Globalization-Poverty Nexuses: Evidences from Cross-Country Analysis

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Globalization-Poverty Nexuses: Evidences from Cross-Country Analysis

Ravindra Deyshappria¹

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Abstract

The current study examines the impact of globalization on poverty across 119 countries by utilizing poverty headcount index based on 1.90$ international poverty line and KOF globalization index developed by Dreher, Gaston, and Martens (2008). The main objectives of the research are to examine the general impact of globalization on poverty and region-specific impact of globalization on poverty. The cross-section analysis based on OLS method suggests that globalization significantly reduces the level of poverty of selected countries. Apart from that, the study found that secondary education enrolment ratio, percentage of urban population and percentage of population who has access to electricity also reduce the poverty. However, impact of globalization on poverty is not equal across all the regions. The region-based analysis confirms that globalization reduces poverty in all considered regions except Sub-Saharan Africa. More specifically, contribution of globalization on poverty reduction is more substantial in South Asia region followed by East Asia and Pacific and Europe and Central Asia regions. Consequently, the study strongly recommends countries to engage with the process of globalization and however the

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degree of opening up trade policies, capital accounts and labor markets should be decided based on their own domestic macroeconomic conditions and future economic goals.

**Keywords:** Globalization, Poverty, South Asia, Corruption  
**JEL Classification:** F6, I3

1. Introduction

1.1. Globalization and Poverty in Brief

The term called ‘Globalization’ which came to discussion in early 1980s has now become one of the key concept in current development agendas. In general, globalization refers to the improved integration among countries which ensures efficient sharing of knowledge, technology, goods and services and mobility of people across the countries. According to Santarelli and Figini (2002), globalization is a historical process which is driven by technological, political and economic factors. Santarelli and Figini (2002) further elaborated that technological factors such as internet and telecommunication, political factors such as demise of the communist bloc and economic factors such as free-market oriented economic policies are the key energizers of current wave of globalization. In fact, economic integration aspect of globalization has become more efficient than other dimensions of the globalization. The closer economic relations among nations have increased trade openness of countries allowing them to get vital benefits from international trade while ensuring inflows Foreign Direct Investments (FDI) which transfer advanced technologies along with employment opportunities. Apart from the economic dimension of globalization, the political consequences of globalization have perhaps rationalized the political structure specifically in developing countries. For instance, globalization directly or indirectly encourages to reduce the state role in economy and welcomes Public Private Partnership (PPP) for loss making state-owned enterprises. Consequently, globalization broadens the horizons of national economies of developing countries by linking their production process with global supply chain which
ultimately reduces the poverty due to rapid economic growth (Athukorala, 1998).

Poverty which is defined as “pronounced deprivation in well-being, where well-being can be measured by an individual’s possession of income, health, nutrition, education, assets, housing, and certain rights in a society such as freedom of speech” (World Bank, 2005), has been recognized as one of the key development issues common to both developed and developing nations. However, the impacts of poverty are more destructive on developing nations than developed countries. Due to its importance as a development issue, poverty has been widely taken into account by global development agendas such as Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). More specifically, MDGs aimed to reduce the global share of extreme poverty during the period of 1990-2015, while SDGs focuses on ending poverty in all its forms by 2030. Additionally, individual countries, regional organizations and non-governmental organizations have also included reducing or ending poverty into their agendas and try to overcome this issue at their capacity. However, ending poverty has still been a dream for the most of developing countries due to unfavorable economic conditions experienced by them. By 2013, globally, 10.7% of people (766.6 million people) were suffering from poverty while Sub-Saharan Africa and South Asian accommodated 50.7% and 33.4% of global poor respectively (World Bank, 2016). Consequently, South Asia and Sub-Saharan Africa accommodate approximately 85% of world’s poor. However, it is well-known fact that the global poverty level has significantly declined during last two decades.

1.2. Research Objectives and Structure of the Research

It is noticeable that reduction of poverty has happened in parallel with expansion of globalization during the last two decades. Thus, scholars have attempted to examine the nexus between globalization and poverty reduction and however ended up with
inconclusive findings. This is clearly indicated by Ravallion (2003) as follows.


