International Journal of Advanced Social Studies
ISSN: 3006-1776 (Print), 3006-1784 (Online)

Article History
Received: January 14, 2025
Revised: April 16, 2025
Accepted: April 24, 2025
Published: April 30, 2025

*Corresponding Email: asma.gulistan@yahoo.com

https://doi.org/10.70843/ijass.2025.05114

Research Article

Impact of Economic Openness, Financial Inclusion, and Unemployment on Income Inequality in Asian Countries

Asima Gulistan [1,*], Ahmed Jan Essa [2], An ul Abidin [3], Durdana Qaiser Gillani [4]
[1] Development Expert, Balochistan Livelihood and Entrepreneurship Project (BLEP) Balochistan, Pakistan
[2] Project Manager, FAO, Georgetown, Guyana
[3] Additional Registrar, Green International University, Lahore, Pakistan
[4] Assistant professor, Department of Economics, Preston University, Kohat, Islamabad Campus, Pakistan

Abstract

Inequalities within the society demonstrated to be traditionally, main reasons for conflicts between social classes, leading most of the time to strikes, riots, or even chaos or civil wars, all of which hinder the society's development. So, lessening the inequalities or at least controlling them is a subject for each country. Highlighting this issue, our work considers the role of urban population, financial inclusion, financial development, industrialization, economic openness, and unemployment rate in Asian countries. OLS results point out that urban population, foreign direct investment, and trade openness lead to a decrease the income inequality. However, financial inclusion, financial development, and unemployment rate have increased the unequal distribution of income in these Asian countries. The study suggests for more stable political and economic system for attracting more employment and foreign investments. Furthermore, there was also a need for an improved financial system for more provision of finance. The government should provide more jobs to the segments of the population to achieve high growth and development, and to lessen poverty.

Keywords: Financial development, Economic openness, Inequality, Asian countries.

Introduction

Financial inclusion has been widely known as a major measure to cope with this matter. Financial inclusion definition changes. Several studies describe financial inclusion at the same time, while others explain the concept of financial exclusion. Mohan (2006) recognises financial inclusion as a condition that persons who have no access to the financial system are offered inexpensive, secure, and fair monetary goods. Similarly, the Rangarajan Committee (2008) explains that financial inclusion is financial services provided to persons who are not privileged to make use of these facilities because of a lack of information and finance in a timely and profitable way. Ajide (2015) refers to financial inclusion as the process by which financial facilities are provided to every person in a society. Trade openness and human capital are actually substantial in affecting economic growth (Cohen & Soto, 2007). It comprises buying and exchanging of supplies and amenities, develops contemporary technical know-how, and movements of original thoughts and information. The idea of trade openness is a very considered matter for totally economies. If a country adopts trade openness, such a state is more perhaps to grow. The word openness specifies the non-appearance of limitations or an elastic performance for exchanging activities. Consequently, trade openness displays the extent to which the government permits trade with new countries (Goldberg et al., 2009).

Technological development and globalization are extensively observed as two of the chief drivers of new economic growth. Technical progress is defined as the growth and spread of novel thoughts and approaches that improve output and competence, and globalization as a substance of technology that eases the dissemination of thoughts and approaches everywhere in the world through, for instance, openness to trade and FDI (Burns & Timmer, 2009). Though much of high-tech invention happens in a handful of progressive nations (Helpman, 1997; Hoffmaister and Roldos, 1997), emerging states can possibly and excessively benefit from imitation of current technologies. The role of the urban population is also substantial in high development and less inequality. Urban population enhances the requirements of novel production and also participates in making additional goods for the overall population. Like this, it endorses improved growth, living standards, and development of the nation.

A lot of factors like education, health expenditures, growth rates, investments, and inflation have been noticed affecting the growth and development of countries. Though our research work highlights the major factors, such as financial inclusion, with other variables affecting income inequality positively or negatively in Asian countries. Pan-Long (1995) examined a link between foreign direct investment and income inequality by using panel data in a few developing countries. The result showed that foreign direct investment gave rise to a more unequal distribution of income among these less-developed countries. Reuveny and Li (2003) highlighted the role of economic openness and democracy on income inequality by using data from 1960 to 1996. The result showed that democracy and trade reduced income inequality, but foreign direct investments tended to increase the unequal distribution of income. Levine (2004) showed how did financial sector affects the growth of countries. The report pointed out that the financial sector has increased savings and economic growth. It has also lessened the transaction costs.

