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INCOME INEQUALITY, INSTITUTIONAL QUALITY, AND TRADE OPENNESS: AN ANALYSIS FROM SELECTED ASIAN COUNTRIES

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ABSTRACT

Income inequality with financial development has been observed in most of the Asian economies. A lot of major factors may strengthen this inequality in these countries. Despite discussions on this issue, the policymakers have not found harmony in this relationship. Considering this, we investigate the link between financial development, institutional quality, and income inequality by using panel data from 2008 to 2018. GMM results reveal that financial development, economic growth, and institutional quality lessen income inequality in Asian countries. It is concluded that more access to credit may lessen the inequality in Asian economies. So, there is a need to make easy the availability of credit facilities for the general public. Institutions should also play a positive and contributing role in decreasing income inequality. Finally, political and economic stability also plays an active and effective role by attracting more involvement in economic activities and trade openness.

Keywords: Income inequality; Economic growth; Trade openness; Asian countries.

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INTRODUCTION

Even though the relationship between personal income distribution and trade is rather significant, there has been just insufficient work on this link. Bourguignon and Morisson (1990) introduce a neoclassical model where income sharing is based on factor endowments and trade openness. Their estimation was based on using a cross-country study and found that factor endowments could highlight 60% of the dissimilarity in income contributing to the bottom decile diagonally nations, but they hardly estimate the influences of trade, indicating issues of definition of openness. Economic growth also plays a major role in lessening in lessening income disparity. Economic growth can be determined by trade openness. However, its effect on the inequality cannot be observed very clearly. Trade allows an economy owning more labor to be involved in producing goods and vice versa, consequently following a positive or negative composition effect. Trade affects inequality positively or negatively.

The link between less partaking share of the labor force and growing income inequality may appear clear in the primary view: till that labor (capital) allocation is further consistently (unequally) dispersed, decreasing (growing) labor (capital) allocation is expected to be related with much income inequality. Financial development may tend to lessen income inequality. It indicates significance for high economic growth, poverty decreasing, and sustainable improvement that educated and disadvantaged people may approach economic facilities by using information communication and technology (Sharma, 2016;

Demirgüç-Kunt & Klapper, 2013). People avail domestic credit for making investments. Financial inclusion may lead to an increase in the convenience of skilled and poor segments of society for basic monetary amenities like investments which may enhance income (Demirgüç-Kunt & Klapper, 2013).

Much of the work considering major factors such as financial development, remittances, trade openness, and population growth affecting inequality has been made in numerous states. However, we show that how institutional quality, and financial development with major factors affect income inequality in certain Asian economies. Beyer (1999) focused on an association between trade liberalization and wage inequality in Chile. The study findings showed that falling relative prices of labor-intensive goods helped in increasing the wage disparity. However, the increased share of the labor force with a college degree, conversely, reduced wage inequality in Chile. Spilembergo et al. (1999) highlighted the linkage of factor endowments, trade, and *personal* income distribution. It was found that land and capital-intensive economies had a lesser amount of equivalent income sharing whereas economies having skilled labor had more equal income sharing.

Reuveny and Li (2003) have checked the influences of both economic openness and democracy on income inequality by utilizing data from 1960 to 1996, in sixty-nine nations. Results showed that democracy and trade reduced income disparity. However, foreign direct investments have increased income disparity. Anderson (2005) focused on how improved openness affected disparities within underdeveloped economies. On the whole, time-series studies found that greater openness had led to enhancing the relative requirement for expert labor, but mainly cross-country studies indicated that better openness hardly affected the overall income inequality. Mische and Vevarelli (2009) estimated the effect of trade on the nation's income disparity in 65 underdeveloped economies from 1980 to 1999. Findings suggested that trade with rich nations has worsened income sharing in underdeveloped nations. DCs, through both imports and exports.

