

# IJRTBT | Economic Globalization and Income Inequality

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## Abstract

The potential for economic progress has been constrained in recent decades by growing income disparity. Using panel data methodologies and policy simulations, this study examines the impact of economic globalisation on income inequality in both a cross-country and country-specific context. The sample includes post-liberalization developed, developing, and least-developed nations. The findings reveal that globalisation has, generally speaking, reduced inequality in advanced nations while having the reverse impact in low-income ones. Trade and FDI have opposing effects on income distribution; trade makes it worse, but FDI is good for all countries and helps to lessen income inequality. It has been discovered that FDI has a higher effect on lowering income disparity. The policy simulations demonstrate that India may lessen income disparity by emulating the policies of middle- and high-income countries. The effects of economic globalisation on income inequality globally have been examined in a sizable body of econometric work. It is challenging to derive reliable conclusions since stated econometric estimations vary widely. The link between globalisation and inequality is summarised quantitatively and analysed in this work. Making use of a brand-new dataset with 1,254 observations from 123 primary research. They arrive at a number of key conclusions by using meta-analysis and meta-regression techniques. First, there is a small to moderate increase in inequality as a result of globalisation. Second, whereas the impact of trade globalisation is negligible, the impact of financial globalisation on inequality is much larger and substantially stronger. Third, both developed and developing nations see an average increase in inequality as a result of globalisation. Fourth, technology and education mitigate the effects of globalisation on economic disparity.

**Keywords:** *FDI; Globalization; Inequality; ICT; Trade Openness*

## Introduction

Most nations have recently been affected by the consequences of economic globalisation, which has led to higher economic growth. The extent of economic globalisation and its effects, however, differ between nations and areas with different levels of development. Economic development has benefited from increased economic globalisation at the expense of increased income disparity across nations. As the advantages of increased income are not distributed fairly across all parts of the population, widening income inequality is the most important concern of our day. The issues raised by economic disparity have sparked discussion about its effects both inside and across nations. The divide between the haves and have-nots is getting wider as a result

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of the anti-globalization argument. In favour of globalisation, it has increased equality and decreased poverty.

The way to a more equitable society is to reduce inequality, which also takes care of people's welfare concerns. There is no guarantee that the poorest members of society would gain if the pie rises but their portion decreases. Since the poor are unable to take advantage of the possibilities presented by economic globalisation, inequality reduces the productive capacity of economies, limiting their ability to expand. Developing the policy measures that improve the economy's capacity to profit from economic globalisation requires a thorough understanding of the factors that contribute to inequality.

Economic globalisation is a multifaceted term that has been defined and assessed in a number of different ways throughout the years. In 2002, the ETH Zurich unveiled the KOF International Ratio. On the basis of the first index of economic globalisation, trade openness, FDI, and ICT are used to measure globalisation. The process of building networks of linkages between players throughout several continents, mediated by different flows, such as those of individuals, information, ideas, money, and commodities, is defined as globalisation by the KOF index. The three components of the KOF index are, more particularly, productive development, political globalisation, and social globalisation. Economic globalisation essentially has two facets. The first index includes information on actual economic flows, including trade, FDI, and portfolio investment. Through the use of mean tariff rates, covert import barriers, taxes on international commerce (as a proportion of current income), and an index of capital restrictions, the second index addresses trade and capital limitations.

Drawing insightful policy findings for income distribution and poverty reduction may be aided by evaluating the influence of globalisation on income disparity. Two dimensions are evaluated in the article. The first stage is to examine the empirical association for a sample of countries representing a range of economic development levels between economic globalisation indexes and income inequality. The second involves running policy simulations to assess the effects on income inequality in a cross-country as well as a country-specific framework, notably for India.

## **Literature Review**

In completing the numeric writings evaluation on how income disparity is impacted by globalisation, this part focuses on two factors that are crucial. First, addressing the definition and measurement of the notion of financial internationalization. Second, providing a succinct summary of key hypothetical reasons that suggest how globalisation may affect income disparity.

