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Globalization's Ripple Effect: Analyzing its Impact on GDP Growth, Trade Balance, and Income Inequality

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Abstract
Analytically, this study focuses on key drivers of economic performance including GDP growth, world trade in service, FDI net outflows and inflation rate impact on income inequality computed by Gini coefficient. The World Development Indicators data for the years 1981-2020 is employed to examine the relationships between these variables and income inequality in a group of countries with panel regression models with random and fixed effects. Basically, the results reveal that the GDP having a significant correlation with FDI is strongly associated with rising levels of income inequality, which underlines two opposing roles of GDP growth and FDI as symbols of economic development as well as intensifying income gaps. Hence, significant variations are observed and have been discussed with respect to various degrees of relevance: which is the case of trade in services and inflation. These results suggest that, although development requires economic growth, capital accumulation and foreign investment, these processes have to be managed more efficiently so that the benefits could be fairly implemented. The last part of the report is the policy recommendations which include the means of enhancing inclusive growth, general enhancement of the quality of FDI, enhancing the successful inflation control, social protection instruments for income distribution impacts. It also enables the policy-makers to start initially addressing these concerns that are central to achieving an equitable and sustainable economic environment.

Keywords: *Income Inequality, GDP, FDI, Trade, Inflation*

1. Introduction
While the world is becoming integrated, economists and politics are now rising to grasp factors of globalisation. As the internationalisation of the economy progresses, the impact of globalisation on development, trade and/or income differences is an issue of much discussion. In this regard, the scholars have recently pointed out the significant effects of globalisation on the national economies The supporters of globalisation also pointed out that it can lead to better economic growth Huh and Park, 2021 While some other scholars argue that globalisation can deteriorate the level of income inequality Haseeb et al. , 2020. In the context of current globalisation challenges it is necessary to discuss further consequences for the growth in GDP, balance of trade, and income distribution so as to have a clearer idea of its further effects and design policies consequently.
This has led them to become a concern towards the effects of globalization on economic growth, balances of payments, or incomes per capita and inequality in Asian emerging countries. In turn, globalization has had a varied

effect on the area, as some states have observed qualitative changes in their economy, while others has rather a tendency towards increasing of income inequality and economic standstill (Santiago et al. , 2019). Moreover, recent findings have sought to unmask the fact that globalization has had both positive and negatives impacts on the economic growth and the wealth inequality hence some scholars have posited that promise of prosperity had not been realized in many Asian countries (Krugman, 2019). It is thus important to investigate the pecuniary vantages and disadvantages of globalisation in the Asian developing countries in its method of analysis to form policies appropriate for these countries. Globalisation and income inequality relationship can be of enormous concerns to Asian emerging nations.

While some believe that globalisation has led of to an eradication of poverty through new business opportunities and foreign investment and improved access to technology (Wade, 2020), others believe that, on the same note, globalisation has increased levels of income inequality by offering better returns to skills, knowledge, technology, and capital as opposed to labour (Roy-Mukherjee and Udeogu, 2021). Moreover, foreign capital and export-processing industrialization have been accompanied by concerns about exploitation of Asian developing countries' labor, environmental pollution as well as cultural imperialism. Given that these countries are liberalising their markets and integrating into the global economy; research has to be carried out on the effects that globalisation has on regional income disparity and its measures in order to develop policies to counter the detrimental effects of globalisation on delicate and sensitive groups of people; whereby policies such as progressive taxation, welfare, and labour protection should be implemented.

The following discussion will show that; thus, the process of globalisation does not pose a threat to the growth and development of the global economy. New studies have brought out the negative facet of globalization especially its tendency to increase inequality and economic insecurity (Tang, 2020; Krugman, 2019). Thus, my research will seek to enrich this debate by assessing the effect of globalisation on GDP growth, trade balance, and income inequality in Asian developing economies to enhance understanding of the accomplishments and shortcomings of the Asian developing economies concerning the SDGs, particularly SDG 8 and SDG 10. Based on a combination of the Globalisation and its Impact indexes as well as primary data collected in 10 Asian emerging countries during the period 1981-2020, I will research the intricate relationship between globalisation, economic development, trade balance and income inequality. The empirical analysis is estimated on a panel dataset of 400 observations on 10 emerging Asian economies over the period of 1981 to 2020. Hence, the statistics indicate significant variations in the degree of GDP per capita growth rate, trade balance, income disparities, and levels of globalisation among countries and over time.

To investigate the relationships between globalisation, economic growth, trade balance, and income inequality, I used Stata 17 and a variety of econometric models such as random-effects GLS regression, fixed-effects regression, Pesaran's test of cross-sectional independence, Friedman's test, Frees' test, Pesaran's Panel Unit Root Test, Westerlund test for cointegration, and the Augmented Mean Group (AMG) estimator. The findings have significant implications for policymakers working to promote long-term economic development and reduce income disparity in Asian emerging nations.

The second chapter provides a detailed literature review on the influence of globalisation on economic development, trade balance, and income inequality, emphasising the field's theoretical and empirical issues. This chapter summarises existing information and indicates the research gaps that this study intends to solve. Chapter 3 describes the theoretical framework that underpins this research, giving a conceptual underpinning for the examination. Chapter 4 explains the study methods, data sources, and model specifications used to examine the links between globalisation, economic growth, trade balance, and income inequality. This chapter also goes into the data gathering procedure, the variables used, and the estimating strategies applied. In Chapter 5, there is a summary of the samples ' estimation outcomes as well as the arguments and findings on the impact of globalisation on development, trade balance and income distribution. Therefore, Chapter 6 concludes the study by proposing policies and the recommendation for the future studies with an emphasis on the significance of the present study to the current literature. The research ends with the list of references containing all the sources cited in body part of the research.

1.1 Problem Statement

While the layman tends to view globalization as the driving force for economic growth and development, academic research has nailed the ugly side of globalisation including its effectiveness in increasing income gap, cyclic economic Volatility and eradicating localized industries. Many questions remain unanswered by the existing

literature regarding the impact of globalisation for the economic development and trade balance, and distribution of income in Asian emerging nations. Moreover, the increasing FDI dependence, rapid growth of the international trade, and increasing influence of the GVCs have created delicate webs of the interconnections of the region's economy that need to be analyzed. Therefore, this study intends to fill this knowledge gap by exploring the association between globalisation, growth rate, balance of trade, and income disparity in ten Asian developing economies between 1981 & 2020 and thereby it will explore the policy implications that Asian developing economies needs to adopt for sustainable and inclusive development.

1.2 Research Questions

1. What implications does the process of globalisation have on the growth of the Asian emerging markets?
2. How does globalisation influence income disparity in Asia's emerging economies?

1. 3 Objectives of the Study

1. For this purpose, the following research question was developed to find out how globalisation influences economic growth in Asian emerging economies.
2. To analyse the role of globalisation in worsening the distribution of income in the emergent economies of Asia.
3. Establish the correlation and causality between globalisation, economic growth, and income inequality.
4. To enable the formulation of policies for the enhancement of sustainable and equitable development in Asian emerging economies in the age of globalisation.

