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Economic Trust Formation in Cashless Community Markets: Transaction Reliability, Merchant Familiarity, and Institutional Assurance

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Abstract

The transition from cash-based exchange to digitally mediated payment changes the institutional foundations on which routine community-market transactions depend. Cash provides immediate physical evidence of settlement, whereas cashless transactions require buyers and merchants to rely on payment platforms, network availability, authentication mechanisms, account records, transaction confirmations, and dispute-resolution systems. Economic trust consequently becomes a central condition for sustained cashless exchange.

This study examines trust formation in cashless community markets through an integrated framework incorporating transaction reliability, perceived security, merchant familiarity, dispute-resolution confidence, and repeated successful payment experience. Because no original consumer or merchant dataset was supplied, the study is explicitly structured as simulation-based research rather than as completed empirical fieldwork. A synthetic dataset representing 400 hypothetical market participants was generated across four progressively stronger trust environments: low assurance, reliable payment only, reliable payment combined with merchant familiarity, and an integrated trust architecture incorporating technical, relational, and institutional assurance.

The simulated mean economic-trust score rises from 3.21 under low assurance to 5.79 under the integrated condition. Reuse intention increases from 2.96 to 4.56, while modeled cash-fallback tendency falls from 0.62 to 0.19. Confidence in dispute resolution shows a similarly substantial increase. The findings support the proposition that dependable payment execution is necessary but insufficient for durable economic trust. Cashless community markets become more resilient when technical reliability is complemented by recognizable merchants, credible security, transparent transaction confirmation, and accessible recourse when payments fail.

The article concludes that community-market digitization should be assessed through trust quality rather than transaction volume alone and provides a testable framework for future longitudinal and experimental research.

Keywords: economic trust, cashless community markets, digital payments, mobile payments, merchant familiarity, transaction reliability, financial inclusion, institutional assurance

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1. Introduction

Digital payment systems are increasingly incorporated into ordinary retail and community exchange through mobile wallets, mobile money, bank transfers, QR-based payment, payment cards, and other electronic mechanisms. Their economic relevance extends beyond technological convenience because digital payments can reduce some physical transaction costs, support remote transfer, create transaction records, and connect individuals with wider financial services. The World Bank's Global Findex framework treats payments as an important dimension of financial inclusion and documents the growing role of accounts and digital channels in how households transact and manage money.

Yet cashless exchange creates a distinctive trust problem. Cash provides both parties with immediately observable settlement: the payer releases currency and the recipient physically obtains it. In digital exchange, participants cannot directly observe much of the underlying settlement process. They must instead rely on software, authentication systems, telecommunications infrastructure, financial intermediaries, transaction records, and confirmation messages. Earlier mobile-payment research shows that convenience alone does not explain adoption; perceived risk, usefulness, ease of use, compatibility, and other system characteristics materially shape acceptance.

Trust is particularly important when a payment technology is unfamiliar. Gao and Waechter's empirical work on mobile payments demonstrates that system quality, service quality, and information quality contribute to initial trust, whereas perceived uncertainty weakens it. Shao, Zhang, Li, and Guo later found that security, platform reputation, mobility, and customization contributed to trust in mobile-payment platforms, with trust positively associated with continuance intention and negatively associated with perceived risk. These findings indicate that trust is not an incidental attitude added after technology adoption; it constitutes part of the mechanism through which people decide whether digitally mediated exchange is economically dependable.

Community markets add an interpersonal dimension that is less visible in platform-centered models. Buyers and merchants may interact repeatedly, recognize one another, share reputational information, and operate within locally embedded social networks. Mobile-money research from Kenya illustrates how digital financial systems can interact with existing social relations rather than replace them. Jack and Suri found that mobile money reduced transaction frictions associated with risk sharing and enabled households to receive resources through broader networks, while subsequent work connected mobile-money diffusion with longer-run household economic outcomes. Merchant-side evidence is also relevant: Singh and Sinha's 2020 study found perceived trust to be an important component in explaining merchants' intention to use mobile-wallet technology.