Bergh and Nilsson (2010) have used panel data from eighty economies from 1970 to 2005. GMM results found that freedom to trade globally was linked to disparity. Social globalization and deregulation were also related to the disparity. Reforms for monetary freedom seemed to enhance disparity mostly in industrialized economies. Ali and Ahmad (2013) focused on the impact of foreign aid on income disparity in Pakistan. It was found that foreign aid, foreign direct investment, and labor force participation rate affected the income disparity, correspondingly. The cointegration test showed a negative impact of growth on income disparity while foreign aid, foreign direct investment, and labor force participation rate seemed to increase the inequality in Pakistan. Park and Shin (2015) analyzed the U-shaped link between financial development and income inequality based on data from 1960 to 2011. It was found that financial development reduced inequality to some extent but afterward, it tended to increase the disparity.

Gaddis et al. (2017) investigated the influence of foreign direct investment and trade on female labor force participation rate in 80 underdeveloped economies from 1980 to 2005. Findings show the negative influence of FDI and trade on female labor force participation. Doan (2019) used data from Sub-Saharan African economies from 1980 to 2013 with (random effect, fixed effect, and system-generalized method of moments). The result showed that free trade had positive effects on income per capita growth in static and dynamic settings. Moreover, Ferrara and Nisticò (2019) found an association between multidimensional well-being disparities and regional institutional quality. Results revealed that institutional quality had positive influences on regional multidimensional well-being inequalities and influences vary heterogeneously for level of public expenditure, institutional dimensions, and spatial spillovers. Erauskin (2020) analyzed the link between labor share and income inequality from 1999 to 2015 in 62 rich and poor states. It was found that less distribution of labor resulted in privileged disparity. Moreover, a lower labor share was linked with a less important income distribution for the least possible two quintiles and well-built income contributed to the highest.

Nae et al. (2024) have focused on the dynamics of income disparity, focused on post-communist economies in Central and Eastern Europe. Results showed that labor market organization, globalization, economic development, and governance mechanisms have mitigated income inequality in specific regions.

This research highlights how institutional quality, financial development, economic growth, and trade openness lessen the income inequality of certain Asian nations. This study will provide policy for more developments.

Significance of the Study

Much of the work on key variables such as financial inclusion, financial development, unemployment, CO2, and other variables that may affect income inequality in emerging nations has been considered. Our work has focused on how institutional quality, financial development with economic growth, and trade openness are key factors affecting income inequality in certain Asian states.

Research Hypothesis

The main hypotheses are given in the following.

1. H1: Domestic credit to the private sector is negatively linked with income inequality.
2. H 2: The higher the institutional quality, the lower the income inequality.
3. H 3: Economic growth and income inequality are negatively associated.
4. H 4: Trade openness and income inequality are positively linked.

METHODOLOGY

For this study, the authors have used data from 2008 to 2018 from 12 selected Asian countries. The focus was to find out the positive role of institutional quality, financial development, economic growth, and trade openness in lessening income inequality by increasing economic growth and development of Asian economies like Bangladesh, India, Indonesia, Iran, Jordan, Malaysia, Pakistan, Sri Lanka, Singapur, Thailand, China, and the Philippines. The data was taken from World Development Indicators. For this, domestic credit to the private sector % of GDP was used as a proxy of financial development. GDP (per capita in US \$), institutional quality index (voice and accountability, political stability and absence of violence, Government effectiveness, regulatory quality, law and order, control of corruption), trade openness (Exports % of GDP & imports % of GDP) were also used as explanatory variables.

In this study, panel data has been used for examining how institutional quality with erstwhile control variables such as financial development, economic growth, and trade openness in selected Asian states. We have used the GMM technique to avoid endogeneity issues.

The econometric model is given as

The equations are:

$$GINI_{it} = \beta_1 INQI_{it} + \beta_2 DMCP_{it} + \beta_3 LGDPP_{it} + \beta_4 TRDOP_{it} + u_{it} \quad (1)$$

The subscript i signifies every economy and the subscript t shows each time period in this analysis. The term u_t shows the error term.

