International Journal of Advanced Social Studies

Research Article

Impact of Financial Inclusion, Financial Development and Misery Index on Economic Growth: An Analysis from Selected Asian Countries

Article History
Received: March 10, 2023
Revised: May 27, 2023
Accepted: June 11, 2023
Published: June 30, 2023

Sajid Karim
Agriculture Department (Marketing Wing), Government of the Punjab, Lahore, Pakistan

*Corresponding Email: sajidk57@gmail.com

Abstract

Despite the increasing focus on global economic development, there remains a gap in understanding the specific impact of financial inclusion, financial development, and the misery index on economic growth within the Asian context. Identifying and analyzing these relationships is crucial for informing effective policy interventions. The lack of a comprehensive understanding of how these variables interact hinders the formulation of targeted strategies to promote sustainable and inclusive economic growth in the region. In the current study, we have investigated the impact of financial development, financial inclusion, urban population and misery index on economic growth in selected Asian economies using panel data from 2004 to 2018. GDP per capita is used as the dependent variable, and financial development, financial inclusion, urban population and misery index are used as explanatory variables. By using a random effect technique, it was found that financial development, financial inclusion, and urban population have boosted financial inclusion. However, the misery index has decreased economic growth in selected Asian economies. It is suggested that these economies must increase financial development and financial services access and availability for more growth. The government must focus on education to increase production and investment in concerned economies. Moreover, the government must control inflation along with unemployment to foster economic growth.

Keywords: Financial inclusion, Financial development, Misery index, Economic growth, Asian countries.

Introduction

Since the early 2000s, achieving financial inclusion has emerged as a significant focus on the global policy agenda. Numerous economies have leveraged financial inclusion as a catalyst for fostering sustainable economic growth (Collard, 2010). The United Nations (UN) has identified financial inclusion as a key objective within the Millennium Development Goals, aiming to promote sustainable development and enhance global well-being grounded in principles of human rights and equality, fostering progress in social, economic, and environmental domains. In line with Pearce (2011), the significance of financial inclusion is currently extensively familiarized, though it has become a policy precedence in various economies. Financial inclusion has an effective influence on building a sturdy basis for a nation's financial substructure, which will result in the ease of its economic growth and development (Sharma, 2016). Policymakers in Asian economies have implemented diverse measures to enhance access to financial services for individuals previously excluded from the financial sector. Many governments in Asian countries have expanded financial inclusion through initiatives such as business loans, E-money, improvements in microfinance services, agent banking, mobile

banking, and innovative technologies like biometric scanning systems (Asian Development Bank, 2014).

The adoption of policies aimed at increasing access to financial services for diverse populations in various Asian countries has led to a rapid development of financial inclusion over the past decade. The World Bank has reported a substantial increase in financial inclusion across numerous Asian nations, with a notable rise in the financial inclusion index in almost all Asian states. The primary objective of financial inclusion programs implemented by Asian states is to promote inclusive growth by reducing poverty, fostering development, improving income distribution, and ensuring financial system stability. Extensive research has consistently demonstrated a robust positive correlation between financial inclusion and economic growth (Kendall et al., 2010; Sarma & Pais, 2010; Masoud & Hardaker, 2012; Sharma, 2016; Kim, Yu, & Hassan, 2018; Raza et al., 2019). The current research investigates critical factors shaping economic growth in the Asian context. By examining the relationships between financial inclusion, financial development, and the misery index, the study offers nuanced insights into the intricate dynamics influencing economic progress. This research holds practical relevance for policymakers, guiding the formulation of targeted strategies to foster inclusive financial practices, strengthen financial systems, and address socio-economic factors. Additionally, the findings contribute to the academic literature by providing a comprehensive understanding of the multifaceted influences on economic growth, facilitating informed decision-making for governments, financial institutions, and international organizations operating in the region.

The problem statement underlying the research initiative arises from the need to comprehend and address the complex factors influencing economic growth in selected Asian countries. Despite the increasing focus on global economic development, there remains a gap in understanding the specific impact of financial inclusion, financial development, and the misery index on economic growth within the Asian context. Identifying and analyzing these relationships is crucial for informing effective policy interventions. The lack of a comprehensive understanding of how these variables interact hinders the formulation of targeted strategies to promote sustainable and inclusive economic growth in the region. Therefore, the problem statement encapsulates the imperative to bridge this knowledge gap, offering a clear rationale for investigating the intricate connections between financial variables and economic growth in the selected Asian countries.

The existing research highlights the impact of financial inclusion, financial development, urban population and misery index on the growth of selected Asian economies. Such kind of research will provide policy for further improvements and courses of action.

Research Questions

1. What is the Impact of the Financial Development Index on economic growth in chosen Asian nations?
2. How does financial inclusion promote the growth potential of Asian countries?
3. Is there a correlation between urban population and economic growth in selected Asian countries?
4. What is the influence of the misery index on economic growth in chosen Asian nations?