As indicated in the literature review below, Dollar and Kraay (2001) and World Bank (2002) have supported globalization-led poverty reduction while Bergh and Nilsson (2010), Milanovic and Squire (2006) and Lundberg and Lyn (2003) highlighted that impact of globalization on poverty is ambiguous. These mixed findings on globalization-poverty nexuses encourage new studies which used latest data along with rigorous methodologies.

This study attempts to reinvestigate inconclusive findings of globalization on poverty by incorporating latest data series across 119 countries. More specifically, the objective of this study is to examine whether the globalization reduces the poverty in the selected countries. Similarly, region-wise impacts of globalization on poverty are also analyzed to identify the regions which are highly benefited from globalization. The next sections of the paper include literature review, methodology, results and discussion followed by conclusions and recommendations.

2. Literature Review

Nexus between globalization and poverty is a highly debatable topic in both theoretical and empirical literature. Santarelli and Figini (2002) indicates that impacts of globalization on poverty can be seen in two channels such as growth and trade. According to Santarelli and Figini (2002), globalization essentially promotes economic growth and trade volume of countries and in turn reduces poverty as well. The well-known theorem of international
trade - the Stolper-Samuelson theorem highlights that abundant resources in countries increase the real incomes of the countries, when there is a higher trade openness. Thus, Krueger (1993) and Bhagawati and Srinivasan (2002) stressed that unskilled poor people are the abundant resources of most of the developing countries and therefore trade openness of developing countries may have positive impact on poor people. Apart from that Davis and Mishra (2007) also argued that trade reforms may affect poverty through the price changes of the goods and services which are consumed and produced by the poor. In fact, trade openness leads to tariff reduction and in turn the poor can consume at lower prices. Similarly, global value chains backed by globalization may increase the prices of the commodities which are produced by the poor. Thus, there is a possibility of increasing the income of the poor followed by a reduction in poverty. However, as Harrison (2006) expressed that HO model emphasizes the winners and the losers from globalization can only be identified based on the skill levels. Therefore, the poor who have low level of skills may end up with low benefits compared to the rich with higher skills. Easterly (2004) indicted two views – ‘Factor Endowment View’ and ‘Productivity View’ in order to explain theoretical linkage between globalization and poverty. According to the factor endowment view, globalization and relaxation of constraints on factor mobility across countries allow inflowing of capital to developing countries with unskilled labor. Thus, the increased capital level of the developing countries will reduce level of poverty by increasing per capita income. In contrast, the productivity view states that developing countries with low productivity growth can increase their level of productivity through technology transfers backed by globalization. Thus, increased productivity increases economic growth while reducing the level of poverty.

In addition to theoretical literature, number of empirical analyses have examined the relationship between globalization and poverty. Most of these analyses use economic growth and trade as mediators and attempted to examine the relationship between globalization and poverty through the impacts of
globalization on either growth or trade. A study by Dollar and Kraay (2004) indicated that trade which is supported by globalization, promotes economic growth but there is no logical relationship between trade and inequality. Thus, Dollar and Kraay (2004) concluded that trade openness essentially increases economic growth followed by poverty reduction. However, Lundberg and Squire (2003), Milanovic and Squire (2006) and Bergh and Nilsson (2010) argued that impact of globalization on poverty depends not only on growth but on inequality as well. As they highlighted, when globalization affects both growth and inequality, the impact of globalization on poverty reduction is ambiguous. Further, empirical studies by Lundberg and Squire (2003), Milanovic and Squire (2006) and Bergh and Nilsson (2010) found that globalization causes to widen economic inequality and therefore the impact of globalization on poverty reduction is negligible. Similarly, Wade (2004) also elaborated that globalization does not necessarily reduce the poverty. In fact, Wade (2004) indicated globalization and trade openness increase inequality and he further questioned the positive link between trade and economic performance. However, Agenor (2004) found a non-linear, inverted U-shaped relationship between globalization and poverty. He examined the situation of developing countries and concluded that globalization reduces poverty only at high degrees of globalization.