The present study therefore conceptualizes economic trust in cashless community markets as confidence that a digitally mediated transaction will be executed accurately, recognized by the counterparty, protected from unacceptable loss, and supported by credible mechanisms of correction when problems arise. The analysis deliberately distinguishes technical reliability from relational and institutional assurance. A payment system can be technically dependable while users remain uncertain about fraud, unfamiliar merchants, reversals, refunds, or complaint handling. Conversely, interpersonal familiarity can facilitate adoption but cannot independently correct a failed electronic settlement. The

study develops a simulation-based framework integrating these complementary dimensions while avoiding any claim that synthetic observations constitute real market evidence.

2. Objectives of the Study

2.1 To Examine the Multidimensional Formation of Economic Trust

The first objective is to conceptualize economic trust as the outcome of several mutually reinforcing forms of assurance. Transaction reliability represents confidence in payment execution; perceived security represents confidence that money and account credentials will not be exposed to unacceptable risk; merchant familiarity represents interpersonal assurance; and dispute-resolution confidence represents institutional protection when normal transactions fail.

This objective deliberately moves beyond a binary distinction between trusting and distrusting technology. Prior mobile-payment research shows that trust depends on characteristics of the technological and service environment. In community settings, these system-level conditions must additionally interact with repeated buyer–merchant relationships and locally accumulated transaction experience.

2.2 To Evaluate Trust, Continued Use, and Cash-Fallback Behavior

The second objective is to investigate how different trust architectures may affect behavioral outcomes. The study examines reuse intention, willingness to continue relying on cashless settlement, confidence in resolving disputes, and the tendency to retain cash as a fallback when uncertainty arises.

This distinction is important because payment adoption does not necessarily indicate deep trust. Users may adopt because of incentives, merchant requirements, convenience, or lack of alternatives. Continuing voluntary use after repeated experience provides a more demanding behavioral indicator. Research on continuance intention supports the relevance of trust after adoption, particularly where security and platform reputation shape whether users remain willing to transact digitally.

3. Review of Literature

3.1 From Initial Adoption to Continuing Payment Trust

Mallat's qualitative investigation of mobile-payment adoption identified mobility, availability, convenience, and situational benefits alongside barriers including complexity and perceived risk. Kim, Mirusmonov, and Lee subsequently demonstrated that user-oriented and system-related characteristics influence intention to use mobile payment, reinforcing the view that digital payment adoption emerges from an evaluation of both usefulness and perceived transaction conditions.

Initial adoption nevertheless differs from continuing use. A consumer making a first digital payment possesses limited direct performance evidence. Trust must therefore be formed from indirect signals such as institutional reputation, interface quality, information clarity, recommendations, and security expectations. Gao and Waechter's findings strongly support this interpretation: system, service, and information quality were associated with initial trust, while perceived uncertainty weakened it.

Once repeated use begins, direct transaction experience can progressively replace expectation with evidence. Successful settlement, timely confirmation, accurate account balances, and consistent

merchant acceptance can validate initial beliefs. Failed transfers, unexplained deductions, ambiguous confirmation status, or inaccessible assistance may instead generate negative learning. Continuing trust must therefore be treated as a dynamic stock accumulated or depleted through repeated transactions.

3.2 Security, Reliability, and Institutional Assurance

Security constitutes one of the strongest recurring themes in digital-payment trust research. Shao and colleagues found security to be the most significant antecedent of trust among the platform characteristics included in their study, followed by reputation, mobility, and customization. This relationship is intuitive because digital transactions expose users to risks that are difficult for nontechnical users to evaluate directly.

Kang's analysis of mobile-payment security similarly identifies authentication, integrity, privacy, availability, and reliable completion as important requirements in financial-technology payment environments. From a community-market perspective, availability and completion are particularly important. A technically secure platform may still damage trust when connection failure creates uncertainty about whether money has left the buyer's account or reached the merchant.