Significance of the Study

While considerable attention has been directed towards understanding the impact of factors such as trade, foreign aid, and foreign direct investment on the economic growth of emerging and developed economies, this study brings to light the critical roles played by financial development, financial inclusion, and urban population in augmenting economic growth in specific Asian nations. These elements are shown to be indispensable for fostering further growth in the respective states.

Research Hypothesis

The major hypotheses of the current research are given below:

H1: There is a positive link between the financial development index and economic growth.

H 2: The higher the financial inclusion, the higher the economic growth.

H 3: There is a positive association between urban population and economic growth.

H 4: There is a negative association between the misery index and economic growth.

The structure of research given after the introduction section review of literature provides a relevant review of the previous research studies. After that, the methodology section shows data, material, and methods used in the article. The section on results and discussion shows the results and the description of the findings of the study. The last section is about the conclusion of the research study.

Review of Literature

A substantial effort regarding the influence of financial development, remittances, inflation, unemployment and population growth has been made in developing and developed world. This study reveals the impact of financial development, financial inclusion, urban population and misery index on the growth of selected Asian countries. Marc et al. (1970) described that there was a positive association between financial inclusion and economic growth in developed and developing economies. Rosenthal and Strange (2003) emphasized the role of urbanization on economic growth. It was found that urbanization has enhanced the growth of the economies. Levine (2004) has shown that economic growth was achieved by a process sustained mainly by the financial sector of the economy. He explained that the financial sector could reduce risk and enhance savings. In another study of South Africa, Fedderke and Luiz (2006) showed that infrastructure has considerable effects on economic growth. They used data from 30 countries. Findings highlighted that infrastructure has enhanced growth. In his study, Fabya (2011) examined that the financial sector has provided debtors with various financial instruments of high quality and low risk, increasing economic growth. An association of financial inclusion and growth has been explained by various studies.

Kendall et al. (2010) and Ghosh (2011) delved into the augmentation of economic growth in India through increased financial access and the utilization of financial services. Another study conducted in India by Lenka and Sharma (2016) employed secondary data, establishing a causal relationship between different dimensions of financial inclusion and economic growth. This study demonstrated a bidirectional causality link, highlighting the interconnected relationship between access to banking services and economic growth. Khatoon et al. (2021) used time series data to find the relation of economic growth with human capital. Fouzia et al. (2023) used the panel data set to estimate the relationship between financial development and economic growth in Asian countries. Presently, Pradhan et al. (2016), Kim et al. (2018), and Raza et al. (2019) utilized panel data from various economies to identify a positive association between financial inclusion and economic growth. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126. Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126.

Masoud and Hardaker (2012) used 12 years of data and checked the influence of stock market development and the banking sector on economic growth in 42 developing countries. Results showed that stock market affected economic growth and had a long-run association. Moreover, it was also found that and the banking sector was complementary to the stock market in facilitating client's approach to their anticipated financial services. Sharma (2016) analysed that how financial inclusion influenced economic growth in India. By using data from 1980–2014, and ARDLand error-correction methods were used to check out the link of both variables.

The findings indicated that financial inclusion boosted up growth short and long runs. Le et al. (2019)used data from 2011 to 2016 in twenty Asian states. The random effect results showed that financial inclusion has increased growth in Asian countries. Wang et al. (2019) focused on how financial structure and misery index affected economic growth in Pakistan by using data from 1989 to 2017. It was found that financial development, misery index and remittances led to boost in growth in Pakistan. Rehman et al. (2022) focused on how foreign direct investment and information and communication technology affected growth in Pakistan, taking data from 1976 to 2019. It was found that foreign direct investment has increased growth of Pakistan economy. Ali et al. (2022) used data from 2000 to 2016 in fourty five OIC countries to check role of institutional quality and financial development on growth. The GMM results showed that institutional quality and financial development have increased growth in these countries. By using data from 1984 to 2018, Pal and Bandyopadhvay (2022) found a positive link between financial inclusion, financial development and economic growth in middle-income countries.

Methodology

We have employed data from 2004 to 2018 for all important variables to check an association of dependent and independent variables. It has selected 9 Asian countries such as Bangladesh, India, Indonesia, Iran, Jordan, Malaysia, Pakistan, the Philippines and Sri Lanka. All data for the variables concerned is taken from World Development Indicators. We have used GDP per capita as the dependent variable and independent variables financial inclusion (Number of commercial bank branches per 100,000 adults), financial development (domestic credit to private sector % of GDP, Bank deposit ratio % of GDP and stock market capitalization) upban population (% total population) and the misery index (an index of the inflation rate and unemployment rate).