## **Measurement and Definition of Globalisation**

The analysis in this paper is restricted to the financial aspects of internationalisation, including commerce and monetary access. Paying attention to "financial internationalisation," but to keep things simple, they'll just call it "globalisation." Economic globalisation, according to Hickel *et al.* (2022), is "the increase of worldwide economic interchange and the name given to the current

period of global economic integration. As a result, "economic globalisation" refers to the transformation of welfare states brought about by the global economy as well as a growth in direct international commerce (Buckley *et al.* 2020). Nasir, Canh & Le (2021) claim that the term "globalisation," which is used more generally in this paper, goes much beyond the measures that are generally used to measure capital flows or trade openness and includes a broad variety of features in the economic, political, and social dimensions. In this article, the concept of "economic globalisation" is considerably more limited.

The researchers follow well-established types of criteria for global economy by focusing on the economic aspect of globalisation. These typologies frequently discriminate between the three types of global integrated commercial, monetary, and total markets —while measuring the latter, which combines the characteristics of commerce and financial globalisation. The most often used measure of internationalization of trade is trade liberalization, this is often calculated as the sum of exports and imports as a percentage of GDP (although there are many different trade openness metrics). Researchers have utilised capital account liberalisation indices and FDI flow indices to analyse the financial globalisation factor. The most widely used indicator of overall economic globalisation, the KOF index of globalisation, provides a complete assessment of the economic globalisation indicators employed in prior empirical studies. The meta-data coding utilised in this study is in accordance with Hui & Bhaumik (2023), of pertinent economic globalisation indicators along the axes of trade globalisation, financial globalisation, and overall economic globalisation measures. The globalisation indicators that is using for the coding are categorised in Appendix S1 according to their impact on commerce and finance.

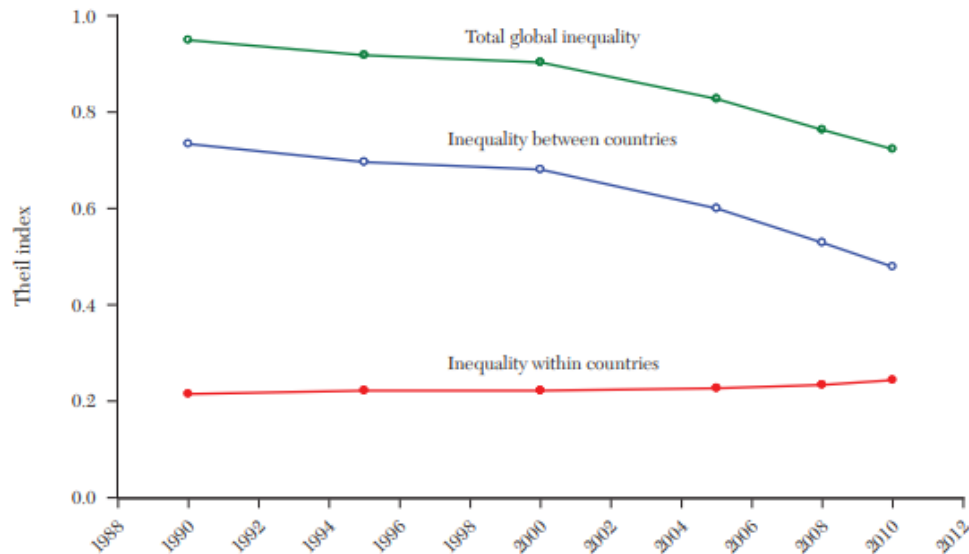
### **The Proof of World Inequality**

Here is a summary of the historical trends mentioned in both volumes. According to Hickel (2020), Global inequality, which is the proportional disparity in wages across all peoples of the globe, regardless of where they reside, has been on the rise for more than 200 years. This trend started in 1820 and continued until around 1990. The fundamental cause of this protracted period of increasing inequality was the dissimilar growth patterns, with the rich world's economic boom beginning in the advance nineteenth century (however, with some latecomers like Japan). Over a large portion of this time, the level of average inequality among nations remained stagnant or even decreasing, very importantly around the centre of the 20th era, when the affluent world came to refer to as the Great Levelling.