RESULTS AND DISCUSSION

Table 1 highlights that on average, the GINI coefficient is 13.1509 in Asian economies. Data also indicates that domestic credit to the private sector is 70.9387 percent on average. The institutional quality index range has been observed from -2.1381 to 1.7912 percent. On average, log GDPPC is found as 3.5974 percent from 2008 to 2018. On average, trade openness seemed 94.2121 percent in particular Asian nations

Table 1.Descriptive statistics of major variables in Asian states.

| Variables | Observations | Mean | Standard deviation | Minimum | Maximum |
|-----------|--------------|---------|--------------------|---------|----------|
| GINI | 117 | 0.7049 | 0.1019 | 0.515 | 0.932 |
| INQI | 133 | -0.3512 | 0.8460 | -2.1381 | 1.7912 |
| DMCP | 133 | 70.9387 | 42.3376 | 15.3861 | 157.567 |
| LGDPP | 133 | 3.5974 | 0.4557 | 2.8575 | 4.7653 |
| TRDOP | 133 | 94.2121 | 88.7388 | 25.3062 | 437.3267 |

Table 2 gives details of the results using the GMM technique in this section. Results show that institutional quality with other control variables lessens income inequality in Asian nations.

Table 2. GMM results, dependent variable is income inequality (Gini coefficient).

| Variables | Coefficients, Standard Errors and t-values |
|-------------|--|
| GINIL1 | -0.4375** 0.1320 (-3.31) |
| GINIL2 | -0.1741 0.1703 (-1.02) |
| INQI | -0.0006 * * 0.0002 (-2.70) |
| DMCP | -0.0055 * * 0.0026 (-2.10) |
| LGDPP | -0.0061 * * 0.0033 (-1.83) |
| TRDOP | -0.0019 0.0014 (-1.33) |
| AR1 | 0.06 |
| AR2 | 0.39 |
| Sargan test | 0.41 |

Note: t-values are in parentheses; ** p<0.05, * p<0.1 and***p< 0.01.

Income inequality has been observed as a major issue in developing and Asian countries. It is found that a unit increase in one year lag income inequality leads to make lessen the inequality by 0.4375 percent in Asian countries.

Institutional quality is another important factor that may decrease income inequality in the concerned economies. Results show that one unit increase in institutional quality results in less income inequality by 0.00006 percent. The reason may be that institutions play a positive role in making positive changes in economic growth and development. In this way, poverty and inequality seem to be lessening. Moreover, employment and earning opportunities seem to be increasing due to the institutional quality. The result is supported by Ferrara and Nisticò (2019) and Nae et al. (2024).

The role of financial development cannot be ignored. As it increases the investment and earning chances in these selected Asian economies. Financial development enhances economic growth and human development and reduces inequality. The general public approach to domestic credit will be to provide financial services and amenities increase development and reduce inequality. It is found that a one percent increase in domestic credit to private sectors results in less income inequality by 0.0055 percent. Our result is favoured by Park and Shin (2015).

Economic growth also decreases income inequality in Asian countries. Results indicate that a one percent increase in economic growth may tend to decrease income inequality by 0.0061 percent. People are involved in the production process and increase their earnings which consequently decreases income inequality. Their indulgence in economic doings enhances more production and investment chances which increases their living standard and decreases income inequality. Moreover, trade openness plays a positive role in lessening the income disparity in certain Asian economies.

CONCLUSIONS

This research is an endeavor to indicate the role of institutional quality, and financial development with other factors in make lessening the income inequality in selected Asian countries. We have used the generalized moment method to highlight the effect of institutional quality and financial development in lessening income inequality. It is indicated how better and improved institutions, and financial development with other variables such as GDP per capita and trade openness have reduced income disparity in these countries. The result reveals the significant role of institutional quality and financial access in lessening income disparity. Furthermore, economic growth seems to be decreasing the inequality in these economies. It is observed that economic growth increases more investment and earnings of the general public and poverty and inequality are reduced to a large extent. Based on the major results, it is suggested that there is much need for a more positive and qualitative role of institutions in determining economic growth and development and in lessening poverty and income inequality in the selected Asian countries. Much emphasis should be placed on easy access to domestic credit for more investment chances in these economies. The government must also increase economic growth for high earnings, investment, and less inequality. The political and economic environment must be good for more trade in these nations.

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