechanism in the Banking Sector. Hanoi, Vietnam, Apr. 29, 2025. Available: https://vanban.chinhphu.vn/?docid=213519&pageid=27160

[18] CECODES, RTA, and UNDP, The 2024 Viet Nam Provincial Governance and Public Administration Performance Index (PAPI 2024): Measuring Citizens’ Experiences. Hanoi, Vietnam, 2025. Available: https://papi.org.vn/wp-content/uploads/2025/04/PAPI_2024_REPORT_ENG_final.pdf

[19] CECODES, RTA, and UNDP, Chỉ số Hiệu quả Quản trị và Hành chính công cấp tỉnh ở Việt Nam (PAPI): Đo lường từ kinh nghiệm thực tiễn của người dân, năm 2023 [The Viet Nam Provincial Governance and Public Administration Performance Index (PAPI): Measuring Citizens' Experiences, 2023]. Hanoi, Vietnam, 2024. Available: https://papi.org.vn/bao-cao/

[20] H. Dao and Y. Nguyen, "Institutional quality's influence on financial inclusion's impact on bank stability," *Cogent Economics & Finance*, vol. 11, no. 1, Art. no. 2190212, 2023, doi: https://doi.org/10.1080/23322039.2023.2190212

[21] H. Wu, Y. Yang, and J. Wang, "Flexible fintech regulation and corporate digital innovation: Evidence from a quasi-natural experiment," *Research in International Business and Finance*, vol. 82, Art. no. 103262, 2026, doi: https://doi.org/10.1016/j.ribaf.2025.103262