According to the reviewed theoretical and empirical studies, there is no consensus on the linkages between globalization and poverty. Similarly, most of the empirical studies have ignored broad nature of globalization and taken into account only the economic aspect (Arribas, Perez, & Tortosa-Ausina, 2009) Thus, variable such as trade openness and tariff rate have considered as proxies for globalization and in turn impact of globalization on poverty might be misinterpreted (Harrison & McMillan, 2007; Santarelli & Figini, 2002). Consequently, the current study attempts to overcome such weaknesses in the literature in order to provide more conclusive findings on globalization-poverty nexuses.
3. Methodology

3.1. Measuring Globalization and Poverty

Measuring globalization is not as explicit as measuring of other variables considered for the study. Different studies have used various proxy variables to measure the globalization. According to Harrison and Margaret (2007), direct policy measures such as tariff and trade volume as percentage of GDP have widely been used as proxies for globalization. However, Harrison and Margaret (2007) criticized the use of these trade measures, as these policy measures vary across countries and their macroeconomic policies. Similarly, UNCTAD highlighted the weakness of using trade volume as a percentage of GDP. According to UNCTAD, a country may have a higher trade volume-GDP ratio even when both trade volume and GDP grow at very a slow rate (Santarelli & Figini, 2002) Apart from that, Rodriguez and Rodrik (2000) have criticized the index developed by Sachs and Warner (1995). The main argument highlighted by Rodriguez and Rodrik (2000) is that binary nature of the index and in turn the index ignores variation of globalization across the countries. Additionally, Arribas et al. (2009) expressed that globalization is not only an issue of economic openness and globalization but also it consists of many dimensions such as economic, political and social. Thus, the current study used KOF Globalization Index developed and updated by Dreher et al. (2008). KOF index accounts for three dimensions of globalization such as economic, political and social along with aggregate index for overall globalization for 207 countries. Particularly, KOF overall globalization index was used for the current study as the overall index represents all three dimensions- economic, political and social. In fact, Bergh and Nilsson (2011) also used KOF globalization index for their empirical work.

Absolute poverty considered for this study is measured by the international poverty line. The initial international poverty line - 1$ per day was updated to 1.25$ per day and came to effect from 2008 (Ferreira et al., 2016). After that, 1.25$ per day
poverty line also was updated by Ferreira et al. (2016) and constructed the currently available international poverty line which is equal to 1.90$ per day. Calculation of this latest international poverty line was based on the same list of 15 countries used for calculation of 1.25$ per day poverty line and only the price variations were newly accommodated. Furthermore, the new international poverty line was calculated at PPP at 2011 prices. The current study used the latest version of international poverty line: 1.90$ per day.

3.2. Empirical Models, Data and Variables

3.2.1 Empirical Models

Nexus between globalization and poverty is modeled using cross country regression analysis based on Ordinary Least Squares (OLS) method. The main reason to use cross country analysis is, the selected variables are not varying significantly over time, but across the countries. There are two empirical models that were estimated to accomplish the objectives of the research. The first empirical model expressed in Equation (1) quantifies the relationship between globalization and poverty along with set of other explanatory variables. The second empirical model indicated in Equation (2) used to capture the region-wise impacts of globalization on poverty which allows to identify the regions highly benefited by globalization.

\[
\text{Poverty}_{it} = \beta_0 + \beta_1 \text{Glob}_{it} + \beta_2 \text{Upop}_{it} + \beta_3 \text{Edu}_{it} + \\
\beta_4 \text{Curr}_{it} + \beta_5 \text{Agri}_{it} + \beta_6 \text{Elec}_{it} + u_{it}
\]  
(1)

\[
\text{Poverty}_{it} = \beta_0 + \beta_1 \text{Glob} \times \text{ECA}_{it} + \beta_2 \text{Glob} \times \text{SSA}_{it} + \beta_3 \text{Glob} \times \\
\text{LAC}_{it} + \beta_4 \text{Glob} \times \text{SA}_{it} + \beta_5 \text{Glob} \times \text{EAP}_{it} + \\
\beta_6 \text{Glob} \times \text{MENA}_{it} + \beta_7 \text{Edu}_{it} + \beta_8 \text{Upop}_{it} + \\
\beta_9 \text{Agri}_{it} + u_{it}
\]  
(2)
Where;