The econometric model for the study is as follows:

$$GDPPC = \beta_0 + \beta_1 FINDIN_{it} + \beta_2 FINANI_{it} + \beta_3 URBANP_{it} + \beta_4 MINDEX_{it} + u_{it} \quad (1)$$

GDPPC= Economic growth (GDP per capita)

FINDIN= Financial development index

FINANI=Financial Inclusion (bank services availability such as number of commercial branches)

URBANP= Urban population (% of total population)

MINDEX= Misery index (index of the inflation rate and unemployment rate)

it = (time trend)

uit= (error term)

Results and Discussion

The results of descriptive statistics of major variables have been highlighted here in this section. Here, we have examined how the independent variables may influence the dependent variable in selected Asian countries. Table 1 results highlight that regarding the financial development index, the sample covering countries having index from the range of -1.2114 per cent to 1.4293 per cent.

Table 1. Descriptive statistics of major important factors.

Variables	Obs.	Mean	Std. Deviation	Minimum	Maximum
LGDPPC	135	3.4117	0.3376	2.7696	4.0831
FINDIN	135	-0.3768	6649036	-1.2114	1.4293
FINANI	135	13.2860	6.7142	5.1642	32.3071
URBANP	135	49.0001	21.6732	18.196	90.979
MINDEX	135	118.4386	49.07493	51.43506	349.204

On average, FINANI across selected Asian economies is 3.2860 percent from the time span of 2004 - 2018. Similarly, variations are being found in urban population from 18.196 to 90.979 percent along with factors. On average, misery index across selected Asian countries is 118.4386 per cent.

Table 2 shows the random effects results, and the dependent variable is GDP per capita. Hausman specification test (REM): Such test is normally used depending on the method used in comparing fixed and random effects estimates of coefficients. To select FEM or REM, Hausman test has been considered in this research. The value of Probability of chi2 was 0.8903. The p- value by Hausman has allowed for the random effects. The study results using the random effects technique are shown in Table 2. Financial development plays a noteworthy role in fostering economic growth in selected Asian economies. Increasing financial access leads to enhanced investment and improves growth in the concerned economies. The result highlights a positive impact of the financial development index on economic growth. One percent increase in the financial development index may seem to be increasing economic growth by 0.1437 percent in selected Asian countries. Our finding is consistent with the result by Ali et al. (2022).

Table 2. Random effect results, dependent variable is Log GDP per capita.

Variables	Coefficients, Std. Errors and Z-values
FINDIN	0.1436*
	0.0271
	(5.31)
FINANI	0.1211*
	0.0019
	(6.51)
URBANP	0.0077*
	0.0017
	(4.50)
MINDEX	-0.0065**
	0.0028
	(-2.32)
C	2.9128
	0.1129
	(25.80)
R 2 within	0.67
R 2 between	0.63
R 2 overall	0.63
Wald Chi2	275.53
Prob.	0.0000

z-values are in parentheses: ** p<0.05, * p<0.1.

Financial inclusion is another important factor affecting the economic growth of selected Asian countries. Too much financial and banking services availability results in much investment and growth. It is found that a one percent increase in banking services availability and usage may lead to an increase in economic growth by 0.0121 percent in these economies. Too much population growth has also influenced economic growth in selected Asian countries. Rapidly increasing urban populations also have positive effects on economic growth. A lot of educated and highly skilled urban populations are using banking and financial services to increase

earnings, production, and growth. The result highlights that a one percent increase in urban population will increase economic growth by 0.0077 %. The result is favoured by Rosenthal and Strange (2003).

The misery index is another major factor that negatively influences the economic growth of selected Asian economies. It leads to less growth. It is found that a one percent increase in the misery index leads to a decrease in the growth by 0.0065 percent. Findings are supported by Wang et al. (2019).

Conclusions

In this research, we have shown the influence of financial development, financial inclusion, urban population and misery index on economic growth in selected 9 Asian countries. We have employed a random effect technique by using data from 2004 to 2018. We have used GDP per capita as the dependent variable, and financial development, financial inclusion, urban population and misery index are employed as independent variables affecting economic growth in selected Asian economies. It has been seen that Asian countries are developing due to high growth, which is the result of the availability of banking services and financial access indicated by financial development. Considering this significance, we have tried to show financial inclusion and development's significant role in determining growth. Misery index (Inflation and unemployment) are also found to be decreasing economic growth. Findings recommend more banking services available for high growth in the selected Asian countries. There is an awful need to improve financial access and high financial development by the banking sector in the concerned countries. Moreover, employment opportunities should be provided in urban areas for investment, production and growth. The government must control inflation in these economies. Many improvements must be made in the education sector as well to educate and improve the skills of the population. All this will improve economic growth in these Asian economies.

References

Ali, M., Nazir, M. I., Hashmi, S. H., & Ullah, W. (2022). Financial inclusion, institutional quality and financial development: Empirical evidence from OIC countries. The Singapore Economic Review, 67(01), 161-188.

