




## Article

# Globalization and Income Inequality in Developing Economies: A Comprehensive Analysis

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**Abstract:** Around the world, people are becoming more and more worried about how globalization will affect their standard of living. According to the literature, globalization has resulted in the marginalization of the impoverished populations in developing economies and has exacerbated inequality, while the opposite may also be true. The objective of this study is to investigate the impact of globalization on income inequality. The study used two-stage least squares (2SLS) to study the influence of globalization on income inequality in 18 developing countries from 1991–2021. Utilizing the KOF index of globalization, it is determined that globalization, together with its three aspects, has a negative effect on income inequality among developing economies. Evidence demonstrates that the combination of trade openness and foreign direct investment (FDI) plays a significant role in reducing inequality among developing economies. We recommend developing economies actively support globalization in terms of trade and FDI in accordance with the findings. By expanding trade opportunities and opening up markets, globalization can benefit developing nations. This may result in a rise in FDI, the creation of jobs, and technological developments. Governments can contribute to raising the living standards of their inhabitants, lowering rates of poverty, and closing the income gap by promoting globalization. Although the study emphasizes the well-established link between globalization and income inequality, it focuses on the effects of various globalization dimensions, emphasizing the need to comprehend how different dimensions of globalization, namely economic, political, and social globalization affects inequality in developing economies.

**Keywords:** developing economies; globalization; income equality; 2SLS**JEL Classification:** C26; D63; F4

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## 1. Introduction

The recent impact of globalization (GL) has been observed in numerous countries, resulting in increased economic growth (Akadiri and Adebayo 2022; Ali et al. 2023; Cuevas García-Dorado et al. 2019). The degree of GL and its impacts, however, vary among nations and regions with varying levels of development. The process of economic development has experienced positive effects as a result of heightened GL, but at the cost of exacerbating income inequality among nations. The unequal distribution of increased wealth has emerged as a prominent worry in contemporary times, with scholars such as Gozgor et al. (2020) and Xia et al. (2022) highlighting the significance of widening income inequality. The subject of economic imbalance has sparked significant discussion over its effects at both the national and global levels. The anti-GL discourse is exacerbating the growing imbalance between persons who possess economic advantages and those who do not. Advocates of GL contend that it has played a significant role in fostering egalitarianism and mitigating

poverty levels (Lugo-Ocando 2020). In order to foster a fairer society, it is imperative to address the issue of inequality, as doing so concurrently addresses individuals' welfare issues. There is no assurance that the most economically disadvantaged individuals would experience a net benefit if the overall size of the pie chart increased but their respective share diminished. The lack of access to the opportunities offered by economic GL among the impoverished population leads to a decrease in the productive capacity of economies, hence constraining their potential for growth. In order to enhance the economy's ability to benefit from economic GL, it is vital to possess a comprehensive comprehension of the components that contribute to inequality.

GL is a multifaceted concept that involves various mechanisms, including financial and trade liberalization (Wolhuter and Niemczyk 2023). In the GL phase, there has been significant diversity in countries, regions, cultures, and skill classes across time. According to the "comparative advantage" theory, countries improve their competitiveness and international trade by specializing in business. Increased heterogeneity, both within and between countries, leads to negative outcomes like increased inequality. Discussing differences between industrialized countries, their impact on residents, and resource allocation skews is crucial. The influence of GL on inequality can be categorized into two distinct groups: a "less detrimental" version and a "more detrimental" version. In the initial scenario, inequality arises as a result of economic expansion and can be accepted within the nation. According to Berger (2014), GL leads to a fall in earnings for low-skilled workers and an increase in pay for high-skilled individuals.

There is a commonly held belief that increased financial openness leads to improved resource allocation, encompassing both trade GL and financial GL. The removal of these limitations is expected to result in a disproportionate increase in the earnings of individuals with lower income levels. This can be attributed to the adverse financial effects caused by credit restrictions imposed by the safeguarding measures of the domestic banking system. This theory posits that the attraction of foreign capital enables nations to engage in a higher level of expenditure relative to their production, as well as to invest more than they save. These factors collectively contribute to economic growth, a rise in earnings for individuals in lower socioeconomic brackets, and a reduction in income inequality, particularly in emerging economies. Conversely, some theoretical frameworks prioritize the potential influence of economic growth levels on the relationship between financial openness and income distribution. Financial openness in the early stages of development is predominantly accessible to and advantageous for households with higher income levels. At elevated stages of economic development, characterized by increased accessibility to financial markets among a larger proportion of households, a wider range of societal segments directly benefits from the phenomenon of financial openness.

Several studies have been conducted to investigate the impact of GL on income inequality, yielding varied outcomes (Adams and Klobodu 2019; Ha et al. 2019; Pal et al. 2022; Sethi et al. 2021). Globalization and international commerce can reduce the talent premium in emerging nations, reducing income inequality, according to the Stolper–Samuelson theorem. Wage convergence occurs for skilled and unskilled workers as countries trade globally. Skills-intensive export businesses can enhance demand for skilled labor, decreasing the wage gap between skilled and unskilled workers. International trade equalizes factor prices, making income distribution more equitable in developing economies. However, industry, workforce adaptability, and policy efficacy determine inequity effects. Academic research examining the relationship between inequality and GL has thus far not undertaken a comprehensive synthesis and exploration of estimates derived from relevant primary sources. In order to address this deficiency in the existing body of scholarly work, scholars employ meta-analysis and meta-regression methodologies. In contrast to meta-regression analysis, which aims to identify the factors contributing to the variability in reported estimates of the relationship between GL and income inequality, meta-analysis is concerned with quantifying the extent of the influence of GL on income disparity. The study also provides an opportunity to examine if there exists substantive evidence for a nebulous correlation, or if

there is a tangible effect that aligns with well-established theoretical assumptions regarding the impact of GL on income inequalities. Scholars may provide a partial explanation for the observed diversity in the provided estimations, so contributing novel insights into the factors influencing the variations in reported results of GL -inequality.

The reduction of inequality is crucial, not just for achieving financial equality, but also for promoting the welfare and improving the living standards of nations. In developing nations, the issue of inequality poses a substantial obstacle, as it intensifies differences in various aspects such as distribution of income, educational accessibility, healthcare provisions, and possibilities for advancement. The presence of this socioeconomic difference not only serves as an obstacle to individual advancement but also poses a threat to the entire economic growth and stability. The imperative to achieve sustainable development in these regions necessitates the implementation of inclusive policies and social programs as a means to tackle inequality. Therefore, the aim of this study is to clarify the relationship between income inequality and GL. This study seeks to examine the correlation between economic inequality and GL by addressing the following inquiries: (i) To what degree does the application of a GL contribute to reducing income inequality? (ii) Does each aspect of the GL have a consistent and equalizing impact on the complex environment of income inequality? The study posits a notable association between GL and the mitigation of income inequality, as well as variations in the influence of different GL aspects on income inequality. The primary variable this study is focusing on is the KOF index of GL, which consists of three sub-indexes: economic, social, and political GL. To achieve this objective, the study utilizes an econometric model and employ suitable panel data methodology to analyze data from 18 developing countries over the extensive time frame of 1991 to 2021. For this analysis, we focus on developing countries in South America, Europe, Asia, and Southeast Asia. This selection ensures a diverse geographical representation for an extensive evaluation. Furthermore, this study aims to address the problem of endogeneity between income disparity and GL by employing both external and internal instruments. In addition, current study is employing two other indicators of GL, namely trade GL and financial GL, to serve as proxies for total GL in our robustness analysis.