Poverty – Poverty Headcount Index (Based on 1.90 $ poverty line)
Glob – Globalization Index
Upop – Percentage of urban population
Edu – Secondary education enrolment ratio
Agri – Agriculture value added (As Percentage of GDP)
Elec – Access to electricity (Percentage of population)
Curr – Corruption perception index
Glob*ECA – Interaction of globalization and European and Central Asia
Glob*SSA - Interaction of globalization and Sub-Saharan Africa
Glob*LAC - Interaction of globalization and Latin America and Caribbean
Glob*SA - Interaction of globalization and South Asia
Glob*EAP - Interaction of globalization and East Asian Pacific
Glob*MENA - Interaction of globalization and Middle East and North Africa

In the 2nd model, interaction between globalization and regional dummies were used to capture the regional variations in impact of globalization on poverty reduction.

3.3. Data and Variables

The current study based on the secondary data collected from various sources across 119 countries over the period of 1990-2016 and a detailed explanation on the variables and data sources are listed in Table 1. Selection of 119 countries based on availability of data especially for the poverty headcount ratio which is assigned as dependent variable of the model. The latest available data at World Bank data series are assigned for each considered variable in order to examine the exact current situation rather than averaging the data for a period of time.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty Headcount Index</td>
<td>Percentage of people below 1.90$ per day poverty line.</td>
<td>World Bank</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globalization Index (Glob)</td>
<td>KOF Index (2017)</td>
<td>Dreher et al. (2008)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Population (Upop)</td>
<td>Percentage of people living in urban areas</td>
<td>World Bank</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (Edu)</td>
<td>Secondary Enrollment Ratio</td>
<td>World Bank</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption (Curr)</td>
<td>Corruption perception index</td>
<td>Transparency International</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture Value Added (Agri)</td>
<td>Agriculture value added as percent of GDP</td>
<td>World Bank</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity (Elec)</td>
<td>Access to electricity as percent of population</td>
<td>World Bank</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Created by author

4. Results and Discussion

4.1. Results of Descriptive Analysis

Initially, descriptive results of the study are explained as below. Mainly, correlation among the explanatory variables were estimated to check whether there is strong correlation among them and listed in Table 2. The correlation matrix indicates moderate level of correlation between globalization-education (0.69), electricity-education (0.67), urban population-education (0.62) and urban population-globalization (0.61), while weak
correlation among all other variables. Thus, is it obvious that the issue of multicollinearity does not affect the estimated empirical models.

Table 2: Correlation among the Explanatory Variables

<table>
<thead>
<tr>
<th></th>
<th>Glob</th>
<th>Edu</th>
<th>Upop</th>
<th>Elec</th>
<th>Agri</th>
<th>Corr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glob</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edu</td>
<td>0.69</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upop</td>
<td>0.61</td>
<td>0.62</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elec</td>
<td>0.67</td>
<td>0.67</td>
<td>0.67</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agri</td>
<td>0.004</td>
<td>0.04</td>
<td>-0.11</td>
<td>-0.01</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Corr</td>
<td>0.55</td>
<td>0.48</td>
<td>0.36</td>
<td>0.40</td>
<td>-0.06</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Authors calculation based on data from World Bank, Transparency International and Dreher et al. (2008)

In addition to correlation matrix, Figure 1 compares the GDP per capita of the highest and the least globalized countries. The Figure 1 clearly illustrates that GDP per capita of 10 highest globalized countries are remarkably higher than that of 10 least globalized countries. More specifically, average GDP per capita of 10 least globalized countries is 1801 USD while top 10 globalized countries’ average GDP per capita is 13885 USD. In fact, highly globalized countries are capable of attracting more Foreign Direct Investments (FDI) and also trade benefits. Thus, there is a higher possibility for them to increase their economic growth followed by per capita income compared to least globalized countries.