Asian Development Bank. (2014). Financial Inclusion in Asia Country Surveys. Institute Working Paper. Asian Development Bank. https://www.adb.org/sites/default/files/ publication/159308/adbi-financial-inclusion-asia.pdf.

Collard S. (2010.) Toward financial inclusion in the UK: Progress and challenges. Public Money & Management, 27(1), 13-20.

Fabya. (2011). Analysis of the influence of financial sector developments on economic growth in Indonesia. Scientific Journal of the Faculty of Economics and Management. Bogor Agricultural Institute, Indonesia.

Fedderke, J., & luiz, J. (2006). Infrastructural investment in long-run economic growth: South Africa 1875–2001. World Development, 34(6), 1037-1059.

Fouzia, M., Javed, I., Nawaz, S., Javaid, H., Yasin, M., & Mumtaz, H. (2023). Role of Education and Financial Development in Economic Growth of Selected Asian Countries. Journal of Education and Social Studies, 4(1), 119-126.

Ghosh, S. (2011). Does financial outreach engender economic growth? Evidence from Indian states. Journal of Indian Business Research, 3(2), 74-99.

Kendall, J., Mylenko, N., & Ponce, A. (2010). Measuring financial access around the world. World Bank Policy Research WorkingPaper Series No. 5253. Washington, DC: World Bank. https:// www.cgap.org/sites/default/files/CGAP-Measuring-Financial-Access-around-the-World-Mar-2010.pdf.

Khatoon, R., Javed, I., & Hayat, M. M. (2021). Impact of human capital on economic growth: A case study of Pakistan. Journal of Social Sciences Advancement, 2(2), 64-69.

Kim, D.-W., Yu, J.-S., & Hassan, M. K. (2018). Financial inclusion and economic growth in OIC countries. Research in International Business and Finance, 43, 1–14.

Le, Q., Ho, H., & Mai, N. (2019). The impact of financial inclusion on income inequality in transition economies. Management Science Letters, 9(5), 661-672. https://doi.org/10.5267/j.msl.2019.2. 005.

Lenka, S. K., & Sharma, R. (2017). Does financial inclusion spur economic growth in India?. The Journal of Developing Areas, 51(3), 215-228.

Levine, R. (2004). Finance and Growth: Theory and Evidence. NBER Working Paper No. 10766. Cambridge, MA: National Bureau of Economic Research. https://www.nber.org/papers/ w10766

Marc S. M., Goldsmith R., & Saint Marc M. 1970. Financial Structure and Development. Rev. e´conomique, 21(3), 491–492, https://doi.org/10.2307/3499896.

Masoud, N., & Hardaker, G. (2012). The Impact of Financial Development on Economic Growth: Empirical Analysis of Emerging Market Countries. Studies in Economics and Finance, 29(3), 148-173.

Pal, S., & Bandyopadhyay, I. (2022). Impact of financial inclusion on economic growth, financial development, financial efficiency, financial stability, and profitability: an international evidence. SN Business & Economics, 2(9), 139.

Pearce D., (2011). Financial Inclusion in the Middle East and North Africa. World Bank Policy Research Working PaperSeries No. 5610. Washington, DC: World Bank. https://doi.org/10.1596/1813-9450-5610

Pradhan, R. P., Arvin, B. M., Norman, N. R., Nair, M., & Hall, J. H. (2016). Insurance Penetration and Economic Growth Nexus: Cross-Country Evidence from ASEAN. Research in International Business and Finance, 36, 447-458

Raza, M. S., Tang, J., Rubab, S., & Wen, X. (2019). Determining the nexus between financial inclusion and economic development in Pakistan. Journal of Money Laundering Control, 22(2), 195- 209. https://doi.org/10.1108/JMLC-12-2017-0068.

Rehman, A., Radulescu, M., Ahmad, F., Khan, M. K., Iacob, S. E & Cismas, L. M. (2022). Investigating the asymmetrical influence of foreign direct investment, remittances, reserves, and information and communication technology on Pakistan's economic development. Economic Research-Ekonomska Istraživanja, 1-22. https://doi.org/10.1080/1331677X.2022.2131591.

Rosenthal, S. S., & Strange, W. C. (2003). Geography, industrial organization, and agglomeration. review of Economics and Statistics, 85(2), 377-393.

Sarma, M., & Pais, J. (2010). Financial Inclusion and Development. Journal of International Development, 23(5), 613–628.

Sharma, D. (2016). Nexus between Financial Inclusion and Economic Growth. Journal of Financial Economic Policy, 8(1), 13–36.

Wang, N., Haroon Shah, M., Ali, K., Abbas, S., & Ullah, S. (2019). Financial structure, misery index, and economic growth: Time series empirics from Pakistan. Journal of Risk and Financial Management, 12(2), 100.