1.4 Hypothesis of the Study

- **H1:** Globalisation facilitates economic development within the framework of Asian emerging markets.
  H0: The process of globalisation does not significantly influence economic development in Asian states – the emerging ones, in particular. (Null hypothesis)
  H1A: Globalisation is unfavourable to economic development in Asian emergent economies. (Alternative hypothesis)
- **H2:** Globalisation intensifies income inequality in Asian emerging countries.
  H0: The change in income inequality in the emerging Asian economies is not affected by globalisation. (Null hypothesis)
  H2A: The increase in the cross-border flow of goods, services and capital reduces income differentiation in Asia's emerging markets. (Alternative hypothesis)

1.5 Research Gap

Although there is a growing literature on the impacts of globalisation, there is a substantial dearth of literature from the viewpoint of empirics on the effects of globalisation on economic growth and income distribution in Asian emerging markets. In the previous studies on globalisation and economic outcomes in the industrialized countries; not a lot of investigations have been directed towards the issues and scenarios of the developing Asian economies. Moreover, there has been rather a tendency in past studies to address globalisation indicators on the most basic level and employ rather naïve measurements of its manifestations on many fronts and in many contexts affecting various sectors and communities. This research gap thus aims at being filled by this study which is geared towards presenting a detailed analysis of the impacts of globalisation on the economy growth and income distribution in Asian emergence economies. This research gap hence underlines the necessity of a more refined and in-depth analysis of the circumstances of Asian emerging economies, thereby providing the basis for your research to contribute to the fill of this gap.

2 Literature Review

In their study exploring the impact of globalisation and resource distribution in addressing poverty and income inequality due to COVID-19, Ofori et al. (2022) focus on economic development and inequality. This research work uses panel data for 30 developing countries for the year 2010 to 2020. Authors employ the GMM estimator to analyze the relations between the globalization, resource allocation, economic growth and income distribution. The information presented show that globalisation widens the income dovetail, but can help to mitigate the process with

the correct supply of resource. It insists that, for the policy makers, it would be important to design polices that foster growth that is more equal, resource mobilisation and distribution efficient, and that reduces income disparities.

Globalisation and gender parity on economic development in the OIC countries for the period 1990-2015. Thus, investigating the relations and causes between the variables, the authors employ the fixed effects regression and Granger causality test, determining that globalisation and gender parity exert positive impact on the economic growth, however contingent on gender parity, the effect of globalisation is differed. The study also suggests that the attainment of gender parity is a complementary strategy to globalisation for long-term economic development, and governments need to address the issue of gender parity while formulating the policies to do with-globalisation. The study contributes to the literature on globalisation, gender and economic growth by underlining, at the same time, the qualifications of gender as a factor that can enhance the positive impact of globalisation on developing the economic growth of the OIC countries.

Continuing the current debate of the distributional consequences of globalisation, Sung et al. (2021) examine the share between capital and labour within the globalisation framework. The authors use the quantitative research design to investigate the relationship between globalisation and the labour share of income by utilizing the panel data set of 133 nations over the period 1990 to 2016, controlling for various country characteristics. By doing so, they find out that globalisation is related to a decline in the labour share of income and that this effect can be mitigated by robust labour institutions and social protection programmes. It also minutely focuses on the role of the policymakers to bring legislations to protect the workers' rights and to promote a fair share of the economic benefits in globalization era. According to the findings of the study, the globalisation has weakened the bargaining power of labour as envisaged and business can easily look for cheap labour or even opt for mechanisation of production. The analysis suggests that politicians are able to change the nature of distributional consequences of globalisation and protect the workers.

In this numerical and qualitative literature review, Nolan et al. (2019) explore income inequality in the developed countries and provide an extensive review of the field. The authors analyze the available literature on the impact of technological advancement, globalization, employment structures, schooling, and taxes on income distribution. They are able to work out that while technical progress and internationalisation have increased the income differentials, such elements as regulation of the labour markets, education and taxes have the contrary effect. The work stresses the need to address such factors as progressive taxation and education that can help to tackle income distribution. To summarize, the authors also importantly note the need for carrying out more research regarding the phenomenon due to the complex connections between the factors relating to income disparity.

Osinubi and Olomola's (2021) study looks at the links between globalisation, economic inequality, and poverty in four emerging countries: The few African countries involved in the smuggling of stolen crude oil include; Mexico, Indonesia, Nigeria, and turkey. Leveraging on econometric analyses, the authors ascertain globalisation as a determinant that has made income levels even more disparate besides deepening poverty in the four countries under consideration. The report always stresses that the policies of the governments should support the inclusion of all population groups and minimise the gap between the rich and the poor through education and training, progressive taxation and minimum guarantees.

Zankovsky et al. (2021) examine the social consequences of economic globalization in developed and developing countries to understand the best practices. Globalisation is discussed taking into account current literature and empirical data of income distribution, poverty, employment and social welfare. They deduce that, although globalization has offered economic benefits, it made huge social costs including high income differentials and poverty in most countries. This report suggests that the policies to counter social costs of globalization have to be developed by policymakers and these can include the measures for social protection, education and training, and labor market regulation.

Mossig and Lischka (2022) explore globalisation, interdependence, and the issue of economic crises and their meanings for social policy. By illustrating historical incidences and the actual evidence the authors, the authors are able to describe how globalisation has enhanced the level of economic integration among nations and enhanced their vulnerability to economic mishaps. They argue that cyclic recessions have social impacts that are devastating to society including incomes inequality, poverty and unemployment. The authors stress that these social consequences should be considered by politicians when designing economic policies and searching for ways to lessen the impacts of negative economic trends on people's well-being.

Grigoryev and Pavlyushina, recollect on the ways in which the modern global recession influences the patterns of wealth distribution and the power of elites in the twenty-first century. Based on the actual data from the international organisations and the national statistics of the 2008 international financial crisis, the authors employ the method of the linear least squares and the hypothesis test to explore the relationship of global recession and income difference. This makes it possible for them to know what causes threaten the elite's power structures, explain other factors, and see potential effects of future economic collapses. The paper also determines a positive correlation between global recession and income disparity meaning that recessions increase income inequality and destabilize elite power relations. The authors of the paper suggest that governments should mitigate income difference using taxation policies, social services, and labour market reforms in order to reduce its social and political impacts while at the same time supporting economic balance at the global level.

Kokodey et al. (2020) examines the impacts of globalisation and managing the supply chain on socio-economic activities at the natio Thus, employing quantitative data from different international organisations and national statistic data for 2000-2018, the authors reveal the long-run relationship of these factors by means of panel data regression analysis. This paper identifies a strong correlation between globalisation and socio economical processes which in combination with the support of the hypothesis strongly suggests that globalisation enhances the national socio economical growth. On the other hand, reviewing the relationships between features of supply chain management and socioeconomic processes, the authors establish a negative correlation, which means that using global supply networks can be detrimental to national economies. According to the authors, policy makers should care for the effects of globalization and supply chain management on socioeconomic phenomena while deciding and the countries should attempt to reconcile globalization with the beneficial control over national interests and socioeconomic welfare.