Higher per capita income levels which are fueled by globalization essentially reduce the level of poverty in higher globalized countries, while least globalized countries suffer from considerably higher poverty levels.
Figure 1: GDP per Capita (USD) of the highest and the least Globalized Countries

Source: Created by author based on data from World Bank and Dreher et al. (2008)

Figure 2 clearly illustrates the differences in poverty headcount ratios (less than 1.90$ per day) between the highest and the least globalized countries. As Figure 2 shows, countries such as Burundi, Guinea-Bissau, Central African Republic and Solomon Islands reported headcount ratios of 77.7%, 67.1%, 66.3% and 45.6% respectively and these poverty levels are extremely higher than that of top 10 globalized countries. Furthermore, poverty levels of 10 least globalized countries, except West Bank and Gaza and Tonga, are even higher than the world’s average headcount ratio of 10.7%. The lower poverty levels in the highest globalized are mainly due to better employment opportunities and higher household income levels which are ensured by growing economic activities fueled by increased openness. Similarly, globalization facilitates cross borderer labor mobility and in turn migrants remittances are also play a crucial role in poverty reduction in highly globalized countries.
Figure 2: Poverty Headcount Ratio of the Highest and the least Globalized Countries

Source: Created by author based on data from World Bank and Dreher et al. (2008)

The notion shown by Figure 2 is further elaborated by Figure 3, in terms of all sample countries. The scatter plot explicitly depicts the negative relationship between globalization and poverty headcount index of sample countries. Therefore, it is apparent that globalization reduces the poverty incidence of the selected countries.

Despite the above analysis clearly indicates the impact of globalization on poverty descriptively, it is essential to quantify the impacts. Therefore, the results of the employed quantitative models are explained in the next section.
4.2. Results of Econometric Analysis

The empirical model expressed in Equation 1 was estimated econometrically and results are summarized in Table 3. Poverty headcount index was assigned as the dependent variable in all three models estimated based on Equation 1. Similarly, globalization index was employed as an explanatory variable in all three models to check the robustness of association between poverty and globalization.
Table 3: Regression results – Impact of Globalization

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.9739***</td>
<td>-0.4732**</td>
<td>-0.3504**</td>
</tr>
<tr>
<td></td>
<td>(-7.40)</td>
<td>(-2.17)</td>
<td>(-2.04)</td>
</tr>
<tr>
<td>Glob</td>
<td>-0.3341**</td>
<td>-0.2569**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.54)</td>
<td>(-2.31)</td>
<td></td>
</tr>
<tr>
<td>Upop</td>
<td>-0.3601***</td>
<td>-0.3219**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.47)</td>
<td>(-2.59)</td>
<td></td>
</tr>
<tr>
<td>Educ</td>
<td>0.0968</td>
<td>-0.1043</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.52)</td>
<td>(-0.72)</td>
<td></td>
</tr>
<tr>
<td>Corr</td>
<td>-0.1508</td>
<td></td>
<td>-0.6799***</td>
</tr>
<tr>
<td></td>
<td>(-0.98)</td>
<td></td>
<td>(-6.45)</td>
</tr>
<tr>
<td>Agri</td>
<td></td>
<td>-0.1508</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.98)</td>
<td></td>
</tr>
<tr>
<td>Elec</td>
<td></td>
<td></td>
<td>-0.6799***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-6.45)</td>
</tr>
<tr>
<td>Constant</td>
<td>72.1725***</td>
<td>88.3710***</td>
<td>86.0403***</td>
</tr>
<tr>
<td></td>
<td>(9.85)</td>
<td>(10.24)</td>
<td>(11.93)</td>
</tr>
<tr>
<td>R²</td>
<td>0.3204</td>
<td>0.6421</td>
<td>0.8293</td>
</tr>
<tr>
<td>Prob&gt;F</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Observations</td>
<td>118</td>
<td>63</td>
<td>52</td>
</tr>
</tbody>
</table>

Source: Authors calculation based on data from World Bank, Transparency International and Dreher et al. (2008)

