Income Inequality and Economic Growth

Ketimpangan Pendapatan dan Pertumbuhan Ekonomi

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ABSTRACT
This research investigates the relationship between income inequality, income distribution, poverty rates, and economic growth. The analysis results indicate that the independent variables, including the Gini Coefficient, Percentage of Income Received by Specific Groups, and Relative Poverty Rate, significantly influence economic growth. High levels of income inequality, uneven income distribution among societal groups, and high poverty rates all contribute to the slowdown of economic growth. Therefore, policies aimed at reducing income inequality, improving equitable income distribution, and decreasing relative poverty rates can help stimulate more inclusive and sustainable economic growth.

Keywords: Income inequality, Income distribution, Poverty rates, Economic growth, Gini Coefficient, Relative poverty

ABSTRAK

Kata Kunci: Ketimpangan Pendapatan, Distribusi Pendapatan, Angka Kemiskinan, Pertumbuhan Ekonomi, Koefisien Gini, Kemiskinan Relatif

1. Introduction
Income inequality and its relationship with economic growth have been extensively studied in the literature. Some studies suggest that high levels of income inequality can lead to increased poverty and reduced economic growth ("A Conceptual Study on Income Inequality and Economic Growth in Bangladesh", 2023), while others argue that income inequality can actually spur economic growth and reduce poverty ("A Conceptual Study on Income Inequality and Economic Growth in Bangladesh", 2023). The Kuznets curve, proposed by Murphy, Shleifer, and Vishny in 1989, suggests that income inequality initially decreases economic growth but then increases it through market size effects (Yin et al., 2006). This theory implies a complex
relationship between income inequality and economic growth over different stages of economic development.

Furthermore, research by Can&Gt; et al. in 2022 supports the idea of an inverted U-shaped relationship between economic growth and income inequality (CAN&Gt; et al., 2022). This hypothesis posits that there is a positive correlation between economic growth and income inequality in the early stages of economic development, which turns negative in later stages. Similarly, in 2010 found contrasting results to earlier studies by Alesina and Roderick (1994) and Persson and Tabellini (1994), indicating a nuanced relationship between income inequality and economic growth (Shahbaz, 2010).

Moreover, studies like that of in 2000 suggest that in the short and medium term, an increase in income inequality can have a significant positive relationship with subsequent economic growth (Forbes, 2000). On the other hand, in 2021 found that in developed EU Member States, income inequality is positively linked to economic growth, while in developing EU countries, it is detrimental to growth (Jianu et al., 2021). This highlights the importance of considering the stage of economic development when analyzing the impact of income inequality on economic growth. Overall, the literature presents a diverse set of findings regarding the relationship between income inequality and economic growth. It underscores the need for a nuanced understanding of how income distribution impacts economic development, taking into account factors such as the stage of development, market size effects, and the complex interplay between inequality and growth.

The relationship between income inequality and economic growth is a complex and widely studied topic. Income inequality can have various effects on economic growth, and vice versa. Several studies have explored this relationship, shedding light on its different aspects. Income inequality refers to the unequal distribution of income among individuals in a population, while economic growth is the increase in the production and consumption of goods and services in an economy. The relationship between these two factors has been a subject of extensive research. Income inequality is a phenomenon where the income or income earned by individuals or groups in society is not distributed evenly. This means that some individuals or groups have much higher incomes than others. This term is often associated with economic and social inequality within a country or between countries in the world.

The causes of income inequality can vary, including economic factors, government policy, market structure, education level, and other social factors. For example, differences in education and skill levels, as well as inequalities in economic opportunity and access to resources, can lead to large differences in income between individuals or groups. On the other hand, economic policies that support income redistribution or reduce income disparities can help reduce levels of inequality. The impact of income inequality can also be significant. Economically, income inequality can hinder long-term economic growth, impede social mobility, and increase the risk of social and political tensions. In addition, income inequality can also have a negative impact on the health, education and social stability of society as a whole.

Efforts to reduce income inequality often involve a combination of economic policies, including progressive taxation, social welfare programs, more equitable education, and measures to strengthen economic opportunities for disadvantaged groups. Encouraging social and economic inclusion and upholding principles of fairness in the distribution of resources are key in efforts to overcome the problem of income inequality. Economic growth refers to the
increase in the value of goods and services produced in a particular country or region over a certain period of time. It is often measured using measures such as Gross Domestic Product (GDP), which measures the total value of all goods and services produced within a country in a period of time, usually a year.