As for Zhang et al. (2022), they consider the impacts of global transition from globalisation to regionalization in terms of the environment and economy. Employing the vector autoregressive (VAR) model and impulse-response functions, the authors employ the variables comprising of regionalization, globalisation and environmental emissions, and the global production throughout the years 1995 to 2019 to analyse the short-run and long-run relationships. The study revealed that a change from Globalisation to regionalization is disadvantageous in terms of emissions within the environment and hence credited regionalization as a factor that enhances environment sustainability. Yet, the authors uncover the notion that regionalization negatively affects economic production and infer an inverse relationship of environmental conservation and economic development. According to these conclusions, the authors propose that the regionalisation strategies used by the policymakers should include the environmental conservation alongside economic growth goals like funding into a clean technology such as energy and endorsing sustainable trade.

Verico and Pangestu (2021) explore the Globalisation Economic Effects going through time series data within the country over the period 1980 to 2018. In employing the studies, the authors employ a Vector Error Correction Model (VECM) which entails short-run and long-run coefficients involving globalisation, economic growth, employment and poverty reduction. Thus, the authors conclude that globalisation itself has a positive effect on economic growth and employment in Indonesia, but a negative effect on poverty reduction. According to this report, the government of Indonesia is advised to consider the directions on how Indonesian authorities should pursue polices that would promote economic growth and employment, while, at the same time, mitigate social costs of globalization for poverty alleviation which, in general, includes monetary safety nets, education and training initiatives. In sum, this research gives insights on the complex impacts of globalisation on Indonesia's economic structure, and the call for complex strategies in order to reap gains, and prevent the social cost of losing out.

Linsi and Mügge (2019) examine as how globalisation influences the validity and accuracy of cross country economic data. Such examination reveals that globalisation has worsened the defects in intenational economic statistics by conducting a qualitative content analysis of data from diverse sources such as international organisations, national statistical offices and academic research. The flaws mentioned here; inconsistencies, biases and omission and might have an impact on the economic policies and research. The study accustoms the fact that promoting international economic statistics, international organisations, nation statistical offices, and academics should built new methodologies and standards for increasing the quality and reliability of international experimental statistics in condition of globalization. Moreover, authors propose more openness, accountability, and cooperation of statistical institutions to adapt to the new exacerbations of International economic statistic. Therefore, the overall focus of the study is to stress the significance of reliable economic statistics in the context of globalization and provides suggestions for improving the quality of cross-country economic statistics.

The literature by Hammudeh et al., (2020) examine the non-linear relationship between economic growth, globalisation, and income distribution by paying attention to the parts of financial development and governance. The authors employ the panel data analysis for 75 countries for the period of 1990–2017 for both emerging and advanced economies to analyze the short and long-run relation between the variables through GMM estimation. It also revealed that the globalisation and the financial development are influential in promoting the economic growth but on the other side the socio-economic inequality slows down the economic growth. Also, the authors find that good governance moderates the negative effects of wealth inequality on growth According to the study, it is the set of non-linear associations when, combined with the roles of financial development and governance, can brighten understanding of the existing relations between the growth, globalization factors, and income difference. In sum, the study provide policy makers with copious information useful in steering toward sustainable, equitable economic development in a world that is becoming shorter with human and geographical barriers.

Trade intensity and the fiscal integration provoking income inequality in the Economic Community of West African States are analyzed by Dout and Kebalo (2021). As the type of data, the authors employ panel data for 15 countries belonging to ECOWAS spanning the period 2000-2018 While exploring the relationship of the variables, the authors utilize the GMM technique. By their studies, they elucidate that the trade intensity that rises leads to higher levels of income inequality, whereas the fiscal integration, which gets improved, results in lower levels of income inequality. From the study, there is a strong call for the analysis of distributional effects of trade and fiscal policy in the ECOWAS member countries. Several recommendations are laid down by the authors, these include calling on policy makers to embrace fiscal integration and seeking to establish measures that reduce economic imbalance in the federation such as progressive taxes and social security nets. Secondly, they also opine that there are a lot of cautions which should be used in pushing for measures of trade liberalisation since it deepens the inequality income. In sum, the study provides relevant suggestions to policy decision makers who are planning for economic development for the ECOWAS member countries.

Polacko in his publication of April 2021 has provided a comprehensive understanding of the factors behind the emergence of income inequality as well as the consequences of the same supported by the findings of multiple studies. When reviewing present level of study in this field the author compiles data on influences which determine income differentials even including economic development, globalization, technological change, education and policies inclusive of taxes and spending on social services. This research establishes a correlation between income inequality and negative effects such as a low level of economic mobility, high levels of poverty, and low social capital. The author why politicians should try to implement measures to narrowing the gap of economic inequality, which can be through the implementation of progressive taxation, vocation education and training as well as subsidies. In addition, the author himself points out that it is the task of the next research to focus on studying the subtle relationship between the increase in income inequality and its causes and consequences in order to provoke relevant and efficient policy reactions. In sum, this paper offers a valuable account of the current state of affairs concerning income inequality and underlines the necessity for health officials and researchers to address this urgent issue.

Kobrin (2020) examines the change in the tone and nature of discourses on globalisation from a prospect of danger. Using a content analysis of publications and speeches from 2010 to 2020, the author concludes that globalization is linked to numerous negative consequences, and it is frequently held accountable for social problems and the loss of jobs. According to the report, the change in the tone of this discourse is occasioned by political and economic factors; the same leaders of the nations and the corporations are challenged to reframe globalization, promoting the wins while at the same time, explaining the losses. Therefore, the international business policies should focus on adopting sustainable globalisation policies in order to create an equitable global economy. In sum, the present research contributes to raising the awareness of the globalisation and its implications for international business policy.

Thus, Goldberg and Reed (2023) examine whether the world economy is deglobalizing, and if it is, what is causing it. For the connections between globalisation, trade policy, technological change and economic nationalism, they rely on quantitative and qualitative data from the 2000s up to 2022. They argue that whether one defines it as ‘economic Guardianism’ or ‘everyday globalization,’ it is clear that deglobalization is taking place albeit in a slow and speculative manner and predict that free trade is now a thing of the past and protectionism, technologically driven change, as well as nationalism are entrenched. The authors state that more attention should be paid to potential consequences of deglobalization actions and authorities should unite to define better strategy of globalization by requests to advance technology in digital trading and collaboration of countries on important

issues. All in all, this research provides valuable recommendations regarding the nature of globalisation processes and their impact on the global economy.

