A Relationship Between Economic Growth and Income Inequality: Contributes to Both Micro and Macroeconomics

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Abstract

Income inequality has emerged as a critical issue in the realm of economics, affecting both micro and macro levels of analysis. The paper has explored the "relationship between economic growth and income inequality", aiming to shed light on their interplay, contribute to the existing body of knowledge, and identify avenues for future research. The research methodology employed involves qualitative secondary data analysis, drawing insights from various sources such as academic studies, reports, and statistical data. By examining the research gap in the literature, this study aims to provide a complete overview of the current understanding of the topic. The findings highlight the complex nature of the relationship, indicating both positive and negative impacts of income inequality on economic growth and vice-versa at different levels of analysis. The abstract concludes with a discussion on future research directions, emphasizing the importance of further exploration to develop effective policy measures and promote more inclusive and sustainable economic growth.

Keywords: Economic Growth, Income Inequality, Macroeconomics, Microeconomics.

Introduction

Fair and sustainable economic and social welfare, centred around the theme of the well-being of individuals, households and businesses at the micro-level, is the fundamental objective of the macro-economic policies. Wherefore, economic development encompasses structural transformation at micro and macro levels, which should improve the well-being and living standards of its population. In order to achieve this objective, it is necessary to pursue economic growth by augmenting the gross domestic product (GDP), which serves as a measure of the aggregate value of goods & services generated within a nation (Lee et al., 2020). However, in case of uneven economic growth in a place, there leads to rising in income inequality which impacts the concept of inclusive and sustainable economic development at the macro level and income disparity at the micro level.

Economic growth is defined as an aggregate increase in the company's production, which leads to a rise in the national income of a country (Muhammad et al., 2022). In the economy, growth is modelled as the function of the labour force, human and physical capital, and the recent inclusion of technology. On the same line, **income inequality** refers to unequal income distribution between individuals and households within an economy. Income inequality is assessed using different indicators, such as the Gini coefficient, which provides a numerical representation of the extent of income inequality ranging from 0 to 1. A Gini coefficient of zero indicates a condition of absolute income equality, in which every individual possesses an identical level of income. In contrast, a coefficient of 1 represents the highest degree of income inequality, wherein one individual or group holds exclusive control over all the income while others have no possession of it. Besides, that economics has two branches namely **macro and microeconomics**. Macroeconomics emphasised the operation and behaviour of the economy as a whole. Its crucial variable includes gross domestic product (GDP), unemployment, inflation, and the country's growth rate. On the contrary, Microeconomics studies a particular market segment of the economy considering individual demand and price of products.

According to, Topuz (2022) the main objective of macro-economic stabilisation policies is to achieve sustainably through stable economic growth. Furthermore, policies which focus on the reduction of income inequalities lead to long-term sustainable economic growth. However, A systematic theoretical inference among these variables is significant, for policy recommendation at the macro level and its implementation at the micro level of the economy, for economic growth encouragement by ensuring fair income distribution for efficiency-equity trade-off. Hence, it is imperative to establish and scrutinise the "relationship between economic growth and income distribution" to analyse the efficiency-equity trade-off of the economy at the macro and micro levels.

There is conflicting data regarding economic growth's effect on income disparity at both micro and macro levels. According to World Inequality Report 2018, income inequality has risen in many countries despite high economic growth, due to a lack of sustainable economic growth policies and opportunities for social mobilities (Omar & Inaba, 2020). However, The Palma Ratio is a metric used to assess income inequality, specifically by comparing the proportion of income held by the top 10% of the population to that held by the bottom 40% of the population Ouechtati (2020), has used this ratio to demonstrate that economic growth often benefits the richest segment of the population more than the poorest, exacerbating income inequality. On a similar note, UNDP human development report, 2019 highlights that despite global economic growth, income inequality remains a pressing issue. It emphasizes that economic growth alone is insufficient for reducing income inequality and calls for comprehensive policies that address disparities in income, access to education, healthcare, and other essential services. On the contrary, Birdsall's research emphasizes that pursuing policies solely focused on reducing income inequality can hinder economic growth (Prasetyo & Kistanti, 2020). It suggests that a trade-off exists between growth and equality, as policies aimed at income redistribution may discourage investment, entrepreneurship, and overall economic productivity at the micro level.

The relationship between the nature of economic growth and the distribution of income has been established by the inverted U -shape hypothesis proposed by Kuznet(1955) which states that in the early stage of economic development income inequalities increase while it decrease in a later stage. However, in the paper, the relationship between income inequality and economic growth is a two-dimensional perspective. From an initial perspective, it has considered the impact of economic growth patterns on income distribution and its consequential effect on the macro and micro levels of the economy. The other perspective will analyse the reverse phenomena, considering the impact of income inequality on economic growth. However, both perspectives will be analysed at the macro and micro levels of the economy. Henceforth, the following objectives have been considered for the research paper:

- 1. To examine the impact of economic growth on income inequality at the macroeconomic level.
- 2. To explore the mechanism through which economic growth influences income inequalities at the microeconomic level.
- 3. To assess the role of income inequality to shape economic growth and its consequences at the micro and macro level of the economy.

The research has adopted the qualitative research methodology, where data has been analysed and the results have been interpreted to establish the "relationship between economic growth & income inequality" to evaluate its consequences at both micro and macro levels. The research has future relevance to tracking the changes in income inequalities and economic growth over time, allowing for the identification of trends, patterns. It also helps to analyse the impact of economic shocks or major policy reforms on income inequality and economic growth trajectories.