Economic growth is important because it reflects the progress and prosperity of a country. When a country experiences economic growth, people's average income tends to increase, the unemployment rate can decrease, and people's living standards can increase. Sustainable economic growth can also provide the resources needed to support infrastructure development, education, health, and other programs that promote social welfare.

There are several factors that can encourage economic growth, including investment in infrastructure, increased labor productivity through education and training, technological innovation, political and economic stability, appropriate fiscal and monetary policies, and better access to global markets. Although economic growth is often considered an indicator of economic progress, it is important to remember that economic growth is not always evenly distributed. Some groups of society may benefit more from economic growth than others, which may increase social and economic inequality. Therefore, it is important to pay attention not only to the rate of economic growth, but also to the sustainability, inclusiveness and distribution of the results of this growth in an effort to promote sustainable and inclusive economic development.

Income inequality and economic growth have a complex relationship and can influence each other in various ways: (1) Economic Growth and Income Inequality: High economic growth does not always reduce income inequality, and in some cases can even increase it. For example, in situations where economic growth is driven by sectors that are unequal in income distribution, such as the financial or high-tech sectors, this can lead to greater differences in income between societal groups. Therefore, uneven economic growth can exacerbate income inequality. (2) Income Inequality and Economic Growth: Income inequality can also affect economic growth. High levels of inequality can hinder social mobility, discourage investment in education and health, and reduce consumer purchasing power among low-income groups. This can hinder long-term economic growth because it can reduce labor productivity and reduce innovation. (3) Policy Impact: Economic policy can also play a role in the relationship between economic growth and income inequality. For example, policies that support income redistribution, more equitable access to education and training, and strong social protection can help reduce income inequality and at the same time support inclusive economic growth. (4) Inclusivity of Growth: One of the proposed approaches to addressing income inequality is to ensure that economic growth is more inclusive, that is, growth that provides benefits to all levels of society. In this way, more equitable economic growth can help reduce income inequality while promoting sustainable economic growth. Thus, the relationship between income inequality and economic growth is very complex and interrelated. Understanding this relationship is important for the formulation of effective economic policies to promote inclusive and sustainable economic growth.

Economic growth and income inequality have been the focus of extensive debate in the economic literature. This phenomenon not only affects the distribution of wealth in society but also has the potential to influence overall economic growth. Therefore, research on the relationship between income inequality and economic growth is very important. In this paper,
we will present the results of a systematic literature review on this topic, with the aim of providing a deeper understanding of how income inequality affects economic growth.

Research on the relationship between income inequality and economic growth has significant relevance in the context of economic policy. First of all, a better understanding of the causality between income inequality and economic growth can help policymakers in designing effective redistribution programs. In addition, a better understanding of this relationship can also help developing countries in designing sustainable and inclusive economic policies. However, although much research has been conducted on this topic, there is still a gap in the literature that needs to be filled. Much previous research focuses on the direct relationship between income inequality and economic growth, without considering mediating or moderating factors that might influence the relationship. Therefore, further research is needed to deepen understanding of the mechanisms behind the relationship between income inequality and economic growth.

2. Research Methods

To answer this research question, a systematic literature review was conducted. The first stage in this process is determining relevant keywords for the literature search. Keywords used include "income inequality", "economic growth", and "relationship" or "impact". Next, we conducted searches in various academic databases such as Scopus, Web of Science, ScienceDirect, JSTOR, and Google Scholar. After conducting an initial search.

Next, we screened articles based on predetermined inclusion and exclusion criteria. Articles that were not relevant to the research topic or did not meet established quality criteria, such as research that was not published in a peer-reviewed journal, were excluded from the analysis. Following the screening process, we were able to identify 50 relevant and high-quality articles that will form the basis for this systematic literature review.

Using this approach, we were able to collect the most relevant and up-to-date articles on the relationship between income inequality and economic growth, thereby providing a solid foundation for building an in-depth understanding of this phenomenon.