As Paganetto and Scandizzo (2020) discussed on what and how about the sustainability of globalization; the economic, social, and environmental factors are mentioned. Analyzing the literature and data from such sources as the World Bank and the United Nations from 1990 to 2020, the authors show that globalisation positive and negative impacts are on the sustainability. They have attributed economic development to the enhancement of disparities as well as destruction of the environment. The authors recommend the application of policies as paradigms for the sustainable globalisation such as capital flow regulation, human capital development, and environmental conservation policies. Moreover, they stress the importance of the international cooperation concerning the global challenges and the formation of the fairer and more sustainable world. In conclusion, the paper gives an insight on how globalisation affects sustainability and so calls for the enhancement of the globalisation process that will enhance the lives of the people while conserving the environment.

Chyi and Su (2020) pay attention to the relationship between the technology advancement patterns, trade openness, and income inequality across countries. Therefore, they employ cross sectional data from 62 nations for 1990 to 2015 to establish the effect of technology advancement and trade on income inequality. The authors also use the same data to estimate their panel data regression analysis and establish that technical development and trade openness have positive coefficients with income inequality this reveal that while trade liberalisation and technology advancement therefore brings many benefits to the economy but these are not fairly distribute across the population. According to the authors of this paper, governments should consider legislation that/regulate the economic difference as to progressive taxation, education/training, and basic income. They also suggest that governments try to embrace an innovation in the use of technology and trade and also increase openness and justice in societies. In general, the study stresses on policymakers to consider to the effects of technology innovation as well as trade openness on distributional gains before they embark on measures that will lead to a more balanced economic development.

In their article Manyika et al., (2019), the authors analyze the trend of the declining labour share of income in the United States and the possible causes and implications. They apply panel data analysis on the macroeconomic data from US Bureau of Economic Analysis for 1947–2017, to examine the relationships between technology change, globalization, industry structure and labour income share. The authors find that technological advancement and changes in industry structure rather than globalization are the primary drivers of the declining labour share using regression analysis and a decomposition technique. It discovered that there was a relatively high variation of the labour share trend in different industries and sectors. The authors also suggested that governmental policies on displaced workers should be put in place so that they have soft landing through education/training; and on increased adoption of information technology and increased productivity; governments should ensure that the gains are fairly distributed by profit sharing. They also encourage organisations to invest in capabilities related to human resources and technologies that are complementary to those of the employees. Altogether, the present paper contributes to the existing literature on factors that characterise dynamics of the labour share of income and offers useful insights for governments and enterprises to learn about the obstacles arising from technological advancements.

In the present day globalised world, Bachas et al. (2022) delves on how the laws of tax effect the distribution of income or factor income taxes between labour and capital. Thus, they employ a set of the annual country-level macroeconomic data for 1995–2017 to examine the effect of globalisation on tax rates and factor income shares. Overall analysis using fixed panel regression techniques establishes that globalisation is associated with decrease in labour income share and increase in capital income share and the effect is subjected to aggravation by lower rate of capital income taxation. Based on the facts presented, the authors suggest that governments should consider the implementation of more progressive taxation policies like increasing capital income tax in order to reduce the adverse effects of globalization on the labour income distribution. They also plead for more international efforts to cooperate in tax matters, in an effort to stop the race to the bottom. In summary, the research underlines the need to consider the distributional impact of globalization and taxation as key factors with regards to income distribution.

In the present work, Hung (2021) examines contemporary trends in global economic disparity concentrating on disparities in income and wealth adjusted on a global, national, and regional level. By the help of statistics from the World Bank and the United Nations for the period of 1990-2020 it becomes clear that, despite the general tendency for the increase of economic inequality in the World throughout the 1990s there were significant differences between different zones and countries. The survey also indicates increasing trend in income per capita and rising income inequality between the insiders of a country, the rich and the poor. To test this hypotheses of Globalisation

Technological change and Economic institutions the author employs the techniques such as descriptive statistics and regression in to explore the interconnection of Globalisation Technological change and Economic institutions and Economic inequality. The author encourages politicians to look for strategies to narrow the gap of economic distribute for example through taxation policies, social security policy and labour market policy. Moreover, the author calls for a cooperation in an attempt to reduce the disparity within the global economical development. Therefore, the study urges the policymakers to pay attention on the importance of increasing the economic equity, so as to provide basis for just and sustainable kind of economy.

The study of Hailemariam et al. (2021) focuses on the long run determinants of income inequality and covers panel data for the period 1870 to 2016. To test the relations between income inequality and many economic, political and institutional factors, the authors apply different econometric methodologies such as fixed effects and system GMM estimates. Eschinch and Sturm explain that technical advancement, globalisation, and political instability are valid predictors of inequality while education; democracy, and unions are valid predictors of inequality. The paper also establishes that the effects that these factors have on income disparity are also location and country dependent. With regard to their findings, the authors have numerous policy prescriptions for those in power who would wish to reduce income differentials: The goal must be to support and strengthen education, democracy and workers' rights while regulating the fallout of technology and globalization.

3 Theoretical Framework

3.1 Kuznets Curve Hypothesis

According to Kuznets Curve Hypothesis, there is a negative relationship between economic development, as proxied by GDP, and inequality which initially increases before reducing. This concept was put forward by Simon Kuznets in 1950s and basically suggests that in the process of industrialization and growth of preceding stages of post-industrialization, inequality rises, reaches its maximum and then declines. This is believed to be due to technology, increasing urbanization and shift in labor market demands and place. Therefore, in the context of my research, the Kuznets Curve Hypothesis provides a theoretical perspective for analyzing the interconnection between the level of GDP, its growth, and income inequality at different stages of development.

3.2 Heckscher–Ohlin Trade Theory

This theory, also known as Factor Proportion Theory or Heckscher Ohlin Trade theory was laid down by Eli Heckscher and Bertil Ohlin involves the detailed analysis of the relationship between trade global trade and the input of the production factors. It is presumed that nations will export goods that make heavy use of abundant factors of production and import goods that make use of scarce factors heavily. When applied to this idea, there is an expectation that commerce internationally may transform income distribution within nations by changing relative demand and prices of the composite parts of manufacture: skilled labor as compared to unskilled. Using the insights offered by the H-O Trade Theory, it is possible to establish the impact that the alteration in services' trade as a percentage of the GDP might exert on income disparity through altering labour market features and wage structures.

3.3 Dependency Theory

Dependency Theory studies the world economic system with regard for the relation between the First, the Second, and the Third World. This thesis formulated in the middle of the twentieth century by Raul Prebisch and Andre Gunder Frank postulates that development countries are inherently constrained since they are in a dependent relation to industrialized countries for funds, technology and markets. As per the school of Dependency Theory, FDI and global business lead to a rise in income inequality in the third world nations as these deliver substantial income to a narrow élite minority and perpetuate disequilibrium. Ultimately, in your study, you use Dependency Theory to elaborate on how FDI net outflows (% of GDP) may impact income distribution by changing the balance of power and dissemination of resources within the host country.

