Exploring the Influence of Financial Development, Institutional Quality and Trade Openness on Inclusive Growth in SAARC Countries

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ABSTRACT

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Better financial infrastructure, trade openness and quality of institutions are key to progress the economy. This paper investigates influence of financial development, institutional quality and trade openness on inclusive growth in SAARC countries during 1996 to 2020. The study applied different econometric techniques for data analysis such as panel unit root tests, Pedroni cointegration test, panel ARDL model and granger causality test. The results show that financial development, institutional quality and human capital are positively and significantly related to the inclusive growth while trade openness is negatively but insignificantly associated to the inclusive growth in SAARC countries. The causality analysis shows a unidirectional causality between EMP and IG, FD and inclusive growth, institutional quality and inclusive growth, human capital and inclusive growth while no causality is observed between TO and IG. Keeping in view the outcomes, it is suggested that financial development should be promoted, institutional quality should be improved and to curtail the negative impacts of trade on inclusive growth these countries should encourage the exports to improve their trade balance and inclusive growth.

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1. Introduction

One method to characterize growth as inclusive is the absolute elimination of poverty linked to creating productive jobs rather than direct income distribution systems. Inclusive growth is anticipated to provide both the rate and pattern of growth. The majority of developing nations continue to place a high focus on achieving inclusive growth. The attention it has attracted stems from the knowledge that inclusive growth might lessen countries' socioeconomic problems (Oduntan & Oluwatoyin, 2017). To attain sustainable growth it is essential to increase the rates at which both human and physical capital is amassed and the productivity with which these assets are used. Financial intermediation supports the investment procedure by using households and external deposits for corporate investment, confirming that these funds are distributed to the utmost effective use, and providing liquidity and risk spreading so that firms can utilize new capacity more effectively (Konstantakopoulou, 2023). Financial development (FD) incorporates the creation of institutions, markets and tools that enable this process of investment and growth (Iram, Zameer, & Asghar, 2024). Historically, the role of financial intermediaries, which varies from stock markets to social funds, has been to convert household savings into business investments, distribute funds, spread out risk, and oversee investments (Mahmood, 2013). The earlier studies highlighted how FD and economic prosperity can be facilitated by raising savings, lowering risks, and finding potential entrepreneurs (Bencivenga & Smith, 1991; King & Levine, 1993). McKinnon (2010); Shaw (1973) were among the first to demonstrate a substantial support to the link between economic growth and FD, a hot matter of debate in emerging economies. According to the
theoretical claim linking FD to economic growth, a sound financial system performs numerous crucial tasks to increase the productivity of intermediation by declining transactions and monitoring costs. On the other hand, institutions of political governance are created to carry out particular tasks, such as creating and applying socio-economic strategies for widespread growth and development of productive employment (UNDP, 2011). To address the enduring socio-economic problems of widespread poverty, vast gaps in income inequality, and an increase in unemployment that plague many developing economies, institutional quality is vital. Unfortunately, it is still difficult to understand how institutions are essential to promote equitable economic growth (Stiglitz, 2016). I. Ali and Son (2007) first emphasized institutions' importance in fostering equitable growth. By outlining the crucial steps to promote inclusive growth, they promoted the idea that institutions are a necessary component of any successful policy. By incorporating institutions, the policies will benefit the underprivileged and reach higher growth goals.

Lastly, both emerging and developed economies view trade openness as essential to economic progress (Udeagha & Ngepah, 2019). According to N. N. Ngepah (2014), access to global goods markets promotes innovation and openness to ideas; it also enables to completely utilize a nation's comparative advantage, which in turn produces high returns on capital due to the endowment of unskilled labor in less developed economies; additionally, it makes it easier to import primary goods to improve the production level in these economies. Increased market access and competition from trade drive greater innovation, which in turn drives a rise in entrepreneurship. Increased TO is believed to augment the productivity due to new investments, which in response enhances the employment and real wages (Krueger, 2019). Many academics have drawn the crucial conclusion that nations with a focus on international trade are more productive than those that exclusively produce for their own markets, and as a result, they tend to develop more quickly (N. Ngepah & Udeagha, 2018). For empirical investigation, we have selected SAARC countries. Examining inclusive growth in SAARC countries is essential to solving the complex issues these countries face including poverty, economic and political instabilities. It guarantees that economic growth is fair, long-term, and advantageous to all facets of society. As SAARC countries covers an enormous portion of the world economy however no comprehensive investigation has been conducted on the SAARC countries that examines the impact of FD, IQ and TO on inclusive growth. Therefore, it is imperative to analyze the role of FD, IQ and TO in influencing inclusive growth in SAARC countries.