This work distinguishes itself from the current literature in three aspects: Firstly, it considers all nations worldwide, regardless of their level of development. Furthermore, it effectively manages the issue of endogeneity by employing appropriate external and internal instruments. Furthermore, this study prioritizing the utilization of Pooled Ordinary Least Square (OLS) and 2SLS methodologies to assess the coherence and dependability of our fundamental findings. Primarily, the literature predominantly concentrates on the topics of Generalized Method of Moments (GMM), fixed effects, and random effects.

The subsequent sections of the paper are structured as follows. Section 2 provides an overview of the current literature, while Section 3 outlines the methods used. Section 4 provides an analysis and discourse on the findings. Finally, in Section 5, current study presents our conclusive remarks and summarize the main outcomes of our study.

## 2. Literature Review

Over the past forty years, there has been a growing apprehension regarding increasing disparities. A substantial body of empirical and theoretical research on inequality was conducted during the twentieth century. [Kuznets \(1955\)](#) initially conducted an empirical analysis on the relationship between income inequality and economic progress, developing a curve that has the shape of an inverted U. From Kuznets forward, academics have been investigating the various forms, foundations, and consequences of inequality in both emerging and established countries. GL is a complex and controversial phenomenon that involves various economic, social, and political processes occurring simultaneously ([Held et al. 1999](#); [Raab et al. 2008](#)). [Sassen \(1996\)](#) argues that GL is a universal factor that affects all nations worldwide in a similar way. However, the impact of GL varies depending on the unpredictable tendencies of economies to either embrace or oppose it. Despite its significant positive impacts, GL is often criticized for many socio-economic drawbacks

(Potrafke 2014). One such issue is the increasing disparity in wealth and resources on a global scale.

According to Beck et al. (2007), Bergh and Nilsson (2010), and Dollar and Kraay (2004), GL increases inequality between nations. Singh and Dhumale (2004) note that GL, technological advancement, social norms, and economic institutions all contribute to increased inequality. However, Dollar and Kraay (2004) theoretically examine how GL affects inequality and argue that certain impoverished countries gain more. Geographical barriers prevent some countries with weak institutions and policies from joining GL. GL helped several economies enhance their living standards and income equality. Similarly, Atif et al. (2012) found that GL widens national income inequalities. However, institutional differences between economies may explain this discrepancy. Lee (2006) studied the influence of GL on income inequality within the European Union throughout the period spanning from 1951 to 1992. A study employing panel data analysis across 14 European nations has revealed a positive association between FDI and tax disparity. The study findings provide confirmation of the acceptability of Kuznets' idea. The study conducted by Wan et al. (2007) used GMM estimations to examine the correlation between GL and regional income inequality in China from 1987 to 2001. The research findings suggest that regional inequality is being propelled by the process of GL. Roy-Mukherjee and Udeogu (2021) demonstrated a significant correlation between GL and income inequality in a sample of 39 nations belonging to the Organization for Economic Cooperation and Development (OECD) and the Balkan region. The authors employed the Feasible Generalized Least Squares (FGLS) methodology to analyze data spanning the period from 1991 to 2017.

Panel research by Adams (2008) utilized panel research methodology to investigate the effects of GL on income inequality within a sample of 62 developing nations throughout the period spanning from 1985 to 2001. This study investigates the influence of intellectual property rights on the process of GL. The findings of this research indicate a positive association between intellectual property rights, market accessibility, and disparities in revenue distribution. Additionally, a negative relationship is shown between foreign direct investment, business infrastructure, and disparities in income distribution. Dreher and Gaston (2008) estimated GMM on country samples from 1970 to 2000. The panel study found that GL increases inequality in OECD countries, but not in less developed countries, specifically in industrial wages and household income. In a later study, Bergh and Nilsson (2010) found that general and social GL positively affect income inequality, while economic and political GL do not. Many find that GL increases income inequality worldwide (Doerrenberg and Peichl 2014; Martinez-Vazquez et al. 2012). In a theoretical study, Mills (2009) argues that GL reduces inequality in emerging economies through industrialization, new employment opportunities, and higher wages for lower-skilled workers while lowering wages for higher-skilled workers. All of these things reduce inequality in these countries.

Asteriou et al. (2014) used panel data to build an econometric model to examine the relationship between GL and inequality from 1995 to 2009. This analysis shows that trade openness reduces inequality, while FDI, capital market openness, and stock market capitalization increase inequality across all EU member States. In particular, FDI was identified as the primary cause of rising inequality in this region. Balan et al. (2015) studied the impact of GL on income inequality in G7 nations from 1970 to 2010. Test results indicate that GL reduces income disparity in Canada, England, and France. GL has been linked to increased poverty and income inequality, particularly in Canada and the UK. GL's impact on revenue quality was examined by Lee et al. (2020) using GMM estimation for 121 countries with ICRG data from 1984 to 2014. Research indicates that GL leads to high inequality levels. The study conducted by Sethi et al. (2021) employed the Autoregressive Distributed Lag (ARDL) limits test to analyze the effects of GL and financial development on inequality in India during the period spanning from 1980 to 2014. A negative effect was detected for both factors. The GMM technique of Ullah et al. (2021) established a correlation between GL and income inequality in 64 countries from 2003 to 2018. Similar results were obtained

by including economic growth, e-government development, government expenditure, and inflation factors. In a recent study conducted by [Pal et al. \(2022\)](#), it was shown that remittance inflows have a positive impact on lowering income inequality in countries with varying income levels. Specifically, the study observed that high-income nations, middle-income countries, and low-income countries all saw benefits from these remittance inflows. Further, he demonstrates the positive effects of financial GL on the equitable distribution of income, as seen by the inflow of personal remittances into countries of varying income levels, including high-, middle-, and low-income nations.