4 Research Methodology

4.1 Data Source

"The sources of data for this study are secondary sources from the World Bank's World Development Indicators (WDI) database. The sources are from 1981 to 2020 and provide accurate and reliable economic and social data for

a wide range of countries. Since, the WDI contains a wide range of data for most countries and has adopted a standard methodology that is widely used in the economic research.

4.2 Methodology

In this study, the research focuses on whether there is an association between the level of economic development characterized by GDP growth, trade of services, FDI net outflows, and inflation with the level of income inequality based on the Gini coefficient. The reason why decision was made to use panel data analysis is because this method allows to consider both the cross-sectional (between nations) and time-series (over time) data. This approach proves useful in explaining the unobserved characteristics of the firms, and the estimates obtained are more accurate than with only cross-sectional or time series data.
This study uses two types of panel regression models:

4.2.1 The Random Effects Model (REM)

Assumes that individual-specific effects are not associated with the independent variables. It is appropriate when the emphasis is on variance between countries.

4.2.2 The Fixed Effects Model (FEM)

Accounts for each country's time-invariant features by correlating individual-specific effects to the independent variables. It is suitable when analysing the long-term influence of factors within nations."
Various diagnostic tests, such as the Pesaran CD test for cross-sectional dependency and the Pesaran CIPS test for unit roots, are also used to confirm the validity and reliability of the panel data analysis. The Westerlund cointegration test is used to determine long-term connections between variables.

4.3 Specification of the Model

The empirical model used to analyse the link between income inequality and the selected independent variables is described as follows:

$$\mathbf{Giniit = \alpha + \beta 1.\ GDPit + \beta 2.\ Tradeit + \beta 3.\ FDIit + \beta 4.\ Inflation + \epsilon it.}$$

Where:

- Giniit shows the Gini index for nation i in year t.
- α represents the intercept term.
- The coefficients for the independent variables are β1, β2, β3, and β4, respectively.
- GDPit represents a country's yearly percentage growth in GDP.
- Tradeit refers to a country's trade in services as a percentage of GDP in the given year.
- FDIit represents foreign direct investment and net outflows (percentage of GDP) for nation i in year t.
- Inflation refers to the yearly percentage increase in consumer prices for a country in year t.
- ϵit is the incorrect term.

4.4 Variable Description

4.4.1 Dependent Variable

The Gini index (Gini) assesses income disparity within a country. It spans from 0 to 100, with 0 representing complete equality (everyone earns the same amount) and 100 representing perfect disparity.

4.4.2 Independent variables

GDP Growth (GDP)

This variable denotes the yearly percentage growth rate of GDP at market prices, using constant local currency. It indicates the country's overall economic performance and growth.

Trade in Services (Trade)

This variable is represented as a percentage of GDP and represents the total value of all service exports and imports

in relation to the country's overall economic output. It measures a country's openness on international business especially in the service sector.

Foreign Direct Investment, Net Outflows (FDI)

This figure as a percentage of the specific country's gross domestic product portrays the net outward flows of foreign direct investment, which explains the amount of capital that is invested in another nation for investment purposes. This shows the nation's engagement on foreign investment transactions.

Inflation, Consumer Prices (Infla)

This figure depicts the annual rate of increase in consumer price index which gives the rate at which general price level for the goods and services is Emmanuel Appiah on Facebook actively progressing. When it comes to economic stability and purchasing capacity, it is one of the significant parameters.

Thus, the research will assess these variables in the aim of presenting a comprehensive view of the factors contributing to income divide amongst nations and over time.

4 Estimation and Results

In this part, we present the result of empirical research on the relationship linking GDP growth, service trade liberalisation, FDI, and inflation to the Gini index of income inequality. The initial indicator is the summary statistics or simple descriptive statistics because they provide a general picture of the data's distribution and dispersion. Subsequently, we analyze the literature's pairwise relations to enhance the understanding of linear associations of pair-wise. Since income inequality could be influenced by our independent variables, we employ the random effects and fixed effects models. The key Pesaran CD test is used to test for cross-sectional dependence, Pesaran CIPS for cross-sectional stationarity while the Westerlund cointegration test of panel otherwise long run relations are examined. Last but not the least, country level variance and cross sectional dependency are controlled by using the AMG estimator. The results of these models and tests provide a comprehensive understanding of the interaction between such variables as economic development, trade, FDI, inflation rate, and income distribution and indicate significant connections between the variables as well as the assumptions' validity.

Table 1: Summary Statistics of Variables

Variable	Overall Mean	Overall Std. Dev.	Overall Min	Overall Max	Overall N	Between Mean	Between Std. Dev.	Within Mean	Within Std. Dev.
gini_n	20.12	31.33169	1	112	N = 400	13.97764	3.875	28.37952	25.655
fdi_n	162.0525	109.0563	1	357	N = 400	78.14746	66.925	79.89481	46.8475
gdp_n	197.665	115.3456	1	397	N = 400	30.2849	154.625	111.7008	24.26
inflation_n	176.0275	113.2428	1	374	N = 400	46.89929	104.8	104.1123	27.0975
trade_n	185.8	115.1195	1	385	N = 400	78.4349	54.775	87.75981	66.8

The xtsum command returns summary statistics for five panel data variables: The variables of concern include gini_n, fdi_n, GDP_n, inflation_n, and trade_n. On average, gini_n which is computed from 400 observations is equal to 20. 12 while the standard deviation is 31. 33, indicating considerable variation. From the results, it can be deduced that the mean of fdi_n is equal to 162. 05 and standard deviation of 109. 06 that shows as the significant change in the scale of foreign investment at the territory. gdp_n averages 197. Mean age was 67 years (+/- 115) for all patients in the study. 35, the fact that it is expressed using different indicators shows that economic production is different in various organisations. The mean value of Inflation_n is 176. 03 and, respectively, the standard deviation is equal to 113. 24 meaning large and very active price movements. Thus, trade_n has a mean of 185. 8, and the standard deviation of 115. 12, implying that the level of trading between the entities is different. Also, the main descriptive statistics include between-group data (n = 10) and within-group data (T = 40) to differentiate between different pairs of entities and temporal variation. They include complete summary statistics of additional economic indicators of the population, and therefore are relevant to preserve in the dataset truly useful for economic research or for the development of economic policy.

Table 2: Pairwise Correlation Matrix

	gini_n	fdi_n	gdp_n	inflation_n	trade_n
gini_n	1.0000				
fdi_n	0.3814	1.0000			
gdp_n	0.0999	0.0889	1.0000		
inflation_n	-0.0513	-0.0840	0.0743	1.0000	
trade_n	-0.0282	-0.0969	0.0160	0.1403	1.0000

The following table presents the result of pairwise Pearson correlation coefficients (pwcorr) on the variables used which is gini_n (income inequality), fdi_n (foreign direct investment), gdp_n (gross domestic product), inflation_n (inflation), and trade_n. Every cell contains the value of the correlation coefficient pertaining to the related variables. The diagonal from top left to bottom right shows the correlations that any variable has with itself and therefore will always be 1. A correlation coefficient closer to 1 or - 1 indicates that the variables have strong positive and negative linear relationship respectively while a coefficient close to 0 indicates that there is very little or no linear association.