1.1. Contribution of the Study

This paper adds to the existing literature by investigating the influence of FD, IQ and TO on inclusive growth in SAARC countries from 1990 to 2020. The study also analyzes the characteristics of data using descriptive analysis, correlation analysis, cointegration analysis and panel unit root analysis. The panel ARDL model is utilized for the long-run estimation of parameters and it also provides an error correction form. This study will have significant consequences for policymakers in SAARC countries because no study in the literature examines the influence of FD, IQ and trade openness in driving inclusive growth. Based on the study's findings, different recommendations to augment FD, IQ, trade openness and IG are suggested.

2. Literature Review

Several studies examine the impact of financial development (FD), institutional quality (IQ) and trade openness (TO) on economic growth (EG) however the literature on the influence of FD, IQ and TO on inclusive growth (IG) is limited. The literature review of these studies is given as follows:

2.1. Financial Development and Inclusive Growth

Numerous studies analyze the association between financial development and inclusive growth such as Gyamfi, Bokpin, Aboagye, and Ackah (2022) showed that FD was positively linked to the IG in Africa. Similarly, Kazeem (2021) showed that FD had a considerable beneficial influence on per capita income and household consumption expenditures over the long and short terms. However, FD harmfully impacts per capita income while having less effect on household consumption expenditures in Nigeria. Similarly, Nguyen and PHAM (2021) financial development indicators in transitional economies were significant predictors of economic growth, but the relationship appeared to be inverted U-shaped. This implied the presence of thresholds for expanding various financial sector channels to affect growth
favorably. The financial system would have been an obstacle to growth if it had gotten out of proportion to the size of the economy. In the case of Pakistan, Rahman, Khan, and Charfeddine (2020) inspected the effects of FD on EG and showed that FD in Pakistan boosts EG. Though, it was discovered that in the regimes of high growth, the impact of FD on EG was relatively substantial. This suggested that EG reacts to FD differently in the regimes of high and low growth. Lastly, TO and government spending favored the EG, whereas the labor force has an adverse effect on EG. The study conducted by N. Ali, Fatima, and Ahmed (2019) investigated the effect of financial liberalization on EG in Pakistan. Their study exhibited that financial liberalization turned out to have a positive short-term impact on EG. This suggested that Pakistan may be able to stimulate its economy by emphasizing improving the financial system through increased financial liberalization. Lastly, Oduntan and Oluwatoyin (2017) provide evidence for a long-term co-integration link between FD and inclusive growth. Long-term inclusive growth in Nigeria was found to be positively and significantly impacted by FD. Therefore, following the literature review the hypothesis developed is given as follows:

H1: Financial development is significantly related to the inclusive growth in SAARC countries

2.2. Institutional Quality and Inclusive Growth

Different studies explored the association between IQ and IG such as Munir, Fatima, and Iftikhar (2022) showed that IQ was a key factor in achieving growing inclusivity. Similarly, the institutional variable showed that the caliber of political and economic institutions benefits inclusive growth. Likewise, Tran, Le, and Nguyen (2021) demonstrated that the highest level of institutional economic growth existed in Asian countries. If the institution indicator rises above the cutoff point, the growth was affected contrarily. Furthermore, factors such as infrastructure, labor force, TO, and inflation have impacted the economic progress of Asian nations. Olanrewaju, Tella, and Adesoye (2019) revealed that the interaction between IQ and financial inclusion and inclusive finance had a bidirectional causal link. This suggests that even while institutional quality may have a broad range of economic impacts, it seems to be the main engine of inclusive growth. To properly utilize the human capital resource base, institutional change that goes beyond the current liberal democratic threshold was advised. The study by Oluseye and Gabriel (2017) revealed an inverse link between government consumption, education spending, and IG. In contrast, although they had a short-term impact on inclusive growth, inflation and population expansion had a long-term negative impact. Similarly, Nawaz, Iqbal, and Khan (2014) used the GMM technique to examine the impact of institutions on EG in Asian economies between 1996 and 2012. The results demonstrated that institutions do have a substantial role in impacting the EG. The results also showed that developed Asia had more effective institutions than developing Asia. This suggested that to inspire long-run EG; institutional quality should be improved. Lastly, Valeriani and Peluso (2011) validated that IQ does have a favorable impact on EG. Therefore, following the literature review the hypothesis developed is given as follows:

H2: Institutional quality is significantly related to the inclusive growth in SAARC countries

2.3. Trade Openness and Inclusive Growth

At the empirical level, the relationship between TO and inclusive growth has been limited. Most of the studies examine the association between TO and economic growth (EG) such as Kumari, Shabbir, Saleem, Yahya Khan, Abbasi, and Lopez (2023) investigated the influence of TO and FDI on EG in India. The outcome showed two-way causality between FDI and EG while no causality between TO and EG. Similarly, Asghar, Sultana, Ullah, and Arshad (2023) showed that exports, capital formation, external debt and labor force were the promoting factors of economic growth in Asian countries. Udeagha and Ngpeh (2021) explored the nexus between TO and EG in South Africa. The outcome showed that trade openness was asymmetrically linked to EG. Hidayat, Mulatsih, and Rindayati (2020) exhibited that household consumption, exports, international and domestic investment, per capita income, and the average length of the study year directly affect IG, whereas imports and unemployment have a negative effect. Awad-Warrad and Muhtaseb (2017) explored the relationship between trade, poverty, employment and EG in Jordan and exhibited that FDI, trade and remittances were contributing factors to economic growth. Similarly, Ayinde and Yinusa (2016) analyzed that either TO and investment was preferable for IG in Nigeria. They also showed that government involvement in the country’s economy and financial openness
was sensitive to the pattern of FD. The study of Menyah, Nazlioglu, and Wolde-Rufael (2014) observed the causal link between TR, FD and EG in 21 African nations and provided weak support for the trade- and finance-led growth hypotheses. The findings suggested that initiatives to strengthen the financial sector and liberalize trade in African countries were not appeared to have a major effect on growth. Therefore, following the literature review the hypothesis developed is given as follows:

H₃: Trade openness is significantly related to the inclusive growth in SAARC countries

3. Theoretical Framework

Inclusive growth refers to the growth process that results in which all socioeconomic groups, including the wealthy and the poor, have contributed and from which everyone has somewhat benefited, hence assisting in the elimination of income disparity. Unlike EG, IG is not just concerned with aggregate income growth but it also concerned with the allocation of income among the inhabitants (Lee & Sissons, 2016). According to the World Bank (2018), inclusive growth (IG) lowers poverty and ensures financial stability for all societal groups. Lee and Sissons (2016) underline the need to give the poor more work opportunities. The definitions given above share common set of indicators, notably economic growth that lowers unemployment, income inequality, and poverty. Greif (2006) suggested that institutions can be characterized as a collection of social elements, laws, ideologies, groups, and organizations that work together to encourage consistency in social and individual behavior. Institutions could encourage or discourage investment and technical advancement, which are direct contributors to economic growth and development. Poor-quality institutions can raise transaction costs, uncertainty, unpredictability, instability, and unrest (Zouhaier & Karim, 2012). According to Ferrini (2012), institutions promote growth through business ventures. He maintained that the costs of economic transactions drive EG through the use of contracts and the enforcement of contracts, common business rules, and better access to information, all of which lower transaction costs, risk, and uncertainty and raise the level of growth.