Institutional assurance becomes most visible when an abnormal event occurs. Routine transactions can operate smoothly for months without requiring formal customer support, but one mistaken transfer or disputed debit may determine whether users continue trusting the system. Consequently, dispute resolution should be treated as a core trust variable rather than an after-sales administrative function.

3.3 Merchant Familiarity and Social Embeddedness

Community markets differ from anonymous digital marketplaces because transactions are often embedded in ongoing local relationships. Merchant familiarity can reduce interpersonal uncertainty and provide informal assistance when buyers are unfamiliar with payment procedures. A customer may be more willing to attempt a new digital method when the merchant is already trusted through repeated offline exchange.

The economic significance of social embeddedness is visible in mobile-money research. Jack and Suri showed that reduced transaction costs through mobile money affected households' ability to receive support through broader transfer networks. Large-scale work on mobile-money use has also identified social-network characteristics among relevant predictors of adoption and usage, reinforcing the importance of social context even when the underlying financial service is technological.

Merchant perceptions matter equally. Singh and Sinha's merchant-focused research found that perceived trust mediated important relationships associated with intention to adopt mobile-wallet technology. The research gap addressed in the present article is therefore the integration of merchant familiarity, system reliability, and formal recourse within a single community-market trust architecture rather than treating digital trust exclusively from the consumer-platform perspective.

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4. Research Methodology

4.1 Research Design and Simulation Logic

The study adopts a quantitative simulation-based experimental design. No consumers, merchants, or community-market operators were actually surveyed. The numerical sample is constructed solely to demonstrate how different trust environments could be compared in a future randomized or quasi-experimental investigation.

Four hypothetical market conditions are represented. The low-assurance condition contains weak technical reliability, unfamiliar counterparties, and limited confidence in recourse. The reliable-payment condition improves payment execution but leaves relational and dispute-resolution assurance comparatively weak. The reliable plus familiar merchant condition combines technical reliability with repeated buyer–merchant familiarity. The integrated trust architecture combines reliable payment execution, familiar or clearly identifiable merchants, visible security assurance, transparent confirmation, and accessible dispute resolution.

Table 1: Proposed Measurement Framework for Cashless Community-Market Trust

Construct	Operational Meaning	Measurement	Analytical Role
Payment reliability	Consistency with which transactions settle accurately and produce clear confirmation	1–5	Technical antecedent
Merchant familiarity	Degree of prior recognition and repeated economic interaction with the counterparty	1–5	Relational antecedent
Perceived security	Confidence that payment credentials, funds, and transaction information remain adequately protected	1–5	Risk-related antecedent
Dispute-resolution confidence	Confidence that incorrect, delayed, or disputed transactions can be corrected fairly	1–5	Institutional antecedent
Economic trust	Overall confidence in the dependability and fairness of cashless exchange	1–7	Primary outcome
Reuse intention	Willingness to continue making routine community-market payments digitally	1–5	Behavioral outcome
Cash-fallback tendency	Inclination to retain or revert to cash because of payment uncertainty	0–1	Behavioral outcome

The model does not assume that trust is generated by any one dimension independently. Instead, the strongest trust environment is expected when technical, relational, and institutional signals are mutually consistent.

4.2 Proposed Questionnaire and Field Protocol

A future empirical study could recruit both buyers and micro-merchants from neighborhood retail markets in which digital and cash payment options coexist. Participants should have recent cashless-payment experience so that continuing trust can be separated from purely hypothetical adoption

intention. Data collection could combine questionnaire responses with anonymized transaction-success indicators where ethically and legally appropriate.

Exactly five principal questionnaire items are proposed and have not been administered. Q1 would ask: “How confident are you that a cashless payment in this market will reach the intended recipient accurately?” Q2 would ask: “To what extent does familiarity with the buyer or merchant affect your willingness to use a cashless payment method?” Q3 would ask: “How secure do you believe the payment method is against unauthorized access, fraud, or loss?” Q4 would ask: “If a transaction failed or was disputed, how confident are you that the problem would be corrected fairly and promptly?” Q5 would ask: “How willing are you to continue using cashless payment for routine purchases or sales in this community market?”

A real field study should additionally collect payment type, transaction frequency, prior payment failures, fraud experience, merchant category, transaction value, network reliability, digital literacy, smartphone access, account ownership, fee perception, age, education, and length of participation in the local market.

4.3 Simulation Procedure and Analytical Approach

The synthetic dataset contains 400 observations, with 100 participants assigned to each trust condition. Economic trust is modeled on a seven-point scale, while reuse intention and dispute-resolution confidence use five-point scales. Cash-fallback tendency is modeled between zero and one.

Random variation was retained within every condition so that participants do not respond identically. The group means were structured to reflect the theoretical proposition that technical reliability produces an important initial increase in trust, merchant familiarity adds a further relational benefit, and integrated institutional assurance produces the strongest continuing-trust outcome.

The analysis uses descriptive comparison and a line graph with standard-error indicators. Inferential significance tests are deliberately not presented as empirical proof because the outcomes were generated from the conceptual design itself. Future field research could employ ANOVA, structural-equation modeling, multilevel regression, repeated-measures analysis, or longitudinal trust-growth models depending on sampling and data structure.

5. Analysis

5.1 Economic Trust Across Market-Assurance Conditions

The simulated analysis reveals a clear progression in economic trust. Mean trust is 3.21 under the low-assurance condition and rises to 3.92 when payment execution becomes reliable. Adding merchant familiarity increases mean trust to 4.88, while the integrated trust architecture produces the highest mean value of 5.79.

The result demonstrates the conceptual difference between reliable transactions and trusted market systems. Reliability alone improves evaluation substantially, but the increase remains smaller than when participants also recognize the counterparty and believe that institutional remedies are available if something goes wrong.

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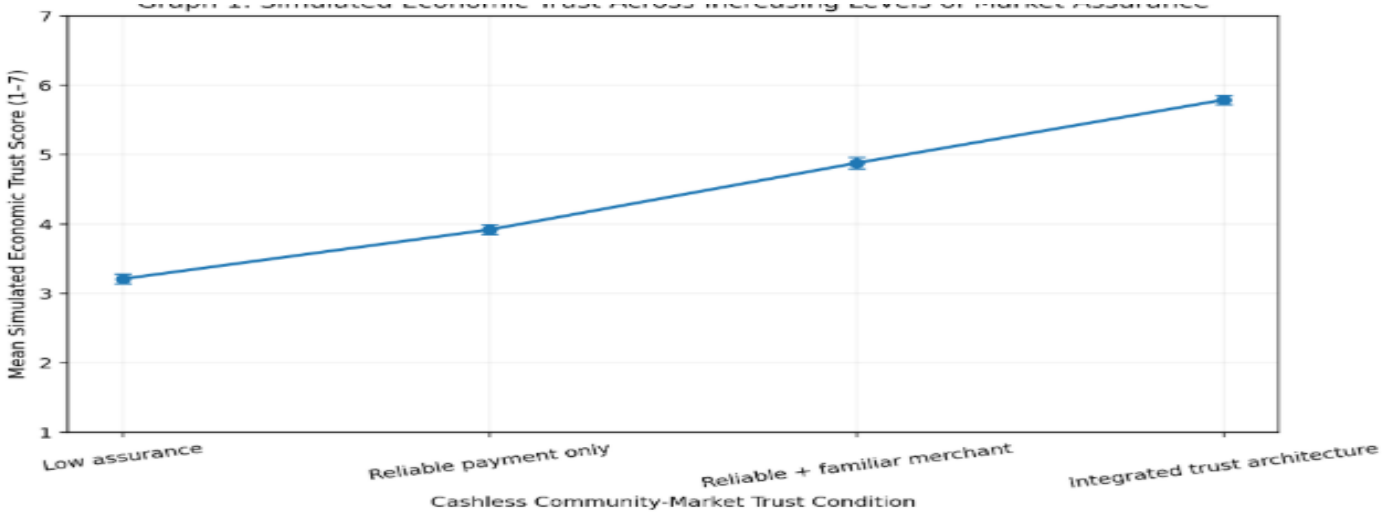
Table 2: Simulated Behavioral Outcomes Across Cashless Trust Environments

Market Trust Condition	Simulated n	Mean Economic Trust	Mean Reuse Intention	Mean Cash-Fallback Tendency	Mean Dispute-Resolution Confidence
Low assurance	100	3.21	2.96	0.62	2.56
Reliable payment only	100	3.92	3.53	0.48	2.77
Reliable + familiar merchant	100	4.88	4.06	0.33	3.53
Integrated trust architecture	100	5.79	4.56	0.19	4.31

5.2 Trust Formation as a Cumulative Assurance Process

Graph 1: Simulated Economic Trust Across Increasing Levels of Market Assurance



The graph indicates that trust formation is cumulative rather than binary. Technical reliability produces the first improvement, but the subsequent addition of merchant familiarity creates another substantial increase. The highest result appears only when technical performance and relational familiarity are supplemented by broader institutional protection.

The graph should not be interpreted as an empirical causal estimate. Its purpose is to make the central hypothesis explicit: cashless trust becomes stronger when several independent sources of uncertainty are addressed simultaneously.

5.3 Reuse Intention, Dispute Confidence, and Declining Dependence on Cash

Reuse intention increases continuously from 2.96 to 4.56 across the four conditions. This result is theoretically consistent with earlier research identifying trust as a predictor of continued mobile-payment use.

Cash-fallback tendency follows the opposite pattern, decreasing from 0.62 to 0.19. In practical terms, this implies that stronger trust may be reflected not merely in stated willingness to use digital payment but in a reduced perceived need to maintain cash as insurance against technical or institutional uncertainty.

6. Discussion

6.1 Reliability Is Necessary but Does Not Complete Trust Formation

The first major implication is that payment reliability should be viewed as a necessary foundation rather than a complete explanation of trust. A consumer or merchant cannot reasonably develop continuing trust in a payment mechanism that frequently fails, delays settlement, or creates ambiguous transaction status. Technical reliability is therefore the first layer of economic assurance.

Mobile-payment literature strongly supports this system-quality perspective. Gao and Waechter's findings connect system and service quality with initial trust, while Kang's security analysis highlights availability and reliable transaction completion as core requirements of digital-payment environments. These insights are particularly relevant in community markets where buyers and sellers need rapid settlement and may not have time to investigate ambiguous payment status while other customers are waiting.

Yet the simulated difference between “reliable payment only” and the integrated condition indicates that technical performance cannot resolve every uncertainty. Fraud, incorrect recipients, disputed transactions, failed reversals, and unfamiliar merchants create risks that are not eliminated by high average uptime. Trust must therefore extend from confidence that transactions normally work to confidence that the broader system behaves fairly when normal processes break down.

6.2 Merchant Familiarity as a Bridge Between Cash and Digital Exchange

The second implication is that familiar merchants may perform an important transitional trust function. Cashless payment introduces an unfamiliar technological process into relationships that may already possess substantial interpersonal trust. When the counterparty is known, the consumer need not simultaneously solve both technological and interpersonal uncertainty.

This mechanism helps explain why community markets deserve separate attention from anonymous online marketplaces. A neighborhood merchant may demonstrate how to confirm payment, wait while a transaction is pending, identify a mistaken amount, or reassure a customer that settlement has been received. Such interpersonal accommodation can make early digital transactions more manageable.

However, merchant familiarity should not become a substitute for formal protection. A trusted local seller cannot independently restore funds compromised by unauthorized access or resolve a payment-platform failure outside the merchant's control. Merchant-side adoption research also shows that trust influences merchants themselves, meaning that community digitization depends on confidence on both sides of the exchange.

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6.3 Institutional Assurance and the Sustainability of Cashless Community Markets

The third implication is that institutional recourse may determine whether temporary payment problems become permanent trust failures. Routine transactions test system performance, while exceptional events test institutional legitimacy. A cashless market can achieve high adoption yet remain fragile if users do not know what happens after an incorrect debit, duplicate transfer, fraudulent transaction, or failed refund.

Shao and colleagues' findings concerning security and platform reputation are consistent with this broader institutional interpretation of trust. Trust is strengthened not only by technological attributes that prevent problems but by the expectation that the platform is sufficiently reputable and accountable to respond when problems occur.

Community-market digitization strategies should therefore avoid judging success solely through the number or value of digital transactions. High transaction volume may coexist with persistent cash fallback, fear of fraud, unresolved complaints, or usage driven by merchant pressure rather than voluntary confidence. Better evaluation should incorporate transaction success, complaint resolution, user understanding, merchant confidence, security incidents, continued voluntary use, and the extent to which users still perceive cash as necessary protection.

7. Conclusion

Economic trust is a fundamental infrastructure of cashless community markets. When physical currency is replaced by electronic settlement, participants must rely on technologies and institutions that are less directly observable than the exchange of cash. Trust consequently reflects confidence not only that a digital interface functions but that the entire transaction environment is dependable, secure, intelligible, and correctable.

The simulation-based analysis illustrates the value of treating trust formation as cumulative. Mean economic trust rises from 3.21 under low assurance to 3.92 under reliable payment alone, 4.88 when merchant familiarity accompanies reliability, and 5.79 under an integrated trust architecture. At the same time, reuse intention increases, dispute confidence improves, and modeled dependence on cash as a fallback mechanism declines.

These results are synthetic and do not establish causal relationships among actual buyers or merchants. Their value lies in specifying a testable empirical proposition. Future field research should follow users across repeated transactions, recording both routine successes and exceptional failures. Studies should also distinguish initial trust from continuing trust and examine how fraud exposure, failed transactions, dispute outcomes, merchant familiarity, network reliability, and institutional reputation alter trust over time.

A further research priority is to examine both sides of the community transaction simultaneously. Consumers may distrust a system that merchants regard as convenient, while merchants may resist a payment mechanism enthusiastically adopted by consumers if settlement, liquidity, fees, or dispute procedures are unfavorable. Sustainable cashless markets therefore require reciprocal rather than one-sided confidence.

The central conclusion is that economic trust cannot be produced through digitization mandates alone. It must be earned through reliable payment completion, credible security, recognizable counterparties, clear transaction confirmation, accessible dispute resolution, and repeated evidence that the system behaves predictably under both ordinary and abnormal conditions. Cashless community markets become economically mature not when cash disappears, but when participants no longer require physical currency as their primary guarantee that exchange will be honored.

References

1. Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *Journal of Economic Perspectives, 24*(3), 207–232.
2. Bazarbash, M. (2019). FinTech in financial inclusion: Machine learning applications in assessing credit risk. *IMF Working Paper, 19*(109), 1–24.
3. Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of Economic Growth, 12*(1), 27–49.
4. Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications, 14*(5), 265–284.
5. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.
6. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. World Bank.
7. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly, 27*(1), 51–90.
8. Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics, 87*, 537–580.
9. Guo, J., & Bouwman, H. (2016). An ecosystem view on mobile payment technology: A case study of Alipay and WeChat Pay. *Telematics and Informatics, 33*(4), 1041–1054.
10. Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review, 104*(1), 183–223.
11. Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior, 26*(3), 310–322.
12. Klee, E. (2008). How people pay: Evidence from grocery store data. *Journal of Monetary Economics, 55*(3), 526–541.
13. Mallat, N. (2007). Exploring consumer adoption of mobile payments—A qualitative study. *The Journal of Strategic Information Systems, 16*(4), 413–432.
14. McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research, 13*(3), 334–359.
15. Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior, 61*, 404–414.

16. Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, *18*(4), 329–340.
17. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, *7*(3), 101–134.
18. Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, *354*(6317), 1288–1292.
19. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, *27*(3), 425–478.
20. Zhou, T. (2011). The effect of initial trust on user adoption of mobile payment. *Information Development*, *27*(4), 290–300.