Table 3: Summarized table based on the statistics for the variables

Variable	Observations	Mean	Std. Deviation	Min	Max
gini_n	400	20.12	31.33	1	112
fdi_n	400	162.05	109.06	1	357
gdp_n	400	197.67	115.35	1	397
inflation_n	400	176.03	113.24	1	374
trade_n	400	185.80	115.12	1	385

The data involves four hundred records for every variable and provides the basic economic variables data. The gini_n has the average of 20 Thus, the higher the Gini coefficient shows the higher level of concentration. 12 with a population standard deviation of 31. 33, thus indicating the presence of large differences in the level of income inequality in the sample that is between one and one hundred and twelve. We see that foreign direct investment FDI which we denote as fdi_n has a mean of 162. 5 and the standard deviation of 109 for the weight variable. 06 and the foreign investment levels vary from 1 to 357, where Vietnam ranks low at 56. Thus, considering gdp_n as the Gross Domestic Product (GDP), its mean is equal to 197. 67 and SD of 115. 35 The index correlates to an RAE value ranging in between 1 and 397 to illustrate a variety of economical yields. Inflation (inflation_n) averages 176. Mean: 03, Standard Deviation: 113. 24 and varies between 1 and 374, which means change of price. Looking at the mean value, the figure of trade (trade_n) stands at 185. 80 and a standard deviation of 115 was noted for the dose while in group B, it was 85 and the standard deviation of 110 was observed for the dose. 12 and a range of 1- 385 signifying that the level of trade activity differs from country to country. These statistics illustrate the density and dispersion of economic indicators within the analysed dataset, presenting information concerning the income division, investment schedules, economic production, and deflation rates and the trade participation of the observed entities.

Table 4: Results of the Pesaran (2004) CD test and average correlation coefficients for the variables

gini_n	4.39	0.000	0.103	0.158
fdi_n	23.29	0.000	0.549	0.549
inflation_n	3.42	0.001	0.081	0.169
trade_n	-1.91	0.056	-0.045	0.267
gdp_n	4.83	0.000	0.114	0.233

The descriptive results regarding Pesaran (2004) CD test and average correlation coefficients show significant future relationship in all examined variables. According to the cross-sectional independence test it is possible to state that the levels of connectedness of the components differ. It indicates that FDI inflows have a moderately high positive relationship with the variable concerned, with correlation coefficient of 0. 549, which indicates the groups' remarkable dependence in the data set. On the other hand, trade has a near zero negative coefficient estimate of (-0. 045) though not significant thus meaning a very weak negative relationship. Concerning absolute correlations, FDI

has the biggest value of 0. H1 has a moderate influence on the HEI brand and has a t-value of 549, which again, supports a strong effect. The relations identified reveal complex connections between various economic indicators, including FDI, GDP, inflation, and income distribution (gini_n), and can provide a better understanding of the tangled patterns of the defined economy's environment.

Table 5: Panel Regression Results (Random Effects)

Variable	Coefficient	Std. err.	z	P>|z|	95% Conf. Interval
fdi_n	0.0889	0.0166	5.35	0.000	0.0563 0.1215
gdp_n	0.0227	0.0125	1.81	0.070	-0.0019 0.0472
inflation_n	0.0035	0.0133	0.26	0.794	-0.0227 0.0296
trade_n	-0.0071	0.0153	-0.46	0.644	-0.0370 0.0229
_cons	1.9316	5.9942	0.32	0.747	-9.8169 13.6801

The fixed effect results of the panel regression executed by a random effects model illustrate the impacts of several economic indicators on income inequality expressed by gini_n. Analyzing the results I can see that FDI has a significant correlation to the Gini coefficient in the given model, with the coefficient set to 0. For income inequality, the token value is 0889 which is significantly less than 0. 001, meaning that more FDI is associated with greater income inequality. Under the null hypothesis, fs mostly share a positive and significantly small correlation with Gross Domestic Product (gdp_n) which affects the income inequality to a trivial extent. The man was tasered and died – 0227 (p = 0. 070). The variables inflation_n and trade_n did not influence income inequality the results have a coefficient of in the neighbourhood of zero. The correlation between gender and attitude towards risky behaviors was -0. 0035 (p = 0. 794) and -0. This showed a p-value of 0.644, 0.711, and 0. 0071 respectively. The constant term (_cons) not different to the previous results is statistically insignificant. Based on these observations, GDP is indeed a significant source of income inequality as is FDI, though the influences of inflation and trading are not as easily deciphered in this set of data.

Table 6: Panel Regression Results (Fixed Effects)

Variable	Coefficient	Std. err.	t	P>|t|	95% Conf. Interval
fdi_n	0.0829	0.0176	4.70	0.000	0.0482 0.1176
gdp_n	0.0242	0.0126	1.93	0.055	-0.0005 0.0490
trade_n	-0.0096	0.0160	-0.60	0.552	-0.0411 0.0220
_cons	3.6678	4.9309	0.74	0.457	-6.0269 13.3626

The results of the fixed effects panel regression analysis give an idea about the nature and role of different economic predictors on the level of income inequality (gini_n). Therefore FDI_n has a significant positive impact which is equal to 0. For all its countries, it is equal to 0829 (p < 0. 001), which means that a higher level of FDI has a positive effect on income inequality. Gross Domestic Product (GDP_n) is positively related to income inequality though with a relatively small t-statistic. 0242(t= 8. 224) (p = 0. 055). Higher number of International trade partners (trade_n) decreases income inequality (Gini) by -0.0096, statistically insignificant with p=0.552. The other parameter, constant term (_cons), also similar to the previous results, is statistically equal to zero. This proves that both FDI and GDP have a relation to the inequality of income, while the relation between trade and income inequality has not been vividly clear, illustrating the complex relationships connecting income, development, investment and distribution.

Table 7: Pesaran Panel Unit Root Tests (CIPS Test)

Variable	CIPS Statistic	p-value

fdi_n	-3.629	Significant
gdp_n	-4.273	Significant
gini_n	-4.474	Significant
inflation_n	-4.219	Significant
trade_n	-2.606	Significant

The Pesaran Panel Unit Root Tests (CIPS Test) show that all of the variables in the study—foreign direct investment (fdi_n), GDP (gdp_n), income inequality (gini_n), inflation (inflation_n), and trade openness (trade_n)—are stable. Each variable has a substantially negative CIPS statistic and a matching p-value, which indicates significance. The CIPS statistics are -3.629 for fdi_n, -4.273 for gdp_n, -4.474 for gini_n, -4.219 for inflation_n, and -2.606 for trade_n, indicating that the null hypothesis of a unit root is rejected for these variables. This suggests that there are no unit roots and that the variables remain stable over time, which is critical for assuring the reliability of regression analysis and other economic modelling utilising these variables.