Barro (2008) conducted a study to show an association between economic development and income inequality. This study found that political influence was more consistently disseminated as compared to economic power. Rent-seeking and corruption prevented income inequality from decreasing during growth. In a study by Klein et al. (2010), it was found that trade openness exacerbated wealth disparities by reducing employment and earnings of less educated and less skilled labourers, making them more vulnerable to globalization's influences. Franco and Gerusi (2013) focused on the role of trade and inward foreign direct investments in affecting income distribution in 17 Transition Countries from 1990 to 2006. The study result showed that trade seemed to be affecting income inequality. Jaumotte et al. (2013) used data from 1981 to 2003 to analyse the relationship between trade and income inequality. The result showed that trade globalization and income inequality were negatively associated with income inequality. However, financial globalization and foreign direct investment led to an increase in inequality.

Jauch and Watzka (2016) emphasized how financial development affected income inequality by using data from 138 developed and developing economies from 1960 to 2008. Findings pointed out that financial development has enhanced income inequality in the sample of these economies.

Khan and Nawaz (2019) focused on the association between trade, foreign direct investment, and income inequality for the Commonwealth of Independent States by utilising data from during1990 to 2016. GMM results showed that trade and FDI significantly affected income inequality when interacted with the Gini index. Educated people used technology and reduced income inequality. Regarding trade, the study found an inverted U-shaped curve. Filip et al. (2024) have analyzed how GDP, gross capital formation, labor force participation, and control of corruption affected income inequality in EU countries based on data from 2004 and 2020. Ponce et al. (2024) focused on the role of control of corruption on income inequality, proxied by the Gini index. The study concluded that control of corruption resulted in less income inequality.

Our research work has focused on the impact of urban population, financial inclusion, financial development, economic openness, industrialization, and unemployment rate on income inequality in Asian countries. This rich contribution will offer a strategy for extra development and for lessening income inequality.

Research Questions

1. How does the urban population decrease income inequality?
2. What is the role of financial inclusion in the unequal distribution of income?
3. How does financial development affect income inequality?
4. Does economic openness reduce income inequality?
5. What is the impact of industrialization on income inequality?
6. Does the unemployment rate affect income inequality?

Significance of the Study

It has been noticed how investments, savings, taxes, corruption, education, inflation, and population growth affect the income inequality of countries. But our study reveals the role of urban population, financial inclusion, financial development, economic openness, industrialization, and unemployment rate in income inequality in Asian countries.

Research Hypotheses

The important hypotheses are given below.

H1: There is a positive relationship between urban population and income inequality.

H2: The financial inclusion and unequal distribution of income are positively associated.

H3: The Higher the financial development, the higher the income inequality.

H4: More economic openness tends to decrease income inequality.

H5: Industrialization is positively linked with inequality.

H6: The Higher the unemployment rate, the higher the income inequality.

Methodology

By utilizing data from 2006 to 2022, it has been examined how economic openness with other control variables has affected income inequality in Asian countries like Bangladesh, India, Indonesia, Iran, Jordan, Malaysia, Pakistan, and the Philippines. Data on dependent and explanatory factors were taken from WDI. We have used the Gini index as the dependent factor, and the independent variables were urban population, financial inclusion, financial development, economic openness, industrialization, and unemployment rate on income inequality. The OLS model has been used to check the relationship between dependent and independent variables.

Model Specifications

The model is provided as:

GINI= β_0 + β_1 LURBPOPit + β_2FININCit + β_3FINDVINDit + β_4FRDINDit + β_5 LMANUFit+ β_6 TRADOPNit + β_7 LFPRATEit + β_8 UNEMPRit + uit

URBNPOP= Log of Urban population (Total)

FININC= Financial inclusion (Number of commercial bank branches per 100,000 adults + Number of ATM machines per 100,000 adults)

FINDVIND = Financial development index

FRDIND= Foreign direct Investment (% of GAP)

LMANUF= Log of manufacturing value added

TRADOPN= Exports and imports as a percentage of GDP

LFPRATE= Labour force Participation Rate (total)

UNEMPR= Unemployment rate (total)

$_{it}$ = (time trend)

ui= (error term)

Results and Discussion

We have shown summary statistics of the major factors influencing income inequality. Table 1 shows that on average, GINI index is 0.6651, parent having range from 0.5 to 0.81 in middle-income countries. On average, LURBPOP is 7.7123 percent across Asian countries. Likewise, variations were observed in the financial development index (FINDVIND) from -0.9925 to 2.7053. On average, financial inclusion (FININC) is 36.4213 percent with a standard deviation of 24.4843, which is less than the mean value. Moreover, trade openness (TRADOPN) is 704163 percent. Finally, the labour force participation rate is 63.7019 percent among these economies. Overall, the unemployment rate (UNEMPR) is 5.724 percent in these Asian nations.

