IJEFI
INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCIAL ISSUES
EJ EconJournals
ISSN: 2146-4138

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2025, 15(1), 113-118.

EJ EconJournals

Financial Inclusion and Bank Stability in Selected SADC Countries

Leward Jeke

Department of Economics, Nelson Mandela University, Gqeberha, South Africa. Email: leward.jeke@mandela.ac.za

Received: 11 August 2024 **Accepted:** 13 November 2024 **DOI:** https://doi.org/10.32479/ijefi.17294

ABSTRACT

Financial inclusion is very critical in every country and has recently become a policy agenda for economic stability. A number of studies have suggested both positive and negative ways in which financial inclusion could affect financial stability, but very few empirical studies have been made of their relationship. However, there seems to be a lack of consensus across the literature on the effect of financial inclusion on bank stability especially in developing countries. Given the different empirical views, the aim of this study is to examine the effect of financial inclusion on bank stability in selected SADC countries. The study findings reveal that financial inclusion has a significant positive relationship with bank stability (z-score). The study also found a significant negative effect of bank efficiency on bank stability. Policymakers should ensure financial literacy for all to reduce bank fragility. They should also find ways of enhancing bank competition which reduces non-performing loans and bank insolvency. On practical implications, the study calls for the complementation of financial inclusion with financial literacy to enhance bank stability.

Keywords: Financial Inclusion, Bank Stability, SADC Countries
JEL Classifications: G10; G18; G20; G21; G28

1. INTRODUCTION

Financial inclusion can be defined to mean a situation where adults have access to and can effectively use a range of appropriate financial services. This can also encompass access to credit from formal financial institutions that allow adults to invest in educational and business opportunities, as well as the use of formal insurance products that allow people to better manage financial risks (Ain et al., 2020). On the hand, financial stability is a situation in which the financial system can withstand internal and external shocks without a disruption in the financial intermediations. A growing financial sector is a stable financial sector. Financial stability has become very important as a stable system can facilitate the efficiency of economic resources along with other financial operations such as savings, investment, lending, borrowing, liquidity creation, distribution, financial risk assessment, pricing, identification and management, and the ability to perform these basic functions even with external shocks or accumulated imbalances (Al Salamat and Al-Kharouf, 2021). The concept of financial inclusion has gained much attention and is a consequence of empirical findings that financial inclusion efforts have positive effects on the goal of poverty alleviation of a country (Ain et al., 2020). Financial inclusion has recently become an important concept for bank stability and economic growth (Ifediora et al., 2022) in the developing world especially Sub-Saharan Africa as it can help reduce poverty and inequality by helping people invest in the future, smoothen their consumption, and manage financial risks.

A large number of people in developing countries rely on informal financial services yet access to formal financial services allows people to make financial transactions more efficiently and safely and helps poor people climb out of poverty by making it possible to invest in education and business (Cull et al., 2012). Empirical literature has shown that financial inclusion can prevent people from falling into poverty by providing ways to manage income shocks (Zhang and Fang, 2024, Saha and Qin, 2022). Inadequate access and use of financial services have limited the poor and vulnerable groups hence financial inclusion becomes especially relevant for people living in the poorest households and can be used as a poverty alleviation tool by policy makers (Saha and Qin, 2022). The level of financial inclusion affects the stability and the well-being of households, enterprises, and the economy as a whole hence financial inclusion is one of the important drivers that help to realise a country's sustainable economic growth (Boachie and Adu-Darko, 2024). Although no conclusive evidence exists at this point, access to the formal financial system and appropriate credit can potentially facilitate investments, boost economic growth (Ifediora et al., 2022) and productivity (Matsvai et al, 2021).

In most developing countries, there is ongoing debate on the issue of whether financial inclusion contributes to financial stability (Hakimi et al., 2022) or fragility (Damrah et al., 2023 and Dat and Oanh, 2024). In recent times, financial inclusion and financial stability issue have become a priority on policy agendas across the world. Despite several efforts, there still remains no consensus amongst academics on the effect of financial inclusion and bank stability in developing countries especially in SADC countries. A number of empirical studies show that financial inclusion drives financial stability, thereby advocating for the need for countries to develop their domestic financial markets, particularly banks, which can then allow more people to become included in the financial system while some evidence suggests unidirectional positive association of financial inclusion with financial stability (Okpara, 2011). Financial inclusion may promote bank stability through the diversification of risks by lending to more individuals and businesses (Khan, 2011). However, financial inclusion may lead to extended bank credits which may undermine the stability of the banking system in cases where banking supervision is weak (Sahay et al., 2015). Also financial inclusion may result in the rise of non-performing loans. These diverging views point out the need for country specific empirical evidence on the link between financial inclusion and bank stability (Morgan and Pontines, 2014).