Table 8: Cointegration Test (Westerlund)

Statistic	-1.6892
p-value	0.0456

The Westerlund Cointegration Test findings show evidence of cointegration among the variables in the panel dataset. The test statistic is -1.6892, with a p-value of 0.0456, which is less than the standard significance level of 0.05. This shows that the null hypothesis of no cointegration may be rejected at a 5% level of significance. As a result, the variables in the research have a long-run equilibrium connection, which means that despite any short-term changes, they move together over time, resulting in a consistent pattern. This discovery is critical for establishing the long-term interdependence of the variables and demonstrating the durability of the panel data analysis."

Table 9: Augmented Mean Group Estimator

Variable	Coefficient	Std. err.	z	P>|z|	95% Conf. Interval	
fdi_n	-0.0628	0.0372	-1.69	0.092	-0.1357	0.0102
gdp_n	-0.0020	0.0093	-0.21	0.831	-0.0203	0.0163
inflation_n	0.0091	0.0064	1.43	0.152	-0.0034	0.0216
trade_n	-0.0209	0.0277	-0.75	0.451	-0.0752	0.0334
__00000R_c	0.9053	0.3691	2.45	0.014	0.1819	1.6287
__000007_t	0.0008	0.4164	0.00	0.999	-0.8154	0.8169
_cons	9.7456	17.4258	0.56	0.576	-24.4083	43.8994

Analyzing the Augmented Mean Group (AMG) Estimator results, several economic factors have been explored which explain income inequality (gini_n). The coefficient for Foreign Direct Investment also known as FDI is negative (-) and represented as fdi_n which is -0. The mean difference taken in value at = -0.0628 and 'p' value was 0. A somewhat negative though non-significant correlation of -.092 was observed which implies that as FDI increases, income inequality may decrease but the decrease is insignificant enough to only indicate that it may have an effect. There is also a slight negative relationship between Gross Domestic Product (GDP_n) and Income Inequality; its coefficient being -0. 0020 (p = 0. 831). Inflation (inflation_n) has a coefficient of 0.098, positive but negligible and not significant at conventional level. 0091 (p = 0. 152), which suggests that it has a weak; though statistically significant positive impact on inequality. Trade openness (trade_n) has, therefore, a very small negative coefficient which is - 0. 02:09 (p = 0. 451). The coefficient that I have gotten in the final model is the substantial

positive coefficient of I(>0. Thus, the coefficient 9053 (p = 0. 014) for the variable __00000R_c means that from this unlisted variable, there is a tremendous positive impact. All in all, it can be hypothesized that several variables have the potential to influence income inequality, while the results show that the nature of economic issues is both varied and intricate; out of all the predictors, only __00000R_c was found to be statistically significant.

Table 10: Regression Results with First Differences

Variable	Coefficient	Std. err.	t	P>|t|	95% Conf. Interval
gdp_n (D1)	0.0153	0.0083	1.83	0.067	-0.0011 0.0317
trade_n (D1)	-0.0223	0.0134	-1.67	0.096	-0.0487 0.0040
inflation_n (D1)	0.0073	0.0090	0.81	0.417	-0.0104 0.0250
fdi_n (D1)	-0.0812	0.0194	-4.19	0.000	-0.1193 -0.0431
aug1	1.0065	0.0530	19.01	0.000	0.9024 1.1106
L.aug1	-1.0621	0.0517	-20.53	0.000	-1.1638 -0.9604
_cons	0.7918	1.0318	0.77	0.443	-1.2368 2.8205

The regression findings with initial differences examine the short-term influence of several economic factors on income inequality (gini_n). The first-differenced GDP (gdp_n D1) has a positive coefficient of 0.0153 and a p-value of 0.067, implying a marginally significant positive influence on income inequality. The first-differenced trade openness (trade_n D1) has a negative coefficient of -0.0223 and a p-value of 0.096, indicating a marginally significant negative influence on income inequality. Inflation (inflation_n D1) shows a negligible positive coefficient of 0.0073 (p = 0.417), indicating no meaningful effect. Foreign Direct Investment (FDI_n D1) shows a significant negative coefficient of -0.0812 (p < 0.001), indicating that increases in FDI lower income inequality in the short run. The variable aug1 has a substantial positive coefficient of 1.0065 (p < 0.001), whereas its lagged value (L.aug1) has a significant negative coefficient of -1.0621 (p < 0.001). This suggests strong autoregressive effects. The constant term (_cons) is statistically insignificant. These findings highlight the strong short-term dynamics in which FDI decreases income inequality, with other variables like as GDP and trade having marginally significant effects.

5. Conclusion

“The quantitative data is collected from the World Development Indicators (WDI) for the period of 1981 to 2020 where GDP growth, trade in services, FDI net outflow and inflation predicts income inequality which is measured by the Gini index. The collected results offer a better understanding of the processes that happen in income distribution and which involve many variables. The paper’s empirical analysis reveals that there is a positive relationship between income inequality and both, including GDP growth and FDI. This means that the general process of economic development and foreign investment may contribute to the growth of prosperity in the economy but the same contributes to increase income disparity if not well managed in an inclusive manner. However, trade in services and inflation is not the same thing for inequality where trade has no effect and inflation has a relationship that requires further research on. The policy recommendation that stem from these findings underlines long-term and comprehensive growth outcomes, selective and efficient foreign investments, strict inflation control, and massive investments, specialized in education and skill building. Besides, economic stability and poverty reduction requires development of other facets of the community such as social protection and enhancing access to capital and credit.

In summary, this paper stresses the importance of paradigm and integrated approach in the design and implementation of economic policies.” For creating techniques to pursue fair income distribution and promote development for all, there is need to conceptualically disentangle on growth, invetsment, trade and the price level. More research should be directed at these relationships to enhance the understanding of the sources of income differentiation as well as the effectiveness of policy interventions through the use of larger samples and other variables.

5.1 Policy Recommendations

Based on this study's empirical findings, the following policy recommendations are made to effectively alleviate income inequality:Based on this study's empirical findings, the following policy recommendations are made to effectively alleviate income inequality:

1. **Encourage sustainable and inclusive GDP growth:** Governments should ensure that they formulate and implement economic strategies that will help support long-term and sustainable and economic development that integrates all the citizens in the country. This entails spending on education, health and other areas for the enhancement of efficiency, and guaranteeing the trickle down effect of wealth.
2. **Improve the quality of foreign direct investment (FDI):** Recruiting the best quality of FDI that promotes inclusive growth is important. Published policies should encourage formation of investments that will increase employment rates with quality employment, enhance development of skills, and ensure that benefits of economic development are spread equally across various incomes.
3. **Manage Inflation Effectively:** Monetary policy should try to maintain price stability and at the same time support economic growth. There is an important policy implication that central banks should use diverse policies to maintain inflation rate below a specific level that endeavours the low income earners.
4. **Invest in education and skill development:** Large investments in education and skill enhancement are needed for sustained efforts to reduce the income differentials. Policies need to focus on raising the availability of good education and effective vocational training for the disadvantaged to allow the required engagement in the modern economy.
5. **Implement Social Safety Nets and Financial Inclusion:** Sustaining social protection mechanisms and enhancing access to funds can be instrumental in mitigating effects of economic fluctuations on income disparity. This process consists of improving people's coverage with social protection and financial services, especially for vulnerable groups to create affordable opportunities for improving their status and accomplishing worthy livelihoods.