Likewise, Hartmann, Heider, Papaioannou, and Lo Duca (2007) referred FD as the process of financial innovation in addition to institutional and organizational upgrades in a financial system that reduce asymmetry of information, create new avenues for agents to engage in financial transactions through contracts, lower costs of transaction and foster competition. FD thus encompasses non-banking financial structures and capital markets in addition to changes (innovations) made to banking industry goods, institutions, and organizations (Levine, 2004). FD improves the capacity of surplus units to finance the deficit-spending units within an economic space. Therefore, any action that promotes the effectiveness and efficiency of the financial sector is referred to as FD (Mahmood, 2013). In conclusion, FD raises the level of growth and IQ aids in making the level of growth more favorable. On the other hand, trade openness promotes the development of regional and global value chains and reduces trade barriers, all of which are important drivers of productivity, specialization, and industrial exports. The growth become inclusive when everyone gains from sustainable development and minorities are empowered in society and trade is encouraged (Huchet-Bourdon, Le Mouël, & Vijil, 2018). Multiple pathways exist via which trade openness influences economic growth, according to Rivera-Batiz and Rivera-Batiz (2018). The first is that TO can raise the amount of human capital in the foremost industries, which has a re-allocation influence on EG. Second, the trade openness is causing the information to spread among the nations. This argument states that TO promote the exchange of technological knowledge between countries, which benefits long-run growth of the economy. Rivera-Batiz also said that TO have an adverse relationship with EG if the human capital of the country is unable to effectively absorb the creative knowledge produced by trade. The competitive effect, which is connected to the issue of replication, is referred to as the third type of effect (Grossman & Helpman, 1993). Similarly, employment is seen as a crucial macroeconomic indicator of economic expansion in each nation. The expansion of the economy’s primary, secondary, and tertiary sectors is positively and significantly impacted by the establishment of employment opportunities and investments in physical and human infrastructure (Jafri & Aziz, 2021). Lastly, access to quality education and health are effective to raises the HC and reduce the level of poverty. An essential prerequisite for a nation’s socioeconomic and political transition is the growth of its human capital endowment (Sheikh, Akhtar, Asghar, & Abbas, 2020). Moreover, one of the biggest drivers of raising the population’s standard of living is the development of human capital. Therefore, it suggests that it is important to build human capital to attain
inclusive growth for sustainable development (Adelakun, 2011). Based on the previous discussion, a conceptual model is presented in Figure 1.

**Figure 1: Conceptual Model**

4. **Data and Methodology**

This study uses panel data from South Asian Association for Regional Corporation (SAARC) countries from 1996 to 2020. These countries are Afghanistan, Bangladesh, Bhutan, Nepal, India, Pakistan, Sri Lanka and Maldives. The data of variables inclusive growth, employment rate, financial development, trade openness and human capital is collected from WDI while the data of IQ indicators are collected from world governance indicators (WGI). To analyze the role of FD, IQ and TO in the inclusive growth of SAARC countries the following model is developed:

\[
IG_t = \beta_0 + \beta_1 EMP_t + \beta_2 FD_t + \beta_3 IQ_t + \beta_4 TR_t + \beta_5 HC_t + u_t
\]

Where IG indicates inclusive growth (as a dependent variable in a study and measured with a GDP per person employed (as used by Agyei and Idan (2022); Ayinde and Yinusa (2016); Yinusa, Aworinde, and Odusanya (2020), EMP represents employment rate (annual percent), FD indicates financial development (private sector’s domestic credit as a percent of GDP), IQ indicates institutional quality (Principle component analysis is conducted to generate the index of IQ by using six governance indicators including rule of law, control of corruption, voice and accountability, government effectiveness, regulatory quality and political stability), TO means trade openness (as a percent of GDP), HC illustrates human capital (secondary school enrolment) and \( u_t \) is the error term. Different econometric techniques are applied for data analysis. First, unit root analysis is conducted to assess the stationarity level of variables. This analysis is important in determining the suitable technique for long-run estimation of parameters. Therefore, numerous panel unit root tests are used in a study, such as LLC, IPS, ADF, and PP tests. Secondly, the Pedroni cointegration test is used to check the long-run cointegration among variables in a model. Third, panel ARDL model developed by Pesaran, Shin, and Smith (1999) is used to analyze the long-run estimation of parameters. When a model's variables have a mixed order of integration I(0) and I(1), this analysis is suitable. In realistic scenarios, even if change may occur gradually over time in many stages, it may still have an impact on the other variable. In these situations, the panel ARDL approach can be used to compare the long-run and short-run results.

\[
IG_{it} = \sum_{s=1}^{q} \delta_{is} IG_{i,t-s} + \sum_{s=0}^{q} \beta_1 EMP_{i,t-s} + \sum_{s=0}^{q} \beta_2 FD_{i,t-s} + \sum_{s=0}^{q} \beta_3 IQ_{i,t-s} + \sum_{s=0}^{q} \beta_4 TR_{i,t-s} + \sum_{s=0}^{q} \beta_5 HC_{i,t-s} + \epsilon_{it}
\]