Table 1. Summary statistics.

Variables	Mean	Standard deviation	Minimum	Maximum
GINI	0.6651	0.9352	0.5	.81
LURBPOP	7.7123	0.4911	6.6611	8.6630
FININC	36.4213	24.4843	7.2718	119.7394
FINDVIND	-0.0472	0.7983	-0.9925	2.7053
FRDIND	2.5902	3.2465	0.0566	23.5373
LMANUF	10.6865	0.5252	9.6068	11.6913
TRADOPN	704163	43.4744	25.3062	203.8545
LFPRATE	63.7019	6.7133	52.536	76.783
UNEMPR	5.724	4.2122	0.398	15.275

Table 2 highlights the OLS results, which show the significance of factors affecting gini index in Asian countries. The urban population may affect income inequality in Asian economies. The majority of the folks from urban areas have partaken in economic actions, production, and growth, and thus have a source of earnings or profits. This increases their purchasing power. All this results in less income inequality. Urban area provides more earning chances to these people. It is found that a one percent increase in urban population results in less income inequality by 0.2366 percent. Finding is favoured by Ali et al. (2022).

Table 2. OLS Results.

Variables	Coefficients, Standard Errors, and t-values
LURBPOP	-0.2366*
	0.0294
	(-8.04)
FININC	0.0010 *
	0.0001
	(7.55)
FINDVIND	0.0233*
	0.0066
	(3.52)
FRDIND	-0.0056 *
	0.0013

	(-4.38)
LMANUF	0.1968*
	0.0235
	(8.37)
TRADOPN	-0.0004*
	0.0001
	(-2.38)
LFPRATE	-0.0001
	0.0008
	(-0.11)
UNEMPR	0.0093*
	0.0011
	(8.82)
C	0.3433
	0.0666
	(5.17)
Wald chi2	307.97
Probability	0.0000
R-Square	0.960
Adjusted R-Square	0.957

T-values are in parentheses; * p<0.1.

Financial inclusion also plays a noteworthy role in lessening income inequality in Asian countries. The number of commercial bank branches and the number of ATM machines prove helpful for the people in generating income and earnings. This reduces income inequality. However, result shows that a unit increase in financial inclusion has resulted in a 0.0010 increase in income inequality in Asian countries. The result is inconsistent with Kim (2016). Financial development may also affect income inequality in these countries. The results showed that one unit of increased financial development has caused more income inequality by 0.0223 percent in the concerned economies. People availing domestic credit to the private sector make investments and dominate the segment of society that avails this, and in this way, income inequality increases. The study finding is favoured by Jauch and Watzka (2016).

The role of foreign direct investment cannot be ignored in lessening income inequality. It is found that people get job chances by participating in investments done by foreigners in a host country. People have earnings, and this increases their income further. So result shows that a one percent increase in foreign direct investment resulted in less income inequality by 0.0056 percent in Asian countries. The result is supported by Khan and Nawaz (2019). The result also indicates that a one percent increase in industrialization may lead to an increase in income inequality by 0.1968 percent. The reason may be that more investments and industrialization by the high or affluent segment of the population increases income inequality among people. The result is consistent with the study by Ali et al. (2022).

Trade openness also seems to be decreasing income inequality among nations. The result reveals that a one percent increase in trade openness has decreased inequality by 0.0004 percent among Asian countries. The reason may be that more exports, production, investment, and growth of all types of businesses from all sectors have decreased income inequality. The finding is supported by Khan and Nawaz (2019). Finally, unemployment seems to be affecting income inequality positively. The Result highlighted that a unit increase in unemployment rate will cause more income inequality by 0.0093 percent. The reason may be that unemployment reduces income, purchasing power, and living standard. In this way, income inequality will be increased. The result is supported by Maddah (2013).