Literature Review

Impact of economic growth on income inequality at macro-economic level

The study of the "relationship between economic growth and income inequality" at the macroeconomic level has evolved through three stages. In the first stage, attention was given to the positive association between economic growth and income inequality, as highlighted by Kuznets (1955). However, with the experience of growth stagnation in certain countries, the focus shifted to the negative impact of inequality on growth, leading to the second stage of research which states that inequality hampers economic growth. However, potential bias in estimation results due to omitted variables led to varying conclusions and a recent third stage has been developed which argues that inequality promotes growth with high savings and low expenditure. However, Barro (2000) found that inequality tends to promote growth in developed economies and hinders it in developing countries. SALIM et al. (2020) examined the relationship at different stages of the development of a country, highlighting the nuanced patterns of the inequality-growth association.

These studies demonstrate the complexity and heterogeneity of the relationship between economic growth and income inequality at the macroeconomic level. The impact can vary depending on factors such as the level of development, income levels, and stages of development. While some research suggests that inequality promotes growth in certain contexts, others indicate that it hampers growth. The classification of countries based on income levels and stages of development provides insights into the varying patterns of the relationship, but no uniform conclusion has been reached.

The Influential Mechanism of economic growth on Income Inequalities at the micro level

Recent studies on the association between economic growth and income inequalities have focused on the bottom-up approach by analysing the mechanism at the micro level to understand its consequence at the macro level. According to the study conducted by Gründler and Scheuermeyer (2015), it was observed that societies characterized by elevated levels of inequality exhibit a reduced proportion of individuals with higher education, alongside increased rates of fertility. This suggests that income inequalities can limit access to quality education, which in turn affects human capital accumulation and can perpetuate income disparities. Additionally, higher fertility rates in unequal societies can contribute to income inequalities, as larger families may struggle to break the cycle of poverty and limited opportunities.

According to Lee et al. (2020), credit market imperfections models posit that an increase in inequality can hinder economic growth by diminishing the average levels of physical capital investment and human capital accumulation. Individuals with higher incomes possess a greater range of options for distributing their investments and savings, whereas individuals with lower incomes may opt to forgo investment opportunities that entail higher levels of risk but also offer higher potential returns.

The influence of inequality on economic growth exhibits variability contingent upon the level of income and stages of development. The theory of unified growth posits that the association between inequality and economic growth varies across distinct phases of development. During the initial phases, the presence of inequality can potentially stimulate economic growth by effectively allocating resources towards individuals who possess higher propensities for saving, particularly capital owners. Nevertheless, with the progression of the economy, the significance of human capital as a primary driver of growth becomes evident. In this context, it is important to acknowledge that inequality can impede growth by diminishing the level of investment in human capital. As the level of income rises and the limitations on accessing credit become less restrictive, the impact of inequality on economic growth becomes increasingly insignificant.

Role of Income Inequalities to shape economic growth at Macro and Micro Level

The income inequalities growth nexus has been analysed on various theoretical frameworks. On the macro level, it has been analysed on the level of economic development, saving rates and imperfection of the credit market. However, on the micro level, human capital, investment and innovation are the main factors which are impacted by income inequalities.

In the case of unequal distribution of income, the general purchasing power of the population is reduced when income is concentrated in the hands of a small number of high-income people. As a result, consumer spending declines with low demand for products and services, which leads to slow economic growth. Similarly, Access to high-quality education, healthcare, and other critical services may be hampered by income disparities (Omar & Inaba, 2020). The difference in access to opportunities for the development of human capital is a barrier to the creation of a skilled workforce. This can consequently slow down innovation, productivity, and overall economic growth. Furthermore, High levels of income inequality can contribute to social discontent, political instability, and loss of social cohesion. These elements may have a detrimental effect on investment, company confidence, and economic stability, impeding long-term economic expansion. On the other hand, decreasing income disparities can support political stability and social cohesiveness, creating a climate that is favourable to economic growth.

Similarly, at the micro level, Entrepreneurial activities might be impacted by income inequality. A person may have obstacles when beginning or growing a business if they have restricted access to financial resources and possibilities. This limits the creation of novel concepts, creativity, and entrepreneurial growth, all of which are essential ingredients for microeconomic progress (Ouechtati, 2020). By restricting access to chances for education and skill development, income disparities have an impact on the accumulation of human capital. People with lower incomes frequently struggle to develop the knowledge and skills required for higher-paying employment. As a result, productivity declines, labour market mobility declines, and microeconomic growth slow.

Hence, an environment that fosters equitable opportunities, the development of human capital, and social cohesion can be created by addressing income inequality through policy initiatives. Societies can encourage investment, productivity, and innovation by reducing inequities, which will increase general prosperity.

Analysis & Conclusion

In summary, the relationship between economic growth and income distribution at both macro and micro levels is multifaceted. Some theories suggest that income inequality hampers economic growth. Stiglitz argues that inequality weakens aggregate demand, as individuals at the bottom have to spend a larger portion of their income on necessities, limiting their ability to contribute to economic growth. Additionally, high levels of inequality can lead to social unrest, political instability, and higher crime rates, all of which can have adverse effects on economic performance. Furthermore, imperfect capital markets and limited access to investment opportunities for the poor can hinder human capital accumulation and impede overall economic growth. On the other hand, there are theories suggesting that income inequality does not harm economic growth and may even have positive effects. Neoclassical economics suggests a trade-off between equality and efficiency, arguing that inequality can incentivize individuals to invest and innovate, leading to faster growth. The concentration of wealth in the hands of a few can also facilitate investment in new industries and technological advancements. Additionally, some studies find a positive relationship between income inequality and growth in the short to medium term, indicating that reducing inequality may involve a trade-off with growth.

The consequences of income inequality on both macro and micro levels are significant. At the macro level, income inequality can undermine social cohesion, create disparities in access to education and healthcare, and hinder human capital development, all of which can impede long-term economic growth. It can also lead to socio-political instability, affecting investor confidence and hindering productive investment. At the micro level, income