T values shown in () *** Significant at 1% level ** Significant at 5% level *

As Table 3 indicates, estimated coefficient for ‘Globalization Index’ is negative and highly significant in all three models. The significant negative coefficient essentially proves that globalization reduces the poverty in the selected countries. Similar significant and negative relationship between globalization and poverty were also found by World Bank (2002), Collier and Dollar (1999) and Bergh and Nilsson (2011). In fact, closer integration among countries essentially smoothens trade and investment flows while facilitating technology transfers and mobility of labor across countries. These impacts of globalization essentially increase economic growth which ultimately ensures poverty reduction.
Apart from the key variable of globalization, education which is represented by secondary education enrolment ratio, and percentage of urban population are also negatively and significantly related with poverty level. Education has been identified as one of the crucial factors of poverty reduction as the higher education is a necessary condition for better employment opportunities. Moreover, nexus between education-poverty has been well-documented by micro level analysis by Gunewardena et al. (2007), Ravallion and Chen (2003) and Dartanto and Otsubo (2013) also confirmed that higher level of education reduces poverty. Percentage of urban population used as a proxy for urbanization, also leads to poverty reduction. In general, majority of economic activities are concentrated in urban areas and hence urban sector provides better employment opportunities for both urban people and internally migrated poor rural people (Deyshappriya, 2017). Access to electricity perhaps can be considered as a proxy for infrastructure development. The improved infrastructure and access to basic services are highly essential for poverty reduction (Gunewardena et al., 2007). Particularly, model 1 estimated negative and highly significant coefficient for the variable called ‘electricity’. Thus, the contribution of increased access to electricity on poverty reduction is empirically proven.

However, estimated coefficients for corruption and agriculture value added (as percentage of GDP) are not statistically significant, despite the expected signs were obtained. Apart from that, highly significant Prob. > F value (0.00) and higher R\(^2\) value (0.82 in the 3\(^{rd}\) Model) emphasize the overall significance of the model. Consequently, the estimated OLS model is highly appropriate to quantify the aforementioned relationship.

Table 4 indicates the results of the 2\(^{nd}\) empirical model. In this table, six interaction terms (Globalization * ECA, Globalization * SSA, Globalization * LAC, Globalization * SA, Globalization * EAP and Globalization * MENA) are the most focused variables. However, few other control variables were also included to increase the goodness of fit of the model. As Table 4
indicates, all coefficients related to interaction terms, except the interaction term related to Sub-Saharan Africa, are negative and highly statistically significant in the model 1. It implies that globalization reduces poverty in all considered region except Sub-Saharan Africa. The 2nd model also indicates the same relationship between poverty and regional interaction terms even after including the education control variable. However, only three regional interaction terms are statistically significant in the 3rd and 4th models, due to adding more control variables such as urban population and agriculture value added.