The research conducted by [González Gordón and Resosudarmo \(2019\)](#) demonstrates a notable and favorable correlation between the proportions of manufacturing and services sectors in the Gross Domestic Product (GDP) and the level of income inequality. The contribution of the agricultural sector to the GDP exhibits a notable adverse effect on income inequality. According to [Wu and Rao \(2017\)](#), there exists a strong and consistent inverted-U correlation between inequality and urbanization. In their study, [Adams and Klobodu \(2019\)](#) discovered a positive correlation between urbanization and income disparity in 21 Sub-Saharan African economies. The study conducted by [Sulemana et al. \(2019\)](#) reveals empirical support for a positive correlation between urbanization and income inequality in the Sub-Saharan African region. According to the findings of [Ha et al. \(2019\)](#), urbanization has been found to have a significant effect on reducing income disparity over an extended period of time, although its impact on income inequality itself is considered to be minimal. The researchers have verified the hypothesis positing an Inverted-U-shaped correlation between the process of urbanization and the level of income disparity.

Financial development, which is often used as a measure of GL in previous studies, demonstrates varied impacts on inequality. [Asteriou et al. \(2014\)](#) contends that financial development has a positive impact on the economic growth rate, but it does not contribute to income equality. Similarly, [Acharyya \(2011\)](#) supports the concept that international capital flows, also known as FDI, serve as another avenue for economic development. Foreign direct investment (FDI) typically focuses on high-skill industries in the host country. In the case of a less advanced country, this type of FDI may involve relatively low-skill-intensive outward investment for the advanced economy. As a result, there will be an increase in the demand for skilled labor in both countries. Hence, the skill biased FDI is anticipated to lead to an increase in inequality in both emerging and developed nations.

Our objective is to enhance the current body of knowledge by analyzing the impact of GL on the disparity in income. Only a limited number of recent research has examined the impact of various factors on inequality. The majority of these studies typically focus on analyzing the individual or combined effects of variables. This study examines the impact of GL on income inequality in emerging nations through the application of a novel and reliable econometric research method.

### 3. Data and Methodology

The current study conducts an empirical examination of the correlation between GL and inequality using panel data analysis comprising 18 developing countries (Table 1) throughout the time span of 1991–2021 with 558 observations.

**Table 1.** List of Developing Countries.

Argentina	Georgia	Peru
Armenia	Kazakhstan	Russian Federation
Belarus	Kyrgyz Republic	Thailand
Brazil	Mexico	Turkiye
Costa Rica	Moldova	Ukraine
Ecuador	Paraguay	Uruguay



The Kuznets curve is employed to simulate inequality by taking into account the established knowledge from many sources on the subject.

$$GINI_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \varepsilon_{it} \quad (1)$$

Let “*i*” be a variable ranging from 1 to *N*, and “*t*” be a variable ranging from 1 to *T*.  $GINI_{it}$  refers to the income inequality i.e., GINI index.  $Y_{it}$  and  $Y_{it}^2$  represent the GDP per capita and the square term, respectively. The expected coefficients for  $\beta_1$  and  $\beta_2$  are positive and negative, respectively.

Equation (2) incorporates GL, which is the primary subject of the present work.

$$GINI_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \beta_3 GL_{it} + \beta_4 X_{it} + \varepsilon_{it} \quad (2)$$

The abbreviation “ $GL_{it}$ ” represents the concept of comprehensive GL.  $X_{it}$  represents the fixed vector of control variables. The examination of the influence of economic, social, and political GL on inequality is currently being taken into account. The provided equations are as follows:

$$GINI_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \beta_3 EG_{it} + \beta_4 X_{it} + \varepsilon_{it} \quad (3)$$

$$GINI_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \beta_3 SG_{it} + \beta_4 X_{it} + \varepsilon_{it} \quad (4)$$

$$GINI_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \beta_3 PG_{it} + \beta_4 X_{it} + \varepsilon_{it} \quad (5)$$

In these equations,  $EG_{it}$  represents economic GL,  $SG_{it}$  represents social GL, and  $PG_{it}$  represents political GL. The matrix  $X_{it}$  represents a set of fixed controls, including GDP per capita, the square of GDP per capita, research and development, population growth, the employment share of the industrial sector, the employment share of the service sector, and the export of goods and services.

The literature extensively discusses income disparity as the most contentious aspect of inequality. The GINI coefficient is employed as a metric to quantify income disparity. Therefore, this study uses the GINI coefficient as a measure of income inequality, based on earlier empirical research by [Jalil \(2012\)](#); [Kanbur and Zhang \(2005\)](#); [Liang \(2006\)](#), and others. The variable this current study is examining, GL, is derived from the KOF index of GL as outlined by [Bergh and Nilsson \(2010\)](#), which was established by [Dreher \(2006\)](#); [Dreher and Gaston \(2008\)](#). GL encompasses three dimensions: economic, social, and political. The dimensions of economic GL can be broken down into sub-components, such as actual trade flows and trade restrictions. Similarly, social GL can be divided into sub-categories like information flows, personal contacts, and cultural proximity. However, political GL cannot be decomposed in the same way due to the lack of separate data available for lower levels of this index. The empirical research conducted by [Potrafke \(2015\)](#); [Schinke \(2014\)](#) and [Wood \(1995\)](#) present conflicting data about the correlation between GL and income disparity.

Existing research presents two arguments regarding the correlation between economic growth and inequality. [Forbes \(2000\)](#); [Gozgor and Ranjan \(2017\)](#); [Kaldor \(1955\)](#), and other researchers have demonstrated a positive correlation between GDP growth and income inequality. Conversely, [Glomm and Kaganovich \(2008\)](#) and [Persson and Tabellini \(1994\)](#) have empirically examined a negative link. This study performs an empirical test of this phenomenon using the Kuznets curve, as outlined by [Ahluwalia \(1976\)](#). [Kuznets \(1955\)](#) examines a curvilinear correlation between economic growth and income inequality, illustrating that inequalities rise during the initial stages of economic growth, but decline with advanced stages of economic development as a result of trickle-down effects. In the instrumental-variable analysis, a recent study incorporates lagged values of endogenous variables, as well as the average GL and information and communication technologies (ICTs) of adjacent nations. The additional control variables utilized in this investigation, together with the measurements of variables and the source of data, are provided in Table 2.

**Table 2.** Description of Variables.

Variables	Measurements	Source
Income Inequality (GINI)	0 to 100 (complete equality to inequality)	WDI
Globalization (GI)	Globalization index	KOF
Economic Globalization (EG)	Economic Globalization Index	KOF
Social Globalization (SG)	Social Globalization Index	KOF
Political Globalization (PG)	Political Globalization Index	KOF
Economic Growth (GDP)	GDP per capita growth (annual %)	WDI
Research & Development (RD)	R&D expenditures (% of GDP)	WDI
Population (POP)	Population growth (annual %)	WDI
Industry Employment Share (EMPI)	% of total employment	WDI
Services Employment Share (EMPS)	% of total employment	WDI
Export of goods and services (EXP)	% of GDP	WDI

Source: previous studies.