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References

Bachas, P., Fisher-Post, M. H., Jensen, A., & Zucman, G. (2022). *Globalization and factor income taxation* (No. w29819). National Bureau of Economic Research.

Chyi, Y. L., & Su, Y. H. (2020). Technology progress, trade openness, and income inequality: A cross-country empirical study. In *Advances in Cross-Section Data Methods in Applied Economic Research: 2019 International Conference on Applied Economics (ICOAE 2019)* (pp. 491-506). Springer International Publishing.

Dout, H., & Kebalo, L. (2021). Trade intensity, fiscal integration and income inequality in ECOWAS. *Statistics, Politics and Policy*, *12*(2), 375-394.

Farooq, F., Yusop, Z., Chaudhry, I. S., & Iram, R. (2020). Assessing the impacts of globalization and gender parity on economic growth: empirical evidence from OIC countries. *Environmental Science and Pollution Research*, *27*, 6904-6917.

Grigoryev, L., & Pavlyushina, V. (2020). Global recession and income inequality: Factors of disruption for elites in the twenty-first century. *Global Governance in Transformation: Challenges for International Cooperation*,

275-297.
Goldberg, P. K., & Reed, T. (2023). Is the global economy deglobalizing? If so, why? And what is next?. *Brookings Papers on Economic Activity*, *2023*(1), 347-423.
Hailemariam, A., Sakutukwa, T., & Dzhumashev, R. (2021). Long-term determinants of income inequality: evidence from panel data over 1870–2016. *Empirical Economics*, *61*(4), 1935-1958.
Hammudeh, S., Sohag, K., Husain, S., Husain, H., & Said, J. (2020). Nonlinear relationship between economic growth and nuances of globalisation with income stratification: Roles of financial development and governance. *Economic Systems*, *44*(3), 100761.
Haseeb, M., Suryanto, T., Hartani, N. H., & Jermsittiparsert, K. (2020). Nexus between globalization, income inequality and human development in Indonesian economy: Evidence from application of partial and multiple wavelet coherence. *Social Indicators Research*, *147*(3), 723-745
Huh, H. S., & Park, C. Y. (2021). A new index of globalisation: Measuring impacts of integration on economic growth and income inequality. *The World Economy*, *44*(2), 409-443.
Hung, H. F. (2021). Recent trends in global economic inequality. *Annual Review of Sociology*, *47*(1), 349-367.
Kobrin, S. J. (2020). How globalization became a thing that goes bump in the night. *Journal of International Business Policy*, *3*(3), 280-286.
Kokodey, T. A., Lomachenko, T. I., Maidanevych, Y. P., Nekhaychuk, D. V., & Romanova, Y. A. (2020). Effect of world economy globalization and supply chain upon socio-economic processes at the national level. *International Journal of Supply Chain Management*, *9*(2), 822.
Krugman, P. (2019, November). Globalization: What did we miss?. In *Meeting Globalization's Challenges* (pp. 113-120). Princeton, NJ: Princeton University Press.
Krugman, P. (2019). What economists (including me) got wrong about globalization. *Bloom. Opin*.
Linsi, L., & Mügge, D. K. (2019). Globalization and the growing defects of international economic statistics. *Review of international political economy*, *26*(3), 361-383.
Manyika, J., Mischke, J., Bughin, J., Woetzel, J., Krishnan, M., & Cudre, S. (2019). A new look at the declining labor share of income in the United States. *McKinsey Global Institute Discussion Paper*, 1-64.
Mossig, I., & Lischka, M. (2022). Globalisation, Economic Interdependencies and Economic Crises. In *International Impacts on Social Policy: Short Histories in Global Perspective* (pp. 289-304). Cham: Springer International Publishing.
Nolan, B., Richiardi, M. G., & Valenzuela, L. (2019). The drivers of income inequality in rich countries. *Journal of Economic Surveys*, *33*(4), 1285-1324.
Ofori, I. K., Armah, M. K., & Asmah, E. E. (2022). Towards the reversal of poverty and income inequality setbacks due to COVID-19: The role of globalisation and resource allocation. *International Review of Applied Economics*, *36*(5-6), 647-674.
Osinubi, T. T., & Olomola, P. A. (2021). Globalisation, income inequality and poverty relationships: evidence from Mexico, Indonesia, Nigeria and Turkey. *Journal of Economic and Administrative Sciences*, *37*(2), 179-208.
Paganetto, L., & Scandizzo, P. L. (2020). Is globalization sustainable?. In *Capitalism, global change and sustainable development* (pp. 261-270). Springer International Publishing.
Polacko, M. (2021). Causes and consequences of income inequality–an overview. *Statistics, Politics and Policy*, *12*(2), 341-357.
Roy-Mukherjee, S., & Udeogu, E. (2021). Neo-liberal globalization and income inequality: panel data evidence from OECD and Western Balkan countries. *Journal of Balkan and Near Eastern Studies*, *23*(1), 15-39.
Santiago, R., Fuinhas, J. A., & Marques, A. C. (2019). Income inequality, globalization, and economic growth: a panel vector autoregressive approach for Latin American Countries. In *The Extended Energy-Growth Nexus* (pp. 57-96). Academic Press.
Sung, R., Owen, E., & Li, Q. (2021). How do capital and labor split economic gains in an age of globalization?. *Review of International Political Economy*, *28*(1), 232-257.
Tang, H. (2020). Globalization in crisis. *Western Washington University*.
Wade, R. H. (2020). Is globalization reducing poverty and inequality?. In *Neoliberalism, Globalization, and Inequalities* (pp. 143-176). Routledge.
Verico, K., & Pangestu, M. E. (2021). The economic impact of globalisation in Indonesia. In *Globalisation and its Economic Consequences* (pp. 76-102). Routledge.
Zankovsky, S., Bezbakh, V., Inshakova, A., & Rusakova, E. P. (2021). Social consequences of economic

globalization: experience of developed and developing countries and perspectives of optimization. *International Journal of Sociology and Social Policy*, *41*(1/2), 211-223.

Zhang, Y., Tian, K., Li, X., Jiang, X., & Yang, C. (2022). From globalization to regionalization? Assessing its potential environmental and economic effects. *Applied Energy*, *310*, 118642.