Where \( \beta_i 's \) are the long-run coefficient of explanatory variables, \( p \) indicates the lag of dependent variables, \( q \) indicates the lag of independent variables, while \( \epsilon_{it} \) indicates the error term. The panel ARDL model also provides the short-run error correction form and the equation of the ECM model is given as follows:
\[ \Delta IG_{it} = \partial \left( ECM_{it} \right) + \sum_{s=1}^{q-1} \chi_{i,s} IG_{i,t-s} + \sum_{s=0}^{q-1} \alpha_{s} \Delta EMP_{i,t-s} + \sum_{s=0}^{q-1} \alpha_{s} \Delta FD_{i,t-s} + \sum_{s=0}^{q-1} \alpha_{s} \Delta IQ_{i,t-s} + \sum_{s=0}^{q-1} \alpha_{s} \Delta TR_{i,t-s} + \sum_{s=0}^{q-1} \alpha_{s} \Delta HC_{i,t-s} + \varepsilon_{it} \]

Where \( \partial \) indicates the coefficient of error correction term, \( \alpha \)'s are the short-coefficient of explanatory variables, while \( \varepsilon \) indicates the error term. Lastly, pairwise Granger causality is used to analyze the causation between any pair of variables. When it is required to analyze whether one variable causes the other, both variables cause each other, or two variables do not cause each other, the Granger causality test is applied to data. This test is used to analyze the causality between variables as one-way causality, two-way causality, and no-causality between the variables.

**Figure 2: Methodological Framework**

5. **Data Analysis**

In this section, the analysis of the influence of financial development, institutional quality and trade openness on inclusive growth in SAARC countries is presented:

5.1. **Descriptive Analysis**

Table 1 illustrates the descriptive statistics of variables. The mean value of IG, EMP, FD, IQ, TO and HC is 9.452, 40.041, 31.685, 0.000, 63.238, 57.917 respectively. Similarly, the maximum value of IG, EMP, FD, IQ, TO and HC is 10.849, 79.407, 88.440, 3.993, 166.694 and 106.881 respectively. The minimum value of IG, EMP, FD, IQ, TO and HC is 8.241, 17.458, 3.072, -5.146, 21.929 and 11.763 respectively. The variables IG, EMP, FD, IQ and HC have positively skewed distribution while IQ has a negatively skewed distribution. Lastly, IG, FD, IQ and HC have platykurtic distribution while EMP and TO have leptokurtic distribution.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>S.D.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG</td>
<td>9.452</td>
<td>10.849</td>
<td>8.241</td>
<td>0.686</td>
<td>0.321</td>
<td>2.199</td>
</tr>
<tr>
<td>EMP</td>
<td>40.041</td>
<td>79.407</td>
<td>17.458</td>
<td>14.592</td>
<td>1.452</td>
<td>4.380</td>
</tr>
<tr>
<td>FD</td>
<td>31.685</td>
<td>88.440</td>
<td>3.072</td>
<td>17.038</td>
<td>0.303</td>
<td>2.957</td>
</tr>
<tr>
<td>IQ</td>
<td>0.000</td>
<td>3.993</td>
<td>-5.146</td>
<td>2.044</td>
<td>-0.369</td>
<td>2.634</td>
</tr>
<tr>
<td>TO</td>
<td>63.238</td>
<td>166.694</td>
<td>21.929</td>
<td>42.124</td>
<td>1.404</td>
<td>3.735</td>
</tr>
<tr>
<td>HC</td>
<td>57.917</td>
<td>106.881</td>
<td>11.763</td>
<td>24.380</td>
<td>0.074</td>
<td>2.131</td>
</tr>
</tbody>
</table>

5.2. **Correlation Analysis**

Correlation matrix is imperative in examining the degree of association between two variables. The outcomes of the correlation matrix are exhibited in Table 2. It reveals that inclusive growth is positively associated with the FD, IQ, TO and human capital while inclusive growth is negatively correlated with the employment rate.
5.3. Panel Unit Root Analysis

To analyze the degree of stationarity of variables, unit root analysis is conducted. Table 3 exhibits the outcomes of different panel unit root tests. This analysis recommends which technique is better for long-run estimation of parameters. The results demonstrate that the variables inclusive growth, FD, institutional quality, trade openness and human capital are integrated at 1st difference while employment rate is integrated at level so the mixed integration order advocates that panel ARDL is appropriate for parameter’s long-run estimation.

Table 3: Panel Unit Root Estimates

<table>
<thead>
<tr>
<th>Variable</th>
<th>LLC</th>
<th>IPS</th>
<th>ADF</th>
<th>PP</th>
<th>LLC</th>
<th>IPS</th>
<th>ADF</th>
<th>PP</th>
<th>LLC</th>
<th>IPS</th>
<th>ADF</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG</td>
<td>2.229</td>
<td>4.360</td>
<td>3.806</td>
<td>4.038</td>
<td>0.044</td>
<td>0.990</td>
<td>10.389</td>
<td>9.657</td>
<td>5.905</td>
<td>1.578</td>
<td>1.873</td>
<td>I(1)</td>
</tr>
<tr>
<td>EMP</td>
<td>(0.987)</td>
<td>(1.000)</td>
<td>(0.999)</td>
<td>(0.999)</td>
<td>(0.517)</td>
<td>(0.839)</td>
<td>(0.846)</td>
<td>(0.884)</td>
<td>(1.000)</td>
<td>(1.000)</td>
<td>(1.000)</td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>-2.734</td>
<td>-3.929</td>
<td>-10.223</td>
<td>3.597</td>
<td>0.561</td>
<td>0.104</td>
<td>15.389</td>
<td>7.440</td>
<td>-4.003</td>
<td>34.619</td>
<td>46.045</td>
<td>I(0)</td>
</tr>
<tr>
<td>IQ</td>
<td>1.015</td>
<td>2.163</td>
<td>8.976</td>
<td>8.259</td>
<td>1.625</td>
<td>1.764</td>
<td>7.476</td>
<td>4.445</td>
<td>2.908</td>
<td>5.863</td>
<td>5.730</td>
<td>I(1)</td>
</tr>
<tr>
<td>HC</td>
<td>0.357</td>
<td>0.427</td>
<td>13.460</td>
<td>24.521</td>
<td>3.026</td>
<td>2.778</td>
<td>3.453</td>
<td>14.251</td>
<td>-0.297</td>
<td>16.809</td>
<td>14.840</td>
<td>I(1)</td>
</tr>
<tr>
<td>TO</td>
<td>-0.856</td>
<td>0.037</td>
<td>17.611</td>
<td>12.440</td>
<td>0.983</td>
<td>1.412</td>
<td>13.283</td>
<td>8.505</td>
<td>-2.023</td>
<td>17.569</td>
<td>21.699</td>
<td>I(1)</td>
</tr>
<tr>
<td>EMP</td>
<td>0.196</td>
<td>0.515</td>
<td>0.347</td>
<td>0.713</td>
<td>0.837</td>
<td>0.921</td>
<td>0.652</td>
<td>0.932</td>
<td>0.022</td>
<td>0.350</td>
<td>0.153</td>
<td>I(1)</td>
</tr>
<tr>
<td>HC</td>
<td>1.188</td>
<td>3.148</td>
<td>5.381</td>
<td>24.971</td>
<td>8.981</td>
<td>1.329</td>
<td>10.201</td>
<td>283.450</td>
<td>9.658</td>
<td>0.711</td>
<td>7.367</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Note: Values in a brackets () are p-values while values above the bracket values are test statistic values.

5.4. Pedroni Cointegration Analysis

After stationarity analysis, it is important to observe the cointegration among variables in a model. For this purpose, Pedroni cointegration test is used and its outcomes are exhibited in Table 4. It is found that Panel v-Statistic, Panel PP-Statistic, Panel ADF-Statistic and Group PP-Statistic tests estimates are found to be statistically significant so it suggests that the null hypothesis of no cointegration is rejected and it supports the presence of long-run cointegration among variables in a model.

Table 4: Pedroni Cointegration Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel v-Statistic</td>
<td>2.2737</td>
<td>0.0115</td>
</tr>
<tr>
<td>Panel rho-Statistic</td>
<td>0.5601</td>
<td>0.7123</td>
</tr>
<tr>
<td>Panel PP-Statistic</td>
<td>-5.8515</td>
<td>0.0000</td>
</tr>
<tr>
<td>Panel ADF-Statistic</td>
<td>-2.0973</td>
<td>0.0363</td>
</tr>
<tr>
<td>Group rho-Statistic</td>
<td>1.9072</td>
<td>0.9718</td>
</tr>
<tr>
<td>Group PP-Statistic</td>
<td>-4.5104</td>
<td>0.0000</td>
</tr>
<tr>
<td>Group ADF-Statistic</td>
<td>0.4470</td>
<td>0.6726</td>
</tr>
</tbody>
</table>

5.5. Panel ARDL Analysis

The estimates of the long-run panel ARDL model are exhibited in Table 5. It displays that financial development is directly and significantly linked to the IG in SAARC countries. The coefficient of financial development displays that as FD augment by one unit it leads to the upsurge in inclusive growth by 2.04 percent. Financial development makes it easier to mobilize useful savings, promote information, better utilization of resources with the help of finance and better risk management, all of which support and aid the innovative process of entrepreneurs. This impact might produce a supportive macroeconomic environment for rapid economic expansion (Enisan & Olufsayo, 2009) and can promote the equitable growth due to the access of finance to all groups of the society. These results are also found in the studies of Agyei and Idan (2022); N. Ali, Fatima, and Ahmed (2019); Gyamfi et al. (2022); Yinusa, Aworinde, and O dusanya (2020). Similarly, it is found that IQ is directly and significantly associated to IG in SAARC countries. The coefficient of IQ specifies that as it improves by one unit it leads to
promote the inclusive growth by 69.47 percent. The findings imply that effective institutions promote growth for all, ensure that growth benefits are distributed among various social and political groups within society, enabling everyone to participate in major economic decisions and provision of employment. These results are also linked to the outcomes of (Gyamfi et al., 2022; Ji, Magnus, & Wang, 2014). The results also demonstrate that TO is adversely but insignificantly linked to the inclusive growth in SAARC countries. The coefficient of TO exhibits that as it is improves by one unit it leads to the decrease in inclusive growth by -0.34 percent. These outcomes are not found according to prior expectations. Kim (2011) proposed that trade openness hurts growth in countries with low levels of FD, however has little influence in countries with high levels of FD (Shah, Asghar, & Riaz, 2020; Ulaşan, 2015). In contrast, the adverse effect of TO on IG is due to the fact that TO enhance the income level of the specific growth and may promote the inequitable growth in a country. Lastly, human capital is directly and significantly related with the inclusive growth in SAARC countries. The coefficient of HC implies that as HC improves by one unit it leads to promote the inclusive growth by 2.49 percent. It implies that human capital is imperative to improve the IG. These results are also found by Khan, Sabir, and Ibrahim (2020) and Sibt-e-Ali, Chaudhary, and Farooq (2018).

Table 5: Panel ARDL Long-Run Estimates

<table>
<thead>
<tr>
<th>Dependent Variable: Inclusive Growth</th>
<th>Variables</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMP</td>
<td>0.0255</td>
<td>0.0218</td>
<td>1.1672</td>
<td>0.2462</td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>0.0204</td>
<td>0.0066</td>
<td>3.0864</td>
<td>0.0027</td>
<td></td>
</tr>
<tr>
<td>IQ</td>
<td>0.6947</td>
<td>0.2017</td>
<td>-3.4429</td>
<td>0.0009</td>
<td></td>
</tr>
<tr>
<td>TO</td>
<td>-0.0034</td>
<td>0.0023</td>
<td>-1.4434</td>
<td>0.1524</td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.0249</td>
<td>0.0080</td>
<td>3.0798</td>
<td>0.0027</td>
<td></td>
</tr>
</tbody>
</table>

The panel ARDL short error correction model is displayed in Table 6. It is found that the ECM term is negative (-0.0493) and also statistically significant (Prob. = 0.0195). The negative ECM term indicates the convergence towards equilibrium. So, it suggests that short-run equilibrium converges to long-run equilibrium at the rate of 4.83 percent in case of any errors happening in a short-run.

Table 6: Panel ARDL Short-Run Estimates

<table>
<thead>
<tr>
<th>Dependent Variable: Inclusive Growth</th>
<th>Variables</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM(-1)</td>
<td>-0.0493</td>
<td>0.0207</td>
<td>-2.3787</td>
<td>0.0195</td>
<td></td>
</tr>
<tr>
<td>D(IG(-1))</td>
<td>-0.1126</td>
<td>0.1432</td>
<td>-0.7864</td>
<td>0.4337</td>
<td></td>
</tr>
<tr>
<td>D(EMP)</td>
<td>0.0004</td>
<td>0.0074</td>
<td>0.0647</td>
<td>0.9486</td>
<td></td>
</tr>
<tr>
<td>D(FD)</td>
<td>0.0016</td>
<td>0.0014</td>
<td>1.040</td>
<td>0.2725</td>
<td></td>
</tr>
<tr>
<td>D(IQ)</td>
<td>0.0195</td>
<td>0.0200</td>
<td>0.9743</td>
<td>0.3325</td>
<td></td>
</tr>
<tr>
<td>D(TO)</td>
<td>0.0010</td>
<td>0.0030</td>
<td>0.3043</td>
<td>0.7625</td>
<td></td>
</tr>
<tr>
<td>D(HC)</td>
<td>0.0001</td>
<td>0.0012</td>
<td>0.1223</td>
<td>0.9029</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0.4014</td>
<td>0.1826</td>
<td>2.1978</td>
<td>0.0305</td>
<td></td>
</tr>
</tbody>
</table>

5.6. Panel Granger Causality Analysis

Lastly, pairwise granger causality is used to analyze the causation between any pair of variables. The outcomes of the granger causality test are displayed in Table 7. The outcomes exhibits that there is unidirectional causality between EMP and IG, FD and IG, IQ and IG, and HC and inclusive growth while no causality is observed between TO and IG.

Table 7: Panel ARDL Short-Run Estimates

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>F-Statistic</th>
<th>Prob.</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMP → IG</td>
<td>2.7423</td>
<td>0.0671</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IG → EMP</td>
<td>0.1770</td>
<td>0.8379</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>FD → IG</td>
<td>10.2342</td>
<td>0.0000</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IG → FD</td>
<td>1.8360</td>
<td>0.1624</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IQ → IG</td>
<td>3.5049</td>
<td>0.0321</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IG → IQ</td>
<td>0.0813</td>
<td>0.9219</td>
<td>No-Causality</td>
</tr>
<tr>
<td>TO → IG</td>
<td>0.9891</td>
<td>0.3739</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IG → TO</td>
<td>0.5308</td>
<td>0.5890</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>HC → IG</td>
<td>2.5314</td>
<td>0.0824</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>IG → HC</td>
<td>0.5164</td>
<td>0.5976</td>
<td>Unidirectional</td>
</tr>
</tbody>
</table>
6. Conclusions and Recommendations

The association between financial development, institutional quality, trade openness and inclusive growth has remained a hot topic in the finance literature, and experts still can't agree on this association. Institutions promote growth through business ventures. The costs of economic transactions drive economic growth through the use of contracts and the enforcement of contracts, common business rules, and better access to information, all of which lower transaction costs, risk, and uncertainty and raise the level of growth. In conclusion, financial development raises the level of growth, and IQ aids in making the level of growth more favorable. Therefore, this paper analyzes the influence of FD, IQ and TO on inclusive growth in SAARC countries. For this purpose, panel data from eight SAARC countries is used from 1996 to 2020. The outcomes show that the variables inclusive growth, FD, IQ, TO, and human capital are integrated at 1st difference while employment rate is integrated at level. Pedroni cointegration test suggests the presence of long-run cointegration among variables in a model. The panel ARDL outcome shows that FD, IQ and HC are positively and significantly related to inclusive growth however, TO and employment rate are insignificantly related to IG in SAARC countries. The outcomes imply that financial development makes it easier to mobilize useful savings, promote information, better utilization of resources with the help of finance and better risk management, all of which support and aid the innovative process of entrepreneurs. This impact might produce a supportive macroeconomic environment for rapid economic expansion (Enisan & Olufisayo, 2009). Similarly, effective institutions promote growth for all, ensure that growth benefits are distributed among various social and political groups within society, enable everyone to participate in major economic decisions and enforce sustainable production methods. In contrast, the harmful consequences of TO on IG is due to the fact that TO enhance the income level of the specific growth and may promote the inequitable growth in a country.

The study has important policy implications. First, additional social and safety nets should be offered to financially incorporate the overwhelming majority of the population there should be a significant push toward financial development initiatives. Second, it is suggested that policies should aimed at strengthening regulatory quality, lowering corruption, enhancing government effectiveness, upholding the rule of law, and promoting voice and responsibility. Third, SAARC countries should encourage exports to improve their trade balance to curtail the negative impacts of trade on inclusive growth. Lastly, micro, small, and medium-sized businesses should be the primary focus of the government because they are the main forces behind inclusive growth. The study also has some limitations. First, this study only focused on FD, institutional quality, and trade openness as contributing factors of inclusive growth however other factors such as financial inclusion, digitalization, and technological innovation can also be incorporated in a model. Second, the study used the data of SAARC countries from 1996 to 2020; however, the dataset of other countries can also be used for empirical investigation. Third, the study also relies on the panel ARDL model however future studies can also use 2nd generation panel data techniques for data analysis.

References