However, there is relative dearth of empirical studies addressing and establishing the link between the financial inclusion and bank stability in Africa. Motivated by the increasing importance of financial inclusion and bank stability if not fragility in the developing countries, this study investigates the effects of financial inclusion on financial (bank) stability in the selected SADC countries. This study is therefore conducted to provide comprehensive insights on effect of financial inclusion on financial (bank) stability in emerging SADC economies. The study come into being due to recent literature being more skewed towards the impact of financial inclusion on economic growth (Ain et al., 2020, Bashier et al., 2022, Hye, 2022, Azimi, 2022, Adedokun et al., 2022, Biswas, 2023, Girma, 2024 and Ruixian et al., 2021). Given that, the relationship between financial inclusion and economic growth have been overemphasized hence this study aims to evaluate the relationship between financial inclusion and financial (bank) stability. The findings of this study will inform policy makers on the appropriate macro-economic strategies to adopt in order to better understand the causality between financial inclusion and financial stability among SADC countries. This study contributes to the scholarly debates that exist on the relationship between financial inclusion and financial stability in the SADC countries and the findings will provide empirical evidence on the relationship which remains an important area of interest to developing countries and the attainment of the Sustainable Development Goals (SDGs).

2. LITERATURE REVIEW

The issue of financial inclusion and bank stability has dominated literature in financial economics in the last two decades however studies that explore the link between financial inclusion and bank stability are few owing to unavailability of time-series financial inclusion data (Danisman and Tarazi, 2020). Digitalisation has transformed financial systems in developed and developing countries (Chinoda and Kapingura (2023). Barriers in traditional financial systems continue to fall (Kooli et al., 2022), resulting in a rise in financial inclusion, which is also recognised as a key enabler for achieving the 2030 Sustainable Development Goals (SDGs) through the promotion of banking sector stability (Allen et al., 2016). Financial stability achieves efficiency in the financial system and to the contrary, the lack of banking stability achieves risk in operations, which increases the complexity of the organizational work and threatens the survival of the market (Cetorelli et al., 2007). Financial inclusion positively impacts on banking stability through diversification of benefits and experience which lead to reduced volatility of loan portfolios (Adasme et al., 2006). Morgan and Pontines (2014), using macro-level cross-country data, found that an increase in SME lending improves financial stability through reduced NPLs and a decrease in default risk.

Ahamed and Mallick (2019) investigated the impact of financial inclusion on bank stability in different international samples and concluded a positive effect of financial inclusion on bank stability. Danisman and Tarazi (2020) and Boachie et al. (2021) investigated the interplay between financial inclusion and banking stability in Europe and Sub-Saharan African countries, respectively and the results of the studies suggested that financial inclusion positively and significantly influences bank stability in these regions. These results are also in line with Jungo et al. (2022), who employed the Feasible Generalised Least Squares (FGLS) model to assess the moderating role of financial regulation on the effect of financial inclusion and competitiveness on banks' financial stability in SSA and Latin American and Caribbean (LAC) countries. The results suggest a positive effect of financial inclusion on bank stability in SSA and LAC countries, and financial regulation in LAC countries increases financial stability. The study also suggests an inverse relationship between competitiveness and financial stability in SSA and LAC countries. However, these studies have been criticised for failing to comprehensively define financial inclusion as they excluded digital financial inclusion variables and only used traditional financial inclusion variables.

Despite evidence on economic importance of financial inclusion, knowledge about its impact on bank stability is limited (e.g., Cull et al., 2012; Sahay et al., 2015; Ahamed and Mallick, 2019). Banks play an essential role in allocating scarce financial resources between borrowers and lenders, thus promoting economic growth (Rose and Hudgins, 2018). Empirically financial inclusion is believed to positively affect the soundness of the banking sector. Neaime and Gaysset (2018) highlighted that financial inclusion affect stability through reducing deposit volatility. Le et al. (2019) showed that financial inclusion and financial stability complement each other, making a balance between the two goals possible. Using a sample of 189 economies from 2004 to 2017, López and Winkler (2019) provide evidence that countries with a high level of financial inclusion have a lower probability of being affected if borrowing and lending significantly decline.