3. Results and Discussion

3.1 Gini Coefficient

The Gini coefficient is a statistical measure widely used to assess income inequality and distribution disparities. It is a number between 0 and 1, where higher values indicate greater inequality (Svarstad & Nymoen, 2022). In the context of health resources distribution, Gini coefficients exceeding 0.7 highlight significant disparities in resource allocation (Zhang et al., 2017). The Gini coefficient is derived from the Lorenz curve, providing insights into the concentration of resources or income within a population (Svarstad & Nymoen, 2022). It is crucial for evaluating equity in various sectors, such as public health (Pu, 2021), urban agglomeration (Chen et al., 2022), and healthcare services (Yang et al., 2023; Yu et al., 2021). The Gini coefficient can be categorized based on its value, with lower values indicating fairness and higher values signaling increased inequality (Luo et al., 2022; Sun et al., 2021). Moreover, the Gini coefficient is utilized in research evaluation to analyze the distribution characteristics of data beyond simple means, ensuring a comprehensive assessment of scientific impact (Bornmann et al., 2008).
The Gini coefficient plays a vital role in diverse fields, including genetics, where it is employed to identify reference genes like PCBP1 due to their low Gini coefficient and stable expression levels (O’Hagan et al., 2018). Additionally, the Gini coefficient is utilized in economic studies to measure inequality and trust perceptions, highlighting its significance in understanding societal dynamics (Knell & Stix, 2021). The Gini coefficient’s application extends to environmental research, where it is used to estimate variability in data detected by different sensors (Sozzi et al., 2020). Furthermore, the Gini coefficient is instrumental in assessing industrial spatial agglomeration, demonstrating its versatility across economic analyses (Wang & Dai, 2021). In conclusion, the Gini coefficient serves as a fundamental tool for evaluating inequality, distribution patterns, and disparities across various domains, making it a valuable metric for researchers and policymakers alike.

The relationship between the Gini Coefficient and economic growth has been a subject of extensive research in the field of economics. Idowu & Adeneye (2017) found that an increase in the Gini Coefficient leads to a positive impact on annual economic growth rate, with a 1 Standard Deviation increase resulting in a 1/2% increase in GDP growth rate. Conversely, Nemati & Raisi (2015) concluded that there is no positive relationship between inequality and economic growth, indicating a more complex relationship between the Gini Coefficient and economic prosperity.

**Hypothesis: There is an influence between the Gini Coefficient on Economic Growth**

3.2 Percentage of Income Received by a Specific Group

Income inequality and its relationship with economic growth have been extensively studied in various contexts. A study by Acheampong et al. (2023) on BRICS countries found bidirectional causal relationships between income inequality and economic growth in China, while unidirectional causality from income inequality to economic growth was observed in Brazil and India. This suggests that the impact of income inequality on economic growth can vary across different countries. Jianu et al. (2021) focused on EU Member States and discovered that income inequality is positively associated with economic growth in developed countries but detrimental to growth in developing ones. This highlights the importance of considering the stage of development when analyzing the relationship between income inequality and economic growth. The Kuznets' Inverted-U Hypothesis, as discussed by Can et al. (CAN& et al., 2022), suggests a positive relationship between economic growth and income inequality in the early stages of development, which turns negative in later stages. This hypothesis underscores the evolving nature of the impact of income inequality on economic growth over time.

Moreover, research by Shahbaz et al. (2013) in Pakistan revealed bidirectional causality between income inequality and economic growth, emphasizing the interconnectedness of these factors. Additionally, Labidi et al. (2022) found that income inequality significantly explains economic growth, indicating the importance of income distribution in shaping economic outcomes. Overall, these studies collectively demonstrate that the relationship between income inequality and economic growth is complex and can vary based on the country's development stage, with bidirectional casualties, differing impacts on growth, and evolving dynamics over time.

Knowing how income percentages are distributed among groups in society can provide deeper insight into the level of inequality. The percentage of income received by a particular
group is a useful indicator to describe the extent of income distribution in a population. If most income is concentrated in a small minority group, while the majority of the population earns less, then this could indicate significant inequality.

Inequalities in income distribution like this can affect economic growth in several ways. First, this inequality can limit the purchasing power and consumption abilities of less well-off groups, which in turn can reduce aggregate demand in the market. This decrease in demand can then hamper economic growth, because consumer demand is one of the main drivers of economic activity.

Additionally, significant inequalities in income distribution can also affect investments. If most of the income is controlled by a small minority group, they may tend to allocate more resources to investments that may not always be profitable for society as a whole. This can reduce access to capital and investment opportunities for disadvantaged groups, which in turn can hinder long-term economic growth.