With a general tendency of declining inequality between nations and growing average inequality within countries, this pattern abruptly shifted near the end of the twentieth century (Permanyer & Scholl, 2019). Both books' principal themes centre on this brand-new trend in the development of global inequality. Figure 1 displays the range of Theil-based global inequality indices. Inequality throughout the world has decreased noticeably in the new century. A decline in intra-country inequality, which accounts for the majority of global inequality, has contributed to this. Since 2000, the average level of inequality within nations (population-weighted) has slightly increased.

Underlying figure 1 are a number of data difficulties including household surveys, price benchmarks, census information, and how national accounts work.

**Figure 1: Global Inequality & Between and Within-Country Components**

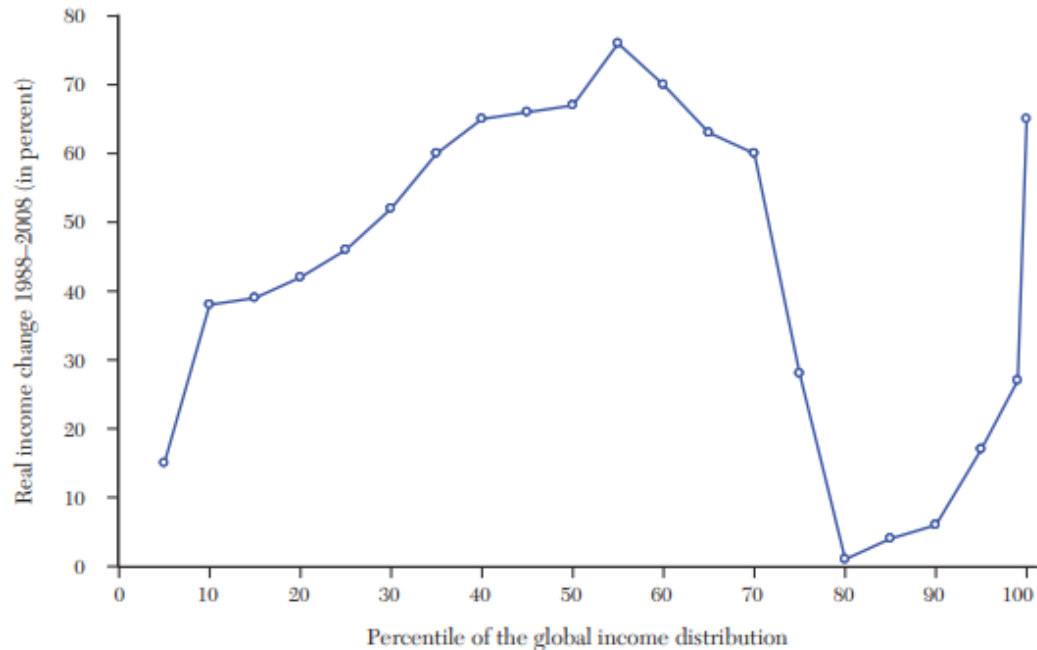


Source: (Goda & Torres García, 2016)

Although the first chapter of each book gives a quick overview of how their estimates for global inequality were created, neither book delves into great length on these topics. This article won't concentrate on data difficulties either. But drawing attention to one thing that has to be remembered. They believe that figure 1's within-country component is overstated, as do both authors. There are several causes. Survey selectivity is a problem practically everywhere, and it stands to reason that wealthy people are less inclined to engage in home surveys. The correction for such selective compliance raises the Gini index for the United States by around five percentage points, suggesting that the bias might be significant. Underreporting of revenues, particularly income from capital, is an issue as well. Estimates based on income tax records have revealed "high-end" incomes that are greater than what has been found in surveys. The degree of intra-national inequality that actually exists likely exceeds that which is currently estimated. The extent to which these measurement errors affect the trend is less clear, but based on the supposition that many newly wealthy respondents are hesitant to fully disclose their gains or even to participate in surveys, the researchers anticipate that inequality within countries is rising more than the data in figure 1 suggest. The aggregate summary data in Figure 1 don't reveal anything about the evolution of the population's income distribution. Milanovic begins by utilising a more illuminating tool to explain the development of wealth distribution in the globe using a graph from, which is replicated in figure 2. The income gain as a percentage from 1988 to 2008 is shown against the income distribution's fractiles in the graph. This is an illustration of what Omori, Mizumoto, and Chowell (2020) refer to as a "growth incidence curve" (GIC) for

continuous distributions and describe the curve's properties. The steps taken to create the GIC in figure 2 are detailed in Zainudin *et al.*, (2021).