Ahamed and Mallick (2019) analyze the nexus between financial inclusion and bank stability using 2635 banks worldwide from 2004 to 2012 and conclude that more financial inclusion helps improve bank stability. They further find that the correlation is more noticeable in banks with a larger share of customer deposits and lower operational costs. Danisman and Tarazi (2020) apply data on 4168 commercial banks in 28 EU countries during the 2010-2017 period and find that progress in financial inclusion stabilizes the banking industry through digital payments and more account ownership. In addition, they find that the main driving force of such a stabilizing effect is disadvantaged adults who are young, poorly educated, unemployed, and living in rural areas. Vo et al. (2021) examine the linkage using 3071 banks in Asia as samples from 2008 to 2017 and find that a higher level of financial inclusion leads to greater bank resilience.

The review of the previous studies on the subject of financial stability provides a clearer picture by knowing the most important variables of these studies and the most important finding. The previous studies can be classified by studying the economic and financial indicator to see the effect of the relationship between financial inclusions and banking sector stability. The current study was premised at a theoretical framework illustration on the concept of financial inclusion and banking financial stability in SADC countries with a quantitative method to examine the effect of financial inclusion on financial banking stability.

3. METHODOLOGY

The study used database from selected SADC countries over a 12- year (2010-2022) period from various sources to analyse the effect of financial inclusion on financial sector stability. The main data sources were the IMF Financial Access Survey and World Bank's Global Findex. Financial inclusion is analysed at bank level using data from bank balance sheets and income statement using two proxies which are usage and penetration which captured both the sully and demand-side dimensions (Jungo et al., 2021). Financial penetration measures the degree of permeability of financial institution as indicated by number of bank branches per 20000 adults and financial usage is measured by the number of credit and debit cards per 1000 adults. Using these supply and demand-side dimensions, the financial index is calculated using the principal component analysis (Carrillo-Hidalgo and Pulido-Fernández (2019). For financial stability, the Z-score is widely used which is an indicator of bankruptcy (Ahamed and Mallick, 2019). The Z-score was calculated using the formula:

$$Zscore_{it} = \frac{ROA + EQA}{sd(ROA)}$$

Where Z-score represents the bank's ability to withstand risk, ROA is return on assets and EQA is the ration of bank equity to total assets.

The study also employed several bank characteristics from literature as control variables which are bank size, bank profitability and loan share (Bayero, 2015); Makina, 2017). Bank size was measured as the natural logarithm of total assets and loan share calculated as the share of net loans in total assets.

The basic model is given by:

Financial stability=f (financial inclusion, bank characteristics) which is represented as:

$$finstability_{it} = \alpha(fininclusion_{it}) + \beta X_{it} + \varepsilon_{it}$$

Where finstability *it* is the measure of financial stability; fininclusion *it* is the measure of financial inclusion; X is a vector of controls variables. The empirical model used to evaluate the effects of financial inclusion on financial stability is given as:

$$Zscore_{it} = \beta_0 + \beta_1\, ROA_{ikt} + \beta_2\, eff_{ikt} + \beta_3\, Finindex_{ikt} + \beta_4\, inf_{ikt} + \varepsilon_{ikt}$$

Where $Zscore_{it}$ is the measure of financial stability, ROA_{it} is a measure of bank return on assets, inf_{ikt} measure the country's inflation level, $Finindex_{it}$ is a measure of financial inclusion, and eff_{it} is efficiency of bank at time t. To estimate the effect of financial inclusion on financial stability, the study employed random effect panel data estimation techniques.

4. DISCUSSION OF FINDINGS

The summary statistics for financial inclusion, bank stability, return on asset and inflation in SADC countries is shown in Table 1. Financial inclusion in SADC has a mean of 27.95% with minimum and maximum values of 2% and 93%, respectively. This figures for the minimum and maximum values showed that there are still huge financial inclusion discrepancies in SADC countries, results

Table 1: Summary statistics

Measure	Z-score	Finindex	Return on asset	Inflation
Mean	0.01695	0.2795	0.30189	0.1585
Maximum	3.3865	0.9300	102.824	5.5720
Minimum	0.000176	0.0200	-0.4059	0.0041
Standard deviation	0.18136	0.22584	5.5123	0.662
Probability	0.0000	0.0000	0.0000	0.0000
Observation	348	348	348	348

Table 2: Stationarity test results

Variable	Level statistic	Level of integration
Z-score	−1.49217 (0.067)*	I (0)
Financial index	−7.12063 (0.000)***	I (0)
Inflation	−3.08655 (0.0010)***	I (0)
Return on asset	−2.79357 (0.000)***	I (0)