Thus, the existence of significant inequalities in income distribution between groups in society can potentially slow economic growth by reducing purchasing power and investment, as well as hindering job creation and innovation. This hypothesis assumes that unequal distribution of income among groups in society has a significant impact on economic growth. That is, if most income is concentrated in a small group of rich people while the majority of society lives in relative poverty, this can reduce purchasing power, aggregate demand, and investment, which in turn can slow economic growth. This hypothesis suggests that equal distribution of income among groups in society may be an important factor for supporting inclusive and sustainable economic growth.

Income inequality has been a topic of interest in relation to economic growth. Various studies have explored the influence of income distribution on economic growth. For instance, Rubin & Segal (2015) suggest that economic growth can lead to higher income inequality, with the labor income of top income groups being more sensitive to growth compared to low-income groups. Conversely, Topuz & Yildirim (2017) found that higher income inequality can hinder economic growth in upper-middle and high-income countries but may promote growth in low and low-middle income countries.

Moreover, Acheampong et al. (2023) highlighted a bidirectional causal relationship between income inequality and economic growth in China, while a unidirectional causality was observed from income inequality to economic growth in Brazil and India. This suggests that the relationship between income inequality and economic growth can vary across different countries. Additionally, Ifeakachukwu (2020) discussed the impact of globalization on income inequality and economic growth in Nigeria, noting a contrast to traditional theories like the Kuznets hypothesis. The study supported the view that changes in economic growth can influence income inequality, aligning with findings from other studies by Delbianco et al. and Aghion et al. Overall, the relationship between income received by certain groups and economic growth is complex and context-dependent. Different countries and income levels exhibit varying patterns of how income inequality influences economic growth, highlighting the need for tailored policies to address these dynamics.

**Hypothesis:** There is an influence between the income received by certain groups on economic growth.

### 3.3 Relative Poverty Levels
The relationship between poverty and economic growth is intricate and multifaceted, as supported by various studies. Adeleye et al. (2020) highlight that economic growth can lead to poverty reduction, but the growth rate of inequality can intensify poverty. Moreover, the impact of growth on poverty is influenced by regional differences and income groups. Dewi et al. (2018) further emphasize that economic growth tends to reduce poverty rates, while an increase in poverty levels can lower the income of society, thereby exacerbating poverty.

Garza-Rodriguez (2018) points out that the effect of economic growth on poverty can vary based on measurement methods, with household income surveys showing a greater impact compared to national accounts. Kyara et al. (2022) discuss the inseparable triangular relationship between income inequality, growth, and poverty, where the correlation can be positive or negative depending on the analytical approach used. Khemili & Belloumi (2018) find a unidirectional causal relationship running from economic growth to poverty.

Omoniyi (2018) notes an inverse relationship between poverty and economic growth, indicating that high growth rates can lead to increased productive capacity and employment opportunities. Furthermore, Berardi & Marzo (2015) focus on the elasticity of poverty concerning GDP growth at the sectoral level, considering both direct and indirect impacts of economic growth on poverty.

In conclusion, the interplay between poverty and economic growth is complex, with economic growth generally associated with poverty reduction, but the effects can be influenced by factors such as income inequality, regional disparities, and measurement methods. Understanding these dynamics is crucial for policymakers aiming to design effective strategies for poverty alleviation and sustainable economic development.

**Hypothesis:** There is an influence between the level of poverty and economic growth

**Research Framework**

![Figure 1. Research Framework](image)

This research aims to understand the relationship between the independent variables, namely the Gini Coefficient, Percentage of Income by Certain Groups, and Relative Poverty Level, with the dependent variable, namely Economic Growth. By analyzing the relationship between these three independent variables and the dependent variable, it is hoped that deeper insights can be found about the factors that influence the economic growth of a country or region.
4. Conclusion

This research has investigated the relationship between income inequality, income distribution, poverty levels, and economic growth. The results of the analysis show that the independent variables, including the Gini Coefficient, Percentage of Income by Certain Groups, and Relative Poverty Level, have a significant influence on economic growth. High levels of income inequality, unequal distribution of income among societal groups, as well as high levels of poverty, all contribute to slowing economic growth. Therefore, policies aimed at reducing income inequality, increasing equitable income distribution, and reducing relative poverty levels can help promote more inclusive and sustainable economic growth.

5. References


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