**Figure 2: The Elephant Graph**



Source: (Zainudin, Mahdzan & Mohamad, 2021)

The Colgan (2019) graph is referred to as the "elephant chart" because it looks like an elephant's head and trunk. The sharply positive curve (the elevated trunk of the elephant) that climbs from nearly zero growth to over a 60% gain for the top percentile between the 80th percentile (from the bottom) and the top 1% globally is the graph's most remarkable characteristic. This feature will be recognisable to readers who are used to hearing about growing inequality in the developed world. Readers also pick up on the significant relative growth in incomes for those around the centre of the global distribution, popularly known as the big and growing elephant's head. The poorest people's growth was noticeably slower as a result.

### **Theories on How Income Disparity Is Impacted By Globalisation**

There are many great review articles available, but this section does not provide a comprehensive examination of the theoretical literature on the links between economic globalisation and income inequality. They limit the discussion to a few key theoretical considerations about how finance and trade globalisation affect money inequality. While doing so, analysing how globalisation has impacted income disparities in rich and developing countries while focusing on the theoretical links that have influenced a substantial section of the research. Notably, current typologies of economic globalisation indicators underline the reality that different components of economic globalisation are indeed reflected in financial and trade openness. The researchers look at trade

and financial globalisation separately in this section since they might not have the same effects on income disparity. Afterward, the meta-analysis considers a number of facets of economic globalisation.

According to the study of Heimberger (2020), economic globalisation will result in a reduction in income gaps in developing countries. The standard Heimberger (2020) trade model makes use of this as a pivotal finding. The more abundant production element of a country will profit from trade openness since trade specialisation typically advantages industries that depend largely on the plentiful component. With regard to the comparatively abundant portion of unskilled labour, developing countries frequently have an advantage over the rest of the world. Heimberger (2020)'s theory predicts that as global trade expands, in growing nations, the demand for unskilled labour will increase, increasing real wages and reducing income inequality. By raising the real return on abundant skilled labour and lowering the real rate of return on comparatively abundant unskilled labour, trade openness is predicted to reduce income inequality in developed countries. The premises upon which these theoretical predictions are based can only be considered as being quite restrictive, despite the fact that the theorem has been expanded by a number of authors beyond the fundamental premises upon which it was formed. When discussing the consequences of globalisation, the literature has surely covered a wider range of subjects. For example, offshore has been added into models of the Heckscher-Ohlin-Samuelson type, and these additional assumptions can modify the predictions given by the models. However, the original Heimberger (2020) theorem's predictions have offered essential advice for structuring hypothesis testing in a sizable portion of the econometric globalization-inequality literature for wealthy and developing nations.

It is widely believed that, from the perspective of trade globalisation to the perspective of financial globalisation, more financial openness would result in better resource allocation. Releasing these limits will disproportionately increase the wages of poorer people because credit restrictions brought on by the protection of the domestic banking system have a negative impact on their finances. This theory contends that the lure of foreign capital helps nations to spend more than they produce and invest more than they save, all of which support economic growth, increased incomes for the poor, and a narrowing of the income gap, particularly in rising nations. On the other hand, other theoretical models place emphasis on the possibility that the level of economic growth may influence how financial openness impacts distribution. Only households at higher income levels have access to and may benefit from financial openness in the early phases of development. At higher economic development levels, where a greater number of families have access to financial markets, a broader spectrum of society gains directly from financial openness. It has also been emphasised that the effectiveness of increased financial transparency in reducing income inequality may rely on how strong democratic institutions are. However, the general viewpoint has mostly emphasised the potential for financial openness to lessen inequality. The premise that greater financial openness will support economic development and increase incomes for lower-income households was frequently cited by international institutions in their promotion of capital account liberalisation in a significant portion of the global economy.