#### 4. Empirical Findings and Discussion

Prior to conducting the estimation, the study conducted preliminary testing. Initially, by employing a link test of functional form, the study ascertains that the model is accurately stated. Furthermore, analysis of the Variance Inflation Factor (VIF) test reveals the absence of any issues related to multicollinearity. Furthermore, analysis of the Breusch–Pagan test reveals the absence of heteroscedasticity. The results are documented in Table 3.

**Table 3.** Diagnostic Tests.

Test Name	Value	Decision
Link Test (Hat-square P value)	0.067	Correct Function Form
Multicollinearity Test (VIF)	1.60	No multicollinearity
Heteroscedasticity Test (Breusch-Pagan)	0.069	Hetero not exist
Normality Test (Jarque-Bera)	0.271	Normally distributed

Source: own calculations.

Table 4 presents the mean values, standard deviations, lowest values, and maximum values of the variables employed in the model. The GINI coefficient, which measures income inequality, exhibits a range of values within the selected sample, with the lowest recorded value being 24 and the largest value reaching 60. This disparity signifies a substantial degree of variation in income distribution. In a similar vein, the minimum documented measure of GL stands at 26, whereas the maximum number reaches 75. This data sheds light on the disparities in the perception of GL among developing economies. The aforementioned statistics offer significant information regarding the distribution and perception of income inequality and GL among the chosen sample. The diverse array of GINI values indicates that certain countries within the chosen sample possess a greater degree of economic equality, while others demonstrate elevated levels of inequality. Moreover, the observed disparities in GL scores suggest that developing economies exhibit divergent perspectives and reactions with regard to GL. The comprehension of income inequality and GL dynamics, as well as the development of effective ways to tackle these concerns, are of utmost importance for policymakers and researchers. Consequently, the utilization of these statistics is vital in this regard. Table 5 presents the results of a correlation analysis.

Prior to conducting more econometric research, the study performs a stationarity test to determine if a unit root is present, as this can result in false regression outcomes. The study utilized panel unit root tests from many studies, including [Choi \(2001\)](#); [Harris and Tzavalis \(1999\)](#); [Im et al. \(2003\)](#); and [Levin et al. \(2002\)](#). The results are presented in Table 6. The variables are either stationary at level or after first differencing. The regression analysis employed first differences of research and development, services employment share, GL index, and social GL index due to their nonstationary at the level but attainment of stationarity after first differencing.

**Table 4.** Descriptive Statistics.

Variable	Obs.	Mean	Std. Dev.	Min	Max
GINI	558	40.978	9.176	24.000	60.100
GDP	558	1.917	6.339	−45.325	15.310
RD	558	0.448	0.334	0.041	1.371
POP	558	0.632	1.043	−3.758	2.645
EMPI	558	21.221	5.474	8.221	39.253
EMPS	558	53.006	10.630	22.116	73.528
EXP	558	34.102	15.381	6.598	78.777
GI	558	59.213	10.241	26.000	75.000
EG	558	52.450	10.936	17.000	81.000
SG	558	56.565	11.203	30.000	77.000
PG	558	68.633	18.391	11.000	93.000

Source: own calculations.

**Table 5.** Correlation Matrix.

	GINI	GDP	RD	POP	EMPI	EMPS	EXP	GI	EG	SG	PG
GINI	1.00										
GDP	−0.03	1.00									
RD	−0.05	−0.09	1.00								
POP	0.56	−0.10	−0.23	1.00							
EMPI	−0.14	−0.09	0.57	0.05	1.00						
EMPS	0.28	−0.01	0.30	0.19	0.32	1.00					
EXP	−0.48	0.02	−0.05	−0.23	0.16	−0.32	1.00				
GI	−0.05	0.27	0.16	0.04	0.11	0.52	−0.08	1.00			
EG	−0.35	0.38	−0.26	−0.25	−0.33	−0.10	0.28	0.59	1.00		
SG	−0.22	0.14	0.07	−0.09	0.03	0.53	0.02	0.85	0.55	1.00	
PG	0.26	0.14	0.38	0.26	0.35	0.60	−0.32	0.80	0.06	0.48	1.00

Source: own calculations.

**Table 6.** Im-Pesaran-Shin Unit Root Testing.

Variable	At Level	At First Difference
GINI Index	−3.150 ***	−13.338 ***
Economic Growth	−6.064 ***	−15.790 ***
Research & Development	0.564	−11.712 ***
Population Growth	−5.830 ***	−9.718 ***
Industry Employment Share	−1.680 **	−5.516 ***
Services Employment Share	2.403	−6.053 ***
Exports	−2.390 ***	−11.108 ***
Globalization Index	3.386	−11.822 ***
Economic Globalization Index	−3.297 ***	−9.310 ***
Social Globalization Index	7.131	−5.781 ***
Political Globalization Index	−4.866 ***	−10.270 ***

Note: \*\*\* (1%), \*\* (5%) Source: own calculations.

Table 7 presents the pooled OLS findings regarding the impact of GL on income inequality. The indices for overall GL, economic GL, and social GL are all negatively and statistically significantly correlated, except for political GL, which exhibits a positive correlation. The study utilizes the calculated models by incorporating per capita GDP and the square of per capita GDP as controlling variables. The study sees a positive and statistically significant relationship between the rise of per capita GDP and its squared term, which is found to be adversely significant. One of the control variables in the models is the employment share in the service sector, which is found to increase inequality. Similarly, there is a positive correlation between population growth and income disparity.



**Table 7.** Pooled OLS Results of Globalization and Income Inequality.

Variables	(1) GINI	(2) GINI	(3) GINI	(4) GINI
GDP Per Capita	0.105 ** [0.051]	0.141 *** [0.051]	0.065 *** [0.027]	0.031 ** [0.013]
GDP Per Capita Squared	−0.031 *** [0.009]	−0.026 ** [0.013]	−0.037 ** [0.016]	−0.018 *** [0.004]
Research & Development	−5.490 *** [1.095]	−3.767 *** [1.087]	−4.156 *** [1.032]	−5.168 *** [1.186]
Population Growth	4.669 *** [0.299]	4.154 *** [0.303]	4.081 *** [0.287]	4.769 *** [0.323]
Industry Employment Share	−0.506 *** [0.067]	−0.613 *** [0.069]	−0.570 *** [0.064]	−0.442 *** [0.070]
Services Employment Share	0.231 *** [0.035]	0.151 *** [0.030]	0.345 *** [0.035]	0.122 *** [0.035]
Exports	−0.137 *** [0.020]	−0.097 *** [0.021]	−0.101 *** [0.019]	−0.160 *** [0.021]
Globalization	−0.234 *** [0.033]			
Economic Globalization		−0.247 *** [0.031]		
Social Globalization			−0.324 *** [0.029]	
Political Globalization				0.024 * [0.012]
Constant	52.534 *** [2.148]	57.759 *** [2.441]	52.082 *** [1.883]	45.721 *** [2.030]
Observations	558	558	558	558
R-squared	0.532	0.542	0.583	0.490

Note: \*\*\* (1%), \*\* (5%), \* (10%) Source: own calculations.

Endogeneity in our model may result from (i) inequality–GL links and (ii) omitted variable bias. Thus, the study re-estimated our model using two-stage least squares (2SLS) to address endogeneity. 2SLS uses instrumental variables to address regression endogeneity and ensure unbiased parameter estimates in simultaneous equation models. The two-stage technique improves consistency and efficiency over least squares. External and internal instruments instrument GL, a potential endogenous variable. Instruments include endogenous variable delay, average adjacent country GL, and ICTs. Average GL in surrounding nations is based on “peer effects” on opening borders and economic and social integration with the international economy. These effects should be strongly tied, with some lag, to a country’s GL level, although it’s unclear how a nearby country’s GL level can affect individual income. [De Soysa and Vadlamannati \(2011\)](#) and [Eichengreen and Leblang \(2008\)](#) instrument openness indicators with nearby countries’ lagged values. Two countries are neighbors if they share a land or maritime boundary, as defined by the UN Convention on the Law of the Sea. Let Latvia, Finland, Russia, and Sweden be Estonia’s neighbors. Territories are not neighboring countries. GL is driven by various forms of ICT. Microcomputers, the Internet, new satellite systems, and fiber-optic cables are part of the ICT revolution that is globalizing. These promote financial and personal communication liberalization ([Castells 2002](#); [Mills 2009](#)). New ICTs allow people to share information to connect and create an instant global standard of comparison. Modern ICTs have changed the scope, intensity, rapidity, and impact of transitions ([Held et al. 1999](#)).

In order to identify the issue of endogeneity, we employed the Wald technique. The outcomes of the Wald test confirm the presence of endogeneity. The probability values of the limitation terms in Table 8, as indicated by the Wald test outcomes, demonstrate the presence of endogeneity, with values below 0.05.

**Table 8.** Wald Test.

Method	Statistic	Prob.
F-statistics	17,321.124	0.000
Chi-square	13,586.110	0.000
	Value	Std.Err.
C-(1)	0.342	0.007
C-(2)	1.371	0.432
C-(3)	−0.125	0.023
C-(4)	−0.287	0.038
C-(5)	−0.094	0.034
C-(6)	−0.043	0.024
C-(7)	−0.235	0.061
C-(8)	0.013	0.045
C-(9)	−0.358	0.004
C-(10)	−0.001	0.011
C-(12)	−0.003	0.001
C-(13)	0.383	0.003
C-(14)	−0.002	0.006

Source: own calculations.

The results obtained from the second stage regression of the two-stage least squares (2SLS) analysis is presented in Table 9. The study obtained consistent findings similar to those obtained using Pooled-OLS. All variables exhibit high significance and share the same signs, with the sole distinction being the magnitude of their coefficients. The indices for total GL, economic GL, social GL, and political GL are all negative and statistically significant. This indicates that as GL increases, the impact on inequality diminishes. The GDP and the square of the GDP provide evidence supporting Kuznets' concept. Furthermore, all other controls in this analysis are also consistent and significant.

**Table 9.** 2SLS Results of Globalization and Income Inequality.

Variables	(1) GINI	(2) GINI	(3) GINI	(4) GINI
GDP Per Capita	0.176 *** [0.051]	0.124 ** [0.052]	0.141 *** [0.048]	0.184 *** [0.053]
GDP Per Capita Squared	−0.048 * [0.025]	−0.037 *** [0.013]	−0.030 *** [0.012]	−0.041 *** [0.016]
Research & Development	−5.618 *** [1.107]	−3.636 *** [1.102]	−4.160 *** [1.051]	−5.343 *** [1.210]
Population Growth	4.672 *** [0.302]	4.079 *** [0.305]	4.053 *** [0.291]	4.761 *** [0.330]

Table 9. Cont.

Variables	(1) GINI	(2) GINI	(3) GINI	(4) GINI
Industry Employment Share	−0.493 *** [0.070]	−0.621 *** [0.072]	−0.570 *** [0.067]	−0.431 ** [0.073]
Services Employment Share	0.227 *** [0.035]	0.138 *** [0.031]	0.346 *** [0.037]	0.115 ** [0.033]
Exports	−0.139 *** [0.021]	−0.092 *** [0.023]	−0.101 *** [0.020]	−0.164 *** [0.022]
Globalization	−0.265 *** [0.035]			
Economic Globalization		−0.287 *** [0.033]		
Social Globalization			−0.342 *** [0.030]	
Political Globalization				−0.082 * [0.042]
Constant	54.513 *** [2.245]	60.863 *** [2.587]	53.233 *** [1.947]	46.511 *** [2.111]
Observations	558	558	558	558
R-squared	0.531	0.540	0.576	0.485
Estat endogenous ( <i>p</i> -value)	0.003	0.006	0.030	0.029
Estat overid ( <i>p</i> -value)	0.072	0.076	0.072	0.069

Note: \*\*\* (1%), \*\* (5%), \* (10%) Source: own calculations.

In order to assess the resilience of our findings, the study conducts a sensitivity analysis by employing alternative indicators of GL that have been widely utilized in past scholarly works: trade GL and financial GL. When the study substitutes the KOF index of GL with measures of trade and financial GL, our findings remain consistent. They indicate that GL, regardless of the specific measure used, contributes to the reduction of global inequalities.

#### Robustness Analysis

Table 10 shows the impact of trade openness on income inequality effects in columns 1 and 2. Open trade borders diminish inequality, as the trade coefficient is significant and negative. This finding supports the literature that shows that trade reduces inequality in nations with higher economic growth. The study discovers a statistically significant negative association between income inequality and the squared term of per capita GDP growth when adjusting the estimated models. This suggests that GDP growth reduces income inequality. Research and development and industrial employment both reduce inequality, while service sector job share and population growth increase it. Financial GL inequality results are in columns 3 and 4. Both regressions show a negative and significant FDI coefficient, indicating that financial deepening reduces inequality. FDI plays a significant role in reducing income inequality and fostering economic growth in emerging nations. The influx of foreign corporations into these nations results in the introduction of novel technology, expertise, and knowledge, hence facilitating the generation of additional employment prospects. Consequently, this contributes to the mitigation of poverty and the enhancement of the socio-economic conditions of the indigenous inhabitants. Moreover, foreign direct investment (FDI) can facilitate the transmission of managerial and technological knowledge, thereby stimulating domestic industries and promoting a more inclusive and equitable economic environment. These findings match [Ang \(2010\)](#); [Beck et al. \(2007\)](#); [Jalil \(2012\)](#); and [Huang et al. \(2020\)](#). Research and development and industrial employment both share reduce inequality, while service sector job share and population growth increase it. These results match other methods in both models. Thus, our benchmark results are

reliable. Our conclusions on the positive or negative effects of GL, GDP growth, service and industrial sector employment share, R&D, and population increase on income disparity are strong regardless of the global integration proxy.

**Table 10.** Results of Trade Openness, FDI, and Income Inequality.

Variables	(1) Pooled OLS	(2) 2SLS	(3) Pooled OLS	(4) 2SLS
GDP Per Capita	0.132 *** [0.049]	0.169 *** [0.051]	0.104 * [0.054]	0.161 *** [0.061]
GDP Per Capita Squared	−0.017 ** [0.008]	−0.019 *** [0.005]	−0.022 ** [0.010]	−0.025 * [0.012]
Research & Development	−3.795 *** [1.111]	−3.450 *** [1.127]	−6.408 *** [1.139]	−6.366 *** [1.187]
Population Growth	4.201 *** [0.310]	4.032*** [0.318]	5.030 *** [0.312]	4.794 *** [0.329]
Industry Employment Share	−0.425 *** [0.066]	−0.383 *** [0.070]	−0.736 *** [0.069]	−0.854 *** [0.077]
Services Employment Share	0.053 *** [0.021]	0.023 [0.024]	0.191 *** [0.030]	0.195 *** [0.032]
Trade Openness	−0.101 *** [0.010]	−0.115 *** [0.011]		
Foreign Direct Investment			−0.615 *** [0.115]	−1.198 *** [0.194]
Constant	50.140 *** [2.055]	52.233 *** [2.183]	42.177 *** [1.916]	46.351 *** [2.236]
Observations	558	558	558	558
R-squared	0.523	0.518	0.465	0.431
Estat endogenous ( <i>p</i> -value)		0.012		0.000
Estat overid ( <i>p</i> -value)		0.068		0.064

Note: \*\*\* (1%), \*\* (5%), \* (10%) Source: own calculations.

## 5. Discussion

The negative sign of alternative indicators of GL suggests that the incremental impact of increased GL on inequality is diminishing. Therefore, it is reasonable to anticipate that an escalation in GL will lead to a reduction in inequality. This finding challenges the common belief that GL exacerbates inequality. The positive correlation observed in political GL may indicate that countries with more global political ties experience greater cooperation and coordination, leading to more equitable outcomes. Overall, these results suggest that GL can have a positive impact on reducing inequality, although further research is needed to understand the underlying mechanisms and potential trade-offs. Globalization can lower income inequality in emerging economies by boosting economic growth, technological transfer, and market access. It can increase wealth and opportunity distribution by encouraging skill development, entrepreneurship, and foreign direct investment. The impact depends on good governance and policies that distribute advantages fairly. The findings are in line with Stolper–Samuelson theorem, [Bergh and Nilsson \(2010\)](#) and [Jalil \(2012\)](#) research, though they differ slightly from those of [Atif et al. \(2012\)](#); [Dabla-Norris et al. \(2015\)](#); [Dreher and Gaston \(2008\)](#); [Gozgor and Ranjan \(2017\)](#), and [Munir and Bukhari \(2020\)](#). The impact of GDP and GDP squares suggest that inequality initially increases as economic growth occurs, although at a decreasing rate. However, when a squared factor is introduced, the relationship becomes negative, indicating that an increase in GDP per capita leads to a reduction in income disparity. This outcome provides evidence for the concept of a curvilinear correlation between income inequality and economic growth, as proposed by Kuznets. It is also consistent with the similar findings of [Ahluwalia \(1976\)](#).

The service sector is responsible for increasing income inequality in developing economies. This phenomenon can be attributed to the prevalence of low-skill and low-education job opportunities within the service industry, which consequently leads to a decrease in pay for workers. Furthermore, it is worth noting that the service sector often exhibits a notable presence of prominent firms, so enabling them to leverage their market dominance in order to further lower wages. Consequently, there is an observable expansion in the disparity between those with high and low incomes, thereby playing a role in the perpetuation of income inequality within the economy. The reason behind this phenomenon is that the service industry frequently provides employment opportunities that do not necessitate a significant level of expertise or educational attainment, thereby leading to comparatively lower remuneration for individuals employed in this area. Furthermore, it is noteworthy that the service sector often exhibits a notable presence of prominent corporate entities, so enabling them to potentially leverage their market dominance in order to further depress pay levels. Consequently, there is an observable expansion in the disparity between those with high and low incomes, thereby playing a role in the perpetuation of income inequality within the economy. There is a positive correlation between higher population growth and increased income disparity. The increase in the sizes of families within the impoverished sector of the economy may be causing a dependency burden.

## 6. Conclusions

Inclusive economic growth is gaining prominence as a worldwide policy objective, with reducing inequality being a key priority of sustainable development goals. The subject at hand has garnered a significant body of literature, which explores the impact of GL on income disparity. However, there is a significant lack of literature on whether the impact of financial GL on income inequality is influenced by the actual and legal aspects of financial GL, the income levels of countries, and the baseline levels of inequality. In order to address this gap in the existing body of research, the study collected data from 18 developing countries spanning the years 1991 to 2021. The study utilized panel quantile regression to investigate whether the impact of financial GL on income inequality differs depending on the de facto and de jure aspects of financial GL, as well as the initial levels of inequality in developing economies.

In addition, when considering the control factors, it can be observed that GDP growth has a balancing impact on income inequality. The research and development sector has the greatest impact on reducing inequality, whereas the employment share in the industrial sector plays a smaller influence. Conversely, the proportion of employment in the service sector and the rate of population increase expedite this phenomenon. This finding remains strong even when other indicators of GL are included in the sensitivity analysis. Nations that welcome foreign direct investment have the opportunity to partake in the increasing worldwide affluence and fairness that accompanies GL. The data suggests that both trade and financial GL have a positive impact on equality.

### 6.1. Policy Recommendations

Multifaceted approaches are needed to address income disparity in GL. Governments should redistribute wealth through progressive taxation and increase labor safeguards, workers' rights, and minimum wage laws to ensure equitable pay. People require education and skill development to compete in the global employment market. Safety nets, trade adjustment aid, and regional development can help GL-affected workers and reduce economic vulnerability in disadvantaged places. Financial inclusion and anti-corruption avoid wealth concentration and ensure economic equality. Along with environmental restrictions, international labor standards, fair trade practices, and global taxation rules, these measures make the global economy more equal. Public-private partnerships and inclusive global economic governance can help reduce income inequality and maximize GL's benefits. A comprehensive plan is needed to handle developing economies' socio-economic difficulties such as income disparity, poor infrastructure, and political instability.



Policymakers should promote inclusive growth, invest in education and infrastructure, and create open and accountable government to reduce inequality through trade and FDI. We may achieve more fair and sustainable economic development by customizing these efforts to each emerging economy's particular difficulties.

### 6.2. Limitations of the Study

This study is subject to certain constraints, such as a notably small sample size and missing observations in the data, particularly regarding inequality itself. The analysis lacks consideration of institutions and fails to address the poverty impact of GL. Further research can enhance the study by including institutions as intermediaries and validating the findings using a larger dataset. In order to undertake a comprehensive and rigorous examination of poverty, it is imperative to incorporate an analysis of disparities as well. Through the analysis of disparities, scholars can acquire a more profound comprehension of the fundamental origins and ramifications of impoverishment. This approach can facilitate the identification of precise domains requiring interventions to mitigate the gaps in income and opportunities. In light of poverty and inequalities, scholars have the potential to enhance comprehension of the intricate mechanisms that sustain poverty, therefore fostering a more comprehensive perspective. Future work can focus on more samples. Moreover, Future research should include technical advances, political factors, and environmental concerns to examine the relationship between globalization and income inequality. These aspects will deepen and strengthen the study, improving knowledge of the complicated processes.

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## References

- Acharyya, Rajat. 2011. A note on quantitative trade restrictions, income effects and wage inequality. *Economic Modelling* 28: 2628–33. [\[CrossRef\]](#)
- Adams, Samuel. 2008. Globalization and income inequality: Implications for intellectual property rights. *Journal of Policy Modeling* 30: 725–35. [\[CrossRef\]](#)
- Adams, Samuel, and Edem Kwame Mensah Klobodu. 2019. Urbanization, economic structure, political regime, and income inequality. *Social Indicators Research* 142: 971–95. [\[CrossRef\]](#)
- Ahluwalia, Montek S. 1976. Income distribution and development: Some stylized facts. *The American Economic Review* 66: 128–35.
- Akadiri, Seyi Saint, and Tomiwa Sunday Adebayo. 2022. Asymmetric nexus among financial globalization, non-renewable energy, renewable energy use, economic growth, and carbon emissions: Impact on environmental sustainability targets in India. *Environmental Science and Pollution Research* 29: 16311–23. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ali, Ernest Baba, Samira Shayanmehr, Riza Radmehr, Bismark Amfo, Joseph Agebase Awuni, Bright Akwasi Gyamfi, and Ebenezer Agbozo. 2023. Exploring the impact of economic growth on environmental pollution in South American countries: How does renewable energy and globalization matter? *Environmental Science and Pollution Research* 30: 15505–22. [\[CrossRef\]](#)
- Ang, James B. 2010. Finance and inequality: The case of India. *Southern Economic Journal* 76: 738–61. [\[CrossRef\]](#)
- Asteriou, Dimitrios, Sophia Dimelis, and Argiro Moudatsou. 2014. Globalization and income inequality: A panel data econometric approach for the EU27 countries. *Economic Modelling* 36: 592–99. [\[CrossRef\]](#)
- Atif, Syed Muhammad, Mudit Srivastav, Moldir Sauytbekova, and Udeni Kathri Arachchige. 2012. *Globalization and Income Inequality: A Panel Data Analysis of 68 Countries*. No. 42385. Munich: University Library of Munich.

- Balan, Feyza, Mustafa Torun, and Cuneyt Kilic. 2015. Globalization and income inequality in G7: A bootstrap panel Granger causality analysis. *International Journal of Economics and Finance* 7: 192–203. [CrossRef]
- Beck, Thorsten, Asli Demirgüç-Kunt, and Ross Levine. 2007. Finance, inequality and the poor. *Journal of Economic Growth* 12: 27–49. [CrossRef]
- Berger, Nahuel. 2014. Theorist Eric Maskin: Globalization Is Increasing Inequality. Available online: <https://www.worldbank.org/en/news/feature/2014/06/23/theorist-eric-maskin-globalization-is-increasing-inequality> (accessed on 21 March 2023).
- Bergh, Andreas, and Therese Nilsson. 2010. Do liberalization and globalization increase income inequality? *European Journal of Political Economy* 26: 488–505. [CrossRef]
- Castells, Manuel. 2002. *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press.
- Choi, In. 2001. Unit root tests for panel data. *Journal of International Money and Finance* 20: 249–72. [CrossRef]
- Cuevas García-Dorado, Soledad, Laura Cornselsen, Richard Smith, and Helen Walls. 2019. Economic globalization, nutrition and health: A review of quantitative evidence. *Globalization and Health* 15: 15. [CrossRef]
- Dabla-Norris, Era, Kalpana Kochhar, Nujin Suphaphiphat, Frantisek Ricka, and Evridiki Tsounta. 2015. *Causes and Consequences of Income Inequality: A Global Perspective*. Washington, DC: International Monetary Fund.
- De Soysa, Indra, and Krishna Chaitanya Vadlamannati. 2011. Does being bound together suffocate, or liberate? The Effects of economic, Social, and Political Globalization on Human Rights, 1981–2005. *Kyklos* 64: 20–53. [CrossRef]
- Doerrenberg, Philipp, and Andreas Peichl. 2014. The impact of redistributive policies on inequality in OECD countries. *Applied Economics* 46: 2066–86. [CrossRef]
- Dollar, David, and Aart Kraay. 2004. Trade, growth, and poverty. *The Economic Journal* 114: 22–49. [CrossRef]
- Dreher, Axel. 2006. Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics* 38: 1091–110. [CrossRef]
- Dreher, Axel, and Noel Gaston. 2008. Has globalization increased inequality? *Review of International Economics* 16: 516–36. [CrossRef]
- Eichengreen, Barry, and David Leblang. 2008. Democracy and globalization. *Economics & Politics* 20: 289–334. [CrossRef]
- Forbes, Kristin J. 2000. A reassessment of the relationship between inequality and growth. *American Economic Review* 90: 869–87. [CrossRef]
- Glomm, Gerhard, and Michael Kaganovich. 2008. Social security, public education and the growth–inequality relationship. *European Economic Review* 52: 1009–34. [CrossRef]
- González Gordón, Ivan, and Budy P Resosudarmo. 2019. A sectoral growth-income inequality nexus in Indonesia. *Regional Science Policy & Practice* 11: 123–39. [CrossRef]
- Gozgor, Giray, and Priya Ranjan. 2017. Globalisation, inequality and redistribution: Theory and evidence. *The World Economy* 40: 2704–51. [CrossRef]
- Gozgor, Giray, Mantu Kumar Mahalik, Ender Demir, and Hemachandra Padhan. 2020. The impact of economic globalization on renewable energy in the OECD countries. *Energy Policy* 139: 111365. [CrossRef]
- Ha, Nguyen Minh, Nguyen Dang Le, and Pham Trung-Kien. 2019. The impact of urbanization on income inequality: A study in Vietnam. *Journal of Risk and Financial Management* 12: 146. [CrossRef]
- Harris, Richard DF, and Elias Tzavalis. 1999. Inference for unit roots in dynamic panels where the time dimension is fixed. *Journal of Econometrics* 91: 201–26. [CrossRef]
- Held, David, Anthony McGrew, David Goldblatt, and Jonathan Perraton. 1999. Global Transformations: Politics, Economics and Culture. In *Politics at the Edge. Political Studies Association Yearbook Series*. Edited by Chris Pierson and Simon Tormey. London: Palgrave Macmillan, pp. 14–28. [CrossRef]
- Huang, Kaixing, Nicholas Sim, and Hong Zhao. 2020. Does FDI actually affect income inequality? Insights from 25 years of research. *Journal of Economic Surveys* 34: 630–59. [CrossRef]
- Im, Kyung So, Mohammad Hashem Pesaran, and Yongcheol Shin. 2003. Testing for unit roots in heterogeneous panels. *Journal of Econometrics* 115: 53–74. [CrossRef]
- Jalil, Abdul. 2012. Modeling income inequality and openness in the framework of Kuznets curve: New evidence from China. *Economic Modelling* 29: 309–15. [CrossRef]
- Kaldor, Nicholas. 1955. Alternative theories of distribution. *The Review of Economic Studies* 23: 83–100. [CrossRef]
- Kanbur, Ravi, and Xiaobo Zhang. 2005. Fifty years of regional inequality in China: A journey through central planning, reform, and openness. *Review of Development Economics* 9: 87–106. [CrossRef]
- Kuznets, Simon. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45: 1–28.
- Lee, Chi-Chuan, Chien-Chiang Lee, and Donald Lien. 2020. Income inequality, globalization, and country risk: A cross-country analysis. *Technological and Economic Development of Economy* 26: 379–404. [CrossRef]
- Lee, Jong-Eun. 2006. Inequality and globalization in Europe. *Journal of Policy Modeling* 28: 791–96. [CrossRef]
- Levin, Andrew, Chien-Fu Lin, and Chia-Shang James Chu. 2002. Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics* 108: 1–24. [CrossRef]
- Liang, Zhicheng. 2006. Financial development and income distribution: A system GMM panel analysis with application to urban China. *Journal of Economic Development* 31: 1–21.
- Lugo-Ocando, Jairo. 2020. The ‘changing’ face of media discourses on poverty in the age of populism and anti-globalisation: The political appeal of anti-modernity and certainty in Brazil. *International Communication Gazette* 82: 101–16. [CrossRef]

- Martinez-Vazquez, Jorge, Blanca Moreno-Dodson, and Violeta Vulovic. 2012. *The Impact of Tax and Expenditure Policies on Income Distribution: Evidence from a Large Panel of Countries*. Andrew Young School of Policy Studies Research Paper Series No. 12-30, Working Paper. Atlanta: International Center for Public Policy. [\[CrossRef\]](#)
- Mills, Melinda. 2009. Globalization and inequality. *European Sociological Review* 25: 1–8. [\[CrossRef\]](#)
- Munir, Kashif, and Mahnoor Bukhari. 2020. Impact of globalization on income inequality in Asian emerging economies. *International Journal of Sociology and Social Policy* 40: 44–57. [\[CrossRef\]](#)
- Pal, Shreya, Muhammed Ashiq Villanthenkodath, Gupteswar Patel, and Mantu Kumar Mahalik. 2022. The impact of remittance inflows on economic growth, unemployment and income inequality: An international evidence. *International Journal of Economic Policy Studies* 16: 211–25. [\[CrossRef\]](#)
- Persson, Torsten, and Guido Tabellini. 1994. Is inequality harmful for growth. *American Economic Review* 84: 600–21.
- Potrafke, Niklas. 2014. *Did Globalization Influence Credit Market Deregulation?* Munich: Working Paper University of Munich, Mimeo.
- Potrafke, Niklas. 2015. The evidence on globalisation. *The World Economy* 38: 509–52. [\[CrossRef\]](#)
- Raab, Marcel, Michael Ruland, Benno Schönberger, Hans-Peter Blossfeld, Dirk Hofäcker, Sandra Buchholz, and Paul Schmelzer. 2008. GlobalIndex: A sociological approach to globalization measurement. *International Sociology* 23: 596–631. [\[CrossRef\]](#)
- Roy-Mukherjee, Shampa, and Ejike Udeogu. 2021. Neo-liberal globalization and income inequality: Panel data evidence from OECD and Western Balkan countries. *Journal of Balkan and Near Eastern Studies* 23: 15–39. [\[CrossRef\]](#)
- Sassen, Saskia. 1996. *Losing Control? Sovereignty in the Age of Globalization*. New York: Columbia University Press.
- Schinke, Christoph. 2014. *Government Ideology, Globalization, and Top Income Shares in OECD Countries*. Munich: Leibniz Institute for Economic Research at the University of Munich.
- Sethi, Pradeepta, Sankalpa Bhattacharjee, Debkumar Chakrabarti, and Chhavi Tiwari. 2021. The impact of globalization and financial development on India's income inequality. *Journal of Policy Modeling* 43: 639–56. [\[CrossRef\]](#)
- Singh, Ajit, and Rahul Dhumale. 2004. Globalization, technology, and income inequality: A critical analysis. In *Inequality, Growth, and Poverty in an Era of Liberalization and Globalization*. Edited by Andrea Cornia Giovanni. Oxford: Oxford University Press, pp. 145–65.
- Sulemana, Iddisah, Edward Nketiah-Amponsah, Emmanuel Ashiedu Codjoe, and Jennifer Akua Nyarko Andoh. 2019. Urbanization and income inequality in Sub-Saharan Africa. *Sustainable Cities and Society* 48: 101544. [\[CrossRef\]](#)
- Ullah, Atta, Zhao Kui, Saif Ullah, Chen Pinglu, and Saba Khan. 2021. Sustainable utilization of financial and institutional resources in reducing income inequality and poverty. *Sustainability* 13: 1038. [\[CrossRef\]](#)
- Wan, Guanghua, Ming Lu, and Zhao Chen. 2007. Globalization and regional income inequality: Empirical evidence from within China. *Review of Income and Wealth* 53: 35–59. [\[CrossRef\]](#)
- Wolhuter, CC, and Ewelina Niemczyk. 2023. Reframing the concept of globalization and human capital in contemporary education. *International Journal of Educational Research* 118: 102157. [\[CrossRef\]](#)
- Wood, Adrian. 1995. How trade hurt unskilled workers. *Journal of Economic Perspectives* 9: 57–80. [\[CrossRef\]](#)
- Wu, Dongjie, and Prasada Rao. 2017. Urbanization and income inequality in China: An empirical investigation at provincial level. *Social Indicators Research* 131: 189–214. [\[CrossRef\]](#)
- Xia, Wanjun, Nicholas Apergis, Muhammad Farhan Bashir, Sudeshna Ghosh, Buhari Doğan, and Umer Shahzad. 2022. Investigating the role of globalization, and energy consumption for environmental externalities: Empirical evidence from developed and developing economies. *Renewable Energy* 183: 219–28. [\[CrossRef\]](#)

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