Table 4: Regression Results – Region-wise Impact of Globalization on Poverty

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glob * ECA</td>
<td>-0.60*** (5.86)</td>
<td>-0.29*** (-2.23)</td>
<td>-0.23* (-1.70)</td>
<td>-0.25** (-1.72)</td>
</tr>
<tr>
<td>Glob * SSA</td>
<td>-0.06 (-0.45)</td>
<td>-0.06 (-0.36)</td>
<td>-0.04 (-0.24)</td>
<td>0.001 (0.01)</td>
</tr>
<tr>
<td>Glob * LAC</td>
<td>-0.64*** (-5.26)</td>
<td>-0.38** (-2.61)</td>
<td>-0.23 (-1.44)</td>
<td>-0.27 (-1.46)</td>
</tr>
<tr>
<td>Glob * SA</td>
<td>-0.75*** (-3.94)</td>
<td>-0.58** (-2.55)</td>
<td>-0.60** (-2.69)</td>
<td>-0.82** (-2.87)</td>
</tr>
<tr>
<td>Glob * EAP</td>
<td>-0.64*** (-4.57)</td>
<td>-0.37** (-2.14)</td>
<td>-0.33* (-1.95)</td>
<td>-0.36* (-1.97)</td>
</tr>
<tr>
<td>Glob * MENA</td>
<td>-0.74*** (-4.02)</td>
<td>-0.58** (-2.53)</td>
<td>-0.38 (-1.56)</td>
<td>-0.37 (-1.39)</td>
</tr>
<tr>
<td>Educ</td>
<td>-0.42*** (-3.65)</td>
<td>-0.37** (-3.24)</td>
<td>-0.30** (-2.28)</td>
<td>-0.27** (-1.94)</td>
</tr>
<tr>
<td>Upop</td>
<td>-0.27** (-2.01)</td>
<td>-0.30* (-1.94)</td>
<td>-0.30 (-1.94)</td>
<td>-0.30 (-1.57)</td>
</tr>
<tr>
<td>Agri</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>44.94*** (6.90)</td>
<td>66.57*** (6.72)</td>
<td>73.73*** (7.14)</td>
<td>75.24*** (6.22)</td>
</tr>
<tr>
<td>R²</td>
<td>0.57</td>
<td>0.63</td>
<td>0.65</td>
<td>0.67</td>
</tr>
<tr>
<td>Prob&gt;F</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Observations</td>
<td>118</td>
<td>77</td>
<td>77</td>
<td>62</td>
</tr>
</tbody>
</table>
Specifically, interaction terms related to Europe and Central Asia, South Asian and East Asia and Pacific are significant at 1%, 5% and 1% level respectively in the 3rd and 4th models. Additionally, coefficients related to education and urban population are also significant in the 3rd and 4th models. The results related to interaction terms suggests that globalization is not a crucial factor of poverty reduction in Sub-Saharan Africa, but in all other considered regions. Moreover, impact of globalization on poverty reduction is more substantial in South Asia, East Asia and Pacific and Europe and Central Asia regions. Considering the magnitude of the coefficients, it can be concluded that impact of globalization on poverty reduction in South Asian region (-0.82) is significantly higher than that of other regions. In fact, South Asia accounts for 50.7% of global poor (World Bank, 2016) and also moderately higher level of globalization in recent years. Thus, a small change in globalization may have bigger impact on poverty in South Asian region compared to other region. In contrast, despite Sub-Saharan Africa accounts for 33.4% of global poor (World Bank, 2016), the region experiences low level of globalization due to backward social and economic conditions. Apart from that, basic education and health status which are essential factors for poverty reduction and globalization are considerably lower in Sub-Saharan Africa compared to other regions. Similarly, the level of globalization also depends on developed information technology, telecommunication systems and improved literacy related information technology. In fact, Sub-Saharan Africa is quite lagging behind in terms of such developments and consequently, impact of globalization on poverty reduction in Sub-Saharan Africa is not apparent as South Asian and other regions. Apart from that, validity of overall model is also confirmed by highly significant Prob. > F at 1 percent significant level and higher R² (0.67).
5. Conclusions and Recommendation

Empirical investigations on impact of globalization on poverty have ended up with mixed findings. Thus, there is a huge vacuum to be filled by scientific and methodologically solid studies which focus on globalization-poverty nexus. The current study examines the impact of globalization on poverty across 119 countries by using the latest available data. Poverty headcount index based on 1.90$ poverty line was used to measure poverty while KOF globalization index developed by Dreher et al. (2008) employed to measure the globalization. Two empirical models were estimated to capture impact of globalization on poverty and region specific impact of globalization on poverty. Results suggest that globalization has a robust negative and highly significant impact of poverty. Consequently, closer integration among countries essentially reduces poverty. Apart from the globalization, the study found that secondary education enrolment ratio, percentage of urban population and percentage of population who has access to electricity also reduce the poverty in selected countries. However, impact of globalization is not equal across all the regions. The region-based analysis confirmed that globalization reduces poverty in all considered regions except Sub-Saharan Africa. More specifically, contribution of globalization on poverty reduction is more substantial in South Asia region followed by East Asia and Pacific and Europe and Central Asia. Hence, the study strongly recommends countries to engage with the process of globalization as the globalization ultimately reduces poverty level through different channels such as trade and investment flows, technological transfers, labor mobility and human capital development. However, the degree of opening up their trade policies, capital accounts and labor markets should be decided based on their own domestic macroeconomic conditions and future economic goals.
References


Annexure A

Figure 3: Relationship between urban population and poverty headcount index

Source: Created by author based on data from World Bank

Figure 4: Relationship between secondary education and poverty headcount index

Source: Created by author based on data from World Bank.