A different collection of scholarship is sceptical of theoretical claims that globalisation has a large impact on wealth inequalities —regardless of the path it takes. This scepticism is mostly supported by theoretical justifications that contend that other elements play a larger role in determining money disparity. The scope of this paper does not allow for a thorough analysis, However, other explanatory variables for income inequality that are frequently mentioned in the literature include government spending, macroeconomic variables, education, skill-biased technological change, the structure of the political system, institutions of the labour market, and technological change.

With mixed results, a number of research have attempted to examine assumptions about how globalisation affects income inequality. Academic studies on the inequality and globalisation are related have not yet made the effort to thoroughly synthesise and explore estimates from pertinent primary sources. To close this gap in the literature, our study uses meta-analysis and meta-regression approaches. Meta-analysis focuses on determining the magnitude of the impact of globalisation on income inequality, as opposed to meta-regression, which tries to uncover the sources of variance in the reported estimates of globalization-inequality. The study also gives us the opportunity to investigate if there is genuine evidence for a hazy connection or if there is a real effect that is consistent with widely recognised theoretical predictions of how globalisation affects income disparities. The researchers provide a partial answer to the question of why the provided estimates show significant variation, which adds new details on the reasons for variation in the published globalization-inequality results.

### **Globalisation-Inequity Nexus Meta-Analysis**

Because there are so many findings recorded in the empirical literature, it is preferable to evaluate them all completely and, if possible, to draw out stylized facts from them rather than picking out specific outcomes. Here, a so-called meta-analysis can be of use. This entails compiling the findings and traits of numerous studies on the subject and objectively analysing them with statistical techniques.

What can they infer about the impact of globalisation on income disparity from the available studies? And what elements help to explain the variations in reported conclusions about the connection between globalisation and inequality? In order to give quantitative replies to these issues, they has researched the effects of economic globalisation on income inequality as documented in 123 relevant peer-reviewed academic journal papers in the English language.

The definition and evaluation of "economic globalisation" must first be made explicit. According to Hui & Bhaumik (2023), economic globalisation "involves the current economic environment forming welfare states and the heightening of actual economic exchanges between nations" and should be understood as "the intensification of international economic exchange and the label for the modern age of international economic integration." The three dimensions of global market integration that are taken into consideration are trade globalisation, financial globalisation, and overall economic globalisation, all of which are measured.

There are many different trade openness indices, but the most crucial indicator of trade globalisation is trade openness, which is frequently calculated as the sum of imports and exports as a percentage of GDP (Mary & Stoler, 2021). To analyse the financial globalisation factor, researchers have used indicators like foreign direct investment and capital account liberalisation indices. The Globalization Index from the KOF Swiss Economic Institute is also perhaps now the most widely used globalisation index.

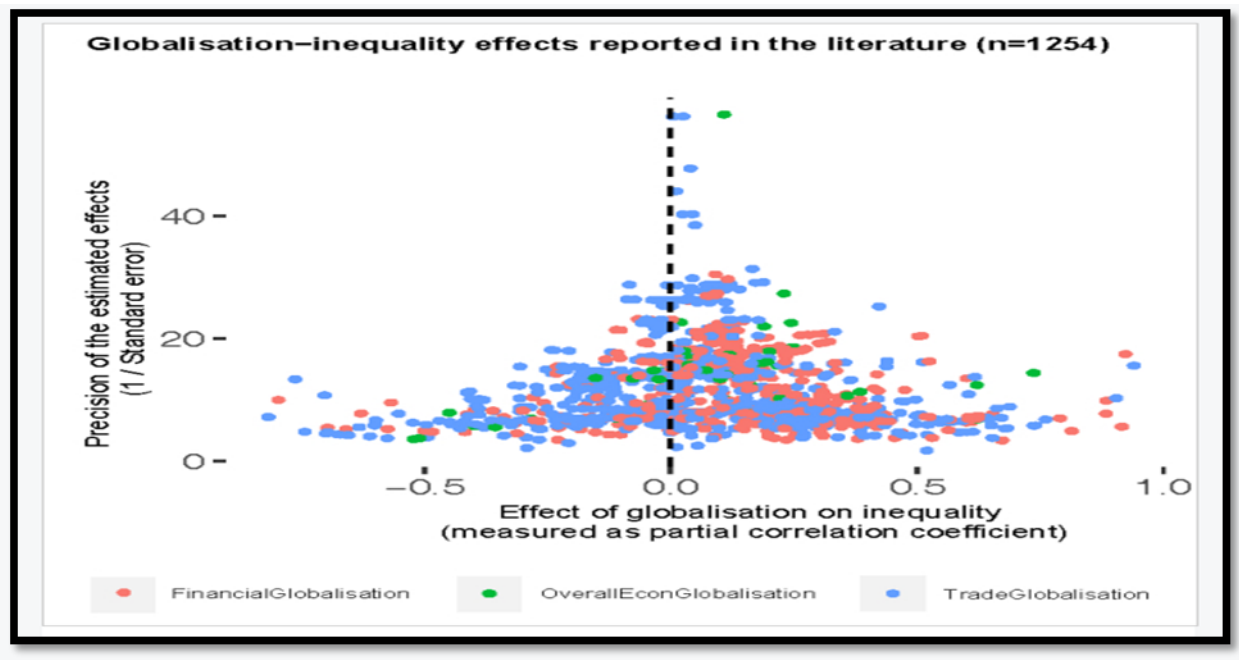
**Adverse Impacts of Globalisation on Distribution**