Conclusions

Current research points out the significance of urban population, financial inclusion, financial development, foreign direct investment, industrialization, trade openness, and unemployment in influencing income inequality in the Asian countries. The authors have used data from 2006 to 2021 for selected Asian nations of the world. The Gini index was taken as the dependent variable. However, financial inclusion with other control variables was taken as an independent variable. The result showed that urban population, foreign direct investment, and trade openness proved very helpful in decreasing income inequality in these countries. However, financial development index, financial inclusion, industrialization, and unemployment rate have increased income inequality in these Asian nations. On the basis of the results, the study suggests more trade openness. There was also a need to have a stable environment for more foreign investment. There should be fairer allocation and distribution of funds to decrease income inequality. The government must improve more political, economic, and financial systems to lessen income inequality in these countries.

References

Ajide, F. (2015). Financial inclusion and rural poverty reduction: Evidence from Nigeria. International Journal of Management Sciences and Humanities, 3 (2), 190-203.

Ali, I. M. A., Attiaoui, I., Khalfaoui, R., & Tiwari, A. K. (2022). The effect of urbanization and industrialization on income inequality: an analysis based on the method of moment's quintile regression. Social Indicators Research, 161(1), 29-50.

Barro, R. J. (2008). Inequality and growth revisited (No. 11). ADB Working paper series on regional economic integration. https://hdl.handle.net/11540/1762.

Cohen, D., & Soto, M. (2007). Growth and human capital: good data, good results. Journal of Economic Growth, 12(1), 51-76.

Filip, B. F. (2024). Impacts of macroeconomic and social determinants on income inequality in EU. Enhancing EU workforces: Advancing skills in the administrative area for Europe's future, https://www.ceeol.com/content-files/document-1363822.pdf#page=44.

Franco, C., & Gerussi, E. (2013). Trade, foreign direct investments (FDI) and income inequality: Empirical evidence from transition countries. The Journal of International Trade & Economic Development, 22(8), 1131-1160.

Goldberg, P., Khandelwal, A., Pavcnik, N., & Topalova, P. (2009). Trade liberalization and new imported inputs. American economic review, 99(2), 494-500.

Helpman, E. (1997). R&D and productivity: the international connection. https://www.nber.org/system/files/working_papers/w6101/w6101.pdf.

Hoffmaister, M. A. W., & Roldos, M. J. (1997). Are business cycles different in Asia and Latin America?. International Monetary Fund. IMF Working Paper No. 97/9, Available at SSRN: https://ssrn.com/abstract=882225.

Jauch, S., & Watzka, S. (2016). Financial development and income inequality: a panel data approach. Empirical Economics, 51, 291-314.

Jaumotte, F., Lall, S., & Papageorgiou, C. (2013). Rising income inequality: technology, or trade and financial globalization?. IMF economic review, 61(2), 271-309.

Khan, I., & Nawaz, Z. (2019). Trade, FDI and income inequality: empirical evidence from CIS. International Journal of Development Issues, 18(1), 88-108.

Kim, J. H. (2016). A study on the effect of financial inclusion on the relationship between income inequality and economic growth. Emerging Markets Finance and Trade, 52(2), 498-512.

Klein, M. W., Moser, C., & Urban, D. M. (2010). The contribution of trade to wage inequality: the role of skill, gender, and nationality (No. w15985). National Bureau of Economic Research. https://doi.org/10.3386/w15985.

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.

Maddah, M. (2013). The effect of unemployment and income inequality on crimes, a time series analysis. International Journal of Economics Research, 4(2), 37-42.

Mohan, R. (2006). Economic growth, financial deepening and financial inclusion. Annual Bankers' Conference 2006. http://rakeshmohan.com/docs/RBIBulletinNov2006-2.pdf.

Pan-Long, T. (1995). Foreign direct investment and income inequality: Further evidence. World development, 23(3), 469-483.

Ponce D. C. R., Aiquipa-Tello, J. J., Pacheco-Luza, E. F., & Pezúa-Vasquez, R. L. (2024). Tests assessing corrupt behavior from a psychological perspective: A systematic review. European Journal of Psychological Assessment, 38(15), 3013. Advance online publication. https://doi.org/10.1027/1015-5759/a000833.

Rangarajan Committee. (2008). Report of the committee on financial inclusion. Ministry of Finance, Government of India, 155-167.

Reuveny, R., & Li, Q. (2003). Economic openness, democracy, and income inequality: An empirical analysis. Comparative Political Studies, 36(5), 575-601.

Burns, A., & Timmer, H. (2009). Technology diffusion in the developing world. Innovation and Growth: Chasing a Moving Frontier, 169-202.