***, **, * denotes significance at 1%, 5% and 10% respectively

Table 3: Regression results (Z index – dependent)

Variables	Coefficient	standard error	t-statistic	P-value
Financial index	0.001024***	0.0000475	−2.158853	0.0016
Inflation	0.000625***	0.000179	3.499745	0.0005
Return on asset	0.032907***	0.00000193	1709.295	0.0000
Efficiency	−0.001051*	0.000565	−1.859738	0.0638
Constant	0.007874	0.000868	9.067812	0.0000

*** ,**,* denotes significance at 1%, 5% and 10% respectively

which are in line with the finding of Thaddeus et al. (2020). Bank stability (z-score) in SADC averages 1.695% reflecting that banks in the region are less stable and bank profitability as measured by return on asset has a mean of 30.189% which implies that bank profitability is still slow in the region.

The unit root test results as presented in Table 2 revealed that all the variables were stationary at intercept and level I(0). The Levin, Lin and Chu statistics for all the variables were significant at a 1 percent level of significance, therefore, the null hypothesis that the variables have a unit root is rejected.

Table 3 above showed the results of the Random effect panel regression model on the impact of financial inclusion on bank stability in SADC countries. The coefficient of financial index (0.001024) indicates that there is a positive effect of inclusiveness in the financial sector on the stability of the bank in SADC countries and this effect is statistically significant at 1% level. The value of z is (−2.1588) and the probability value is (0.0016), which is less than (0.01), which means we can reject the null hypothesis that there is no statistically significant effect of financial inclusion on bank stability. The finding therefore corroborates that of Hakimi et al. (2022), and Elharib (2024) who also concluded that financial inclusion is a critical requirement for financial stability. The coefficient of return on asset (0.032907) indicates that there is a positive effect of bank performance on the bank stability and this effect is statistically significant with the probability value is (0.0000), which is less than (0.01), which means we can reject the null hypothesis that there is statistically significant relationship between bank performance and bank stability. The coefficient of bank effectiveness (−0.001051) indicates that it negatively affect bank stability and this effect is statistically significant. The value of z is (−1.859738) and the probability value is (0.0638), which is less than (0.1), which means we reject the null hypothesis that there is no statistically significant effect of bank effectiveness on stability. The coefficient of inflation rate (0.000625) indicates that there is a positive effect of inflation on bank stability. However, this effect is statistically significant. The value of z is (3.499745) and the probability value is (0.0005), which is less than (0.01), which means we reject the null hypothesis that there is no statistically significant effect of inflation rate on bank stability.

The study findings reveal that financial inclusion has a significant positive relationship with bank stability (z-score). This study results entails those high levels of financial inclusion significantly decreases bank stability. The regression coefficient of financial inclusion is 0.001024 and significant at 5% levels, which show that a 1% increase in financial inclusion increase bank stability (z-score) by 0.10% and from the results, it is clear from the results that more inclusive financial system is associated with greater banking stability, as indicated by its positive and significant (at 1% level) coefficients. These results are in line with the findings of Ahamed and Mallick (2019), Banna et al., 2022), and Hakimi et al (2022) who found that financial systems with highly inclusive digital financial services tend to enhance bank stability. This finding suggests that financial inclusion enhances soundness of individual banks hence with an inclusive financial sector, banks enjoy greater financial stability. The study also showed the importance of macroeconomic factors such as inflation on influencing bank stability and the study finding showed that inflation positively affected bank stability at a significant level of 1% in the SADC region. This finding is supported by Phan et al. (2019) conduct on study in East Asian countries.

5. CONCLUSIONS AND IMPLICATIONS

The aim of the study is to investigate the impact of financial inclusion on bank's stability with yearly data (2010-2022) from the banking sector in SADC countries. The secondary data are collected from IMF Financial Access Survey and World Bank's Global Findex with random effect panel regression technique that has been used. The study showed that there exists a positive and significant relationship between financial inclusion and bank stability. At the same time, there was a positive and significant relationship between bank profitability, inflation and the stability of bank which implies a significant positive influence of macroeconomic factors in the banking sector on bank's stability. Financial inclusion has been documented in the literature, yet, little is known about its impact on stability of banks who are the main arbiters of financial services in any economy especially in SADC countries.

Using selected SADC countries over a 12-year period from various sources, the study analyse the effect of financial inclusion on financial sector stability. These results suggest that greater financial inclusion promotes stable financial sector as banks operating in an inclusive financial sector can improve stability. The study results have importantly suggested that banking stability is strongly influenced by the degree and level and financial inclusion on the economy. The study results have important policy implications. The findings suggest that banking stability is strongly influenced by the degree to which households have access to financial services, indicating the importance of ensuring an inclusive financial sector for achieving inclusive economic growth. However, only more empirical research using both supply- and demand-side data on access will provide comprehensive picture of the effects of financial inclusion on bank stability.

REFERENCES

Adasme, O., Majnoni, G., Uribe, M. (2006), Access and Risk: Friends or Foes?: Lessons from Chile. Vol. 4003. Washington, DC: World

Bank Publications.

Adedokun, M.W., Adekunle, A.O., Akande, J.O. (2022), An investigation of the impact of financial inclusion on economic growth: Evidence from African countries. Asian Economic and Financial Review, 12, 864-885.

Ahamed, M.M., Mallick, S.K. (2019), Is financial inclusion good for bank stability? International evidence. Journal of Economic Behavior and Organization, 157, 403-427.

Ain, N., Sabir, S., Asghar, N. (2020), Financial inclusion and economic growth: Empirical evidence from selected developing economies. Review of Economics and Development Studies, 6(1), 179-203.

Al Salamat, W., Al-Kharouf, S. (2021), The determinants of financial stability: Evidence from Jordan. International Journal of Business and Social Science, 12(1), 25-35.

Allen, F., Demirguc-Kunt, A., Klapper, L., Peria, M.S.M. (2016), The foundations of financial inclusion: Understanding ownership and use of formal accounts. Journal of Financial Intermediation, 27, 1-30.

Azimi, M.N. (2022), New insights into the impact of financial inclusion on economic growth: A global perspective. PLoS One, 17(11), e0277730.

Boachie, R., Aawaar, G., Domeher, D. (2021), Relationship between financial inclusion, banking stability and economic growth: A dynamic panel approach. Journal of Economic and Administrative Sciences, 39, 655-670.

Boachie, R., Aawaar, G., Domeher, D. (2023), Relationship between financial inclusion, banking stability and economic growth: A dynamic panel approach. Journal of Economic and Administrative Sciences, 39(3), 655-670.

Banna, H., Hassan, M.K., Ahmad, R., Alam, M.R. (2022), Islamic banking stability amidst the COVID-19 pandemic: The role of digital financial inclusion. International Journal of Islamic and Middle Eastern Finance and Management, 15(2), 310-330.

Bashier, A.A., Nizar, H., Alsowaidan, O. (2022), Impact of Financial Inclusion on Economic Growth in Saudi Arabia: An Autoregressive Distributed Lag Modelling Approach [SAMA Joint Research Program].

Bayero, M.A. (2015), Effects of Cashless Economy Policy on financial inclusion in Nigeria: An exploratory study. Procedia-Social and Behavioral Sciences, 172, 49-56.

Biswas, G.K. (2023), Financial inclusion and its impact on economic growth: An empirical evidence from South Asian countries. European Journal of Business and Management Research, 8, 163-167.

Boachie, C., Adu-Darko, E. (2024), The effect of financial inclusion on economic growth: The role of human capital development. Cogent Social Sciences, 10(1), 2346118.

Carrillo-Hidalgo, I., Pulido-Fernández, J.I. (2019), Is the financing of tourism by international financial institutions inclusive? A proposal for measurement. Current Issues in Tourism, 22(3), 330-356.

Cetorelli, N., Hirtle, B., Morgan, D.P., Peristiani, S., Santos, J.A. (2007), Trends in financial market concentration and their implications for market stability. Economic Policy Review, 13(1), 1-11.

Chinoda, T., Kapingura, F.M. (2023), Digital financial inclusion and economic growth in Sub-Saharan Africa: The role of institutions and governance. African Journal of Economic and Management Studies, 15, 15-30.

Cull, R., Demirgüç-Kunt, A., Lyman, T. (2012), Financial Inclusion and Stability: What Does Research Show? Washington, DC: World Bank Group.

Damrah, S., Elian, M.I., Atyeh, M., Shawtari, F.A., Bani-Mustafa, A. (2023), A linear mixed model approach for determining the effect of financial inclusion on bank stability: Comparative empirical evidence for Islamic and conventional banks in Kuwait. Mathematics, 11(7), 1698.

Danisman, G.O., Tarazi, A. (2020), Financial inclusion and bank stability: Evidence from Europe. The European Journal of Finance, 26, 1842-1855.

Dat, P.T., Oanh, T.T.K. (2024), Relationship between financial inclusion, inflation and financial stability of countries around the world and lessons for Vietnam. Journal of Finance and Marketing Research, 15, 30-43.

Girma, A.G. (2024), The impact of financial inclusion and stability on economic growth in African countries. International Journal of Business and Economic Studies, 6, 69-81.

Hakimi, A., Boussaada, R., Karmani, M. (2022), Are financial inclusion and bank stability friends or enemies? Evidence from MENA banks. Applied Economics, 54(21), 2473-2489.

Hye, Q.M. (2022), Revisiting the linkage between financial inclusion and economic growth: Time series evidence from Vietnam. Edelweiss Applied Science and Technology, 6(1), 302.

Ifediora, C., Offor, K.O., Eze, E.F., Takon, S.M., Ageme, A.E., Ibe, G.I., Onwumere, J.U. (2022) Financial inclusion and its impact on economic growth: Empirical evidence from sub-Saharan Africa. Cogent Economics and Finance, 10(1), 2060551.

Jungo, J., Madaleno, M., Botelho, A. (2022), The effect of financial inclusion and competitiveness on financial stability: Why financial regulation matters in developing countries? Journal of Risk and Financial Management, 15(3), 122.

Khan, H.R. (2011), Financial Inclusion and Financial Stability: Are They Two Sides of the Same Coin. Bancon: Reserve Bank of India, p1-12.

Kooli, C., Shanikat, M., Kanakriyah, R. (2022), Towards a new model of productive Islamic financial mechanisms. International Journal of Business Performance Management, 23(1-2), 17-33.

Le, T.H., Chuc, A.T., Taghizadeh-Hesary, F. (2019), Financial inclusion and its impact on financial efficiency and sustainability: Empirical evidence from Asia. Borsa Istanbul Review, 19(4), 310-322.

López, T., Winkler, A. (2019), Does financial inclusion mitigate credit boom-bust cycles? Journal of Financial Stability, 43, 116-129.

Makina, D. (2017), Introduction to the financial services in Africa special issue. African Journal of Economic and Management Studies, 8(1), 2-7.

Matsvai, S., Mushunje, A., Tatsvarei, S. (2021), Technical efficiency impact of microfinance on small scale resettled sugar cane farmers in Zimbabwe. Cogent Economics and Finance 10(1), 2017599.

Morgan, P., Pontines, V. (2014), Financial Stability and Financial Inclusion (ADBI Working Paper Series). Japan: Asian Development Bank Institute.

Neaime, S., Gaysset, I. (2018), Financial inclusion and stability in MENA: Evidence from poverty and inequality. Finance Research Letters, 24, 230-237.

Okpara, G.C. (2011), Financial inclusion and financial stability: A Toda-Yamamoto causality approach. Social Sciences (Jamelss), 1(1), 86-100.

Phan, H.T., Anwar, S., Alexander, W.R.J., Phan, H.T.M. (2019), Competition, efficiency and stability: An empirical study of East Asian commercial banks. The North American Journal of Economics and Finance, 50, 100990.

Rose, P., Hudgins, S. (2018), Bank Management and Financial Services. 10th ed. United States: McGraw-Hill Education.

Ruixian, H., Seenaiah, K., Paramati, S.R., Hesary, F.T. (2021), The nexus between financial inclusion and economic development: Comparison of old and new EU member countries. Economic Analysis and Policy, 69, 1-15.

Saha, S.K., Qin, J. (2023), Financial inclusion and poverty alleviation: An empirical examination. Economic Change and Restructuring, 56, 409-440.

Sahay, R., Čihák, M., N'Diaye, P., Barajas, A. (2015), Rethinking financial deepening: Stability and growth in emerging markets. Revista de Economía Institucional, 17(33), 73-107.

Thaddeus, K., Ngong, C., Manasseh, C. (2020), Digital financial inclusion and economic growth: Evidence from Sub-Saharan Africa (2011-2017). International Journal of Business and Management, 8(4), 212-217.

Vo, D.H., Nguyen, N.T., Van, L.T.H. (2021), Financial inclusion and stability in the Asian region using bank-level data. Borsa Istanbul Review, 21(1), 36-43.

Zhang, Y., Fang, S. (2024), Financial inclusion and poverty alleviation: Rethinking theory and intervention strategies based on rural practice in China. Socium, 1, 5-23.