When analysing the more than 1,000 distinct results from the 123 articles that were published, the first thing that stands out is how evenly distributed they are. There are studies that indicate both a greater income concentration at the top and a globalization-related effect that equalises distribution.

Second, it is clear that effect sizes with higher levels of inequality are more common, especially for the subgroup of financial globalisation. However, there are surprisingly few differences between developed and underdeveloped countries.

Thirdly, my meta-analysis shows that variables that function as stand-ins for technology and education have an influence on the distributional consequences of globalisation that have been reported in the econometric literature. In addition to contributing to the explanation of increases in income disparity, education and technology also seem to mitigate the effects of globalisation.

*Figure 3: Partial correlation coefficients and precision of the estimates*



Source: (Zainudin, Mahdzan & Mohamad, 2021)



## Discussion

This section briefly discusses several common measures of inequality and measurement issues associated with them. The discussion draws heavily on a substantially longer discussion of these issues. The top share of income inequality measures provide information on the share of a country's total income held by individuals positioned at the top of a country's income distribution. For example, the measure commonly referred to as the "top 1 per cent of income" captures the share of total income held by individuals positioned in the top 1 per cent of a country's income distribution. This measure of inequality has recently received substantial attention in the academic and policy circles in response to studies. These studies constructed the top share of income inequality series for about 22 countries at annual frequencies over long time horizons. The computation of top income share usually relies on historic tax records. Published tax records tabulate information for several income brackets, and for each income bracket report the number of taxpayers, their total income and tax liability. The researchers combine this information with the information on a country's total population, total personal income, and some assumptions on taxpayer filing behaviour and the underlying shape of income distribution to compute the top 1 per cent inequality measure (Santoro *et al.* 2020).

## Conclusion

Theoretically, globalisation would increase a developing nation's abundant low-wage unskilled labour force's wages, promoting greater equality. The information however, points to advanced economies as the winners and low-income regions as the losers.

A panel data technique is utilised for the years 1993 to 2012 for 115 economies to examine how economic globalisation has affected income inequality. After that, decomposition exercises and policy simulations are used to assess how economic globalisation has affected income disparity.

Using a trustworthy data set, it is suggested that the primary cause of the rise in income inequality across the different development categories is economic globalisation. While trade has exacerbated income disparity in the HIC and LIC, FDI has continued to lessen it.

According to the decomposition exercises, economic globalisation has the worst effects on income inequality in low-income economies. Other than low income economies, our findings imply that all other economies are partially benefiting from globalisation. Even while the impact of FDI on lowering income inequality is fairly minor in low-income nations, it has broad-reaching benefits across all categories. In industrialised nations with the appropriate degree of human capital and the ability to absorb technology, FDI contributes more. The results of the policy simulations show that globalisation has worsened income inequality and that India, which belongs to the low-income group of economies, can do better if it emulates the policies of advanced economies.

## Conflict of Interests

The authors declare that they have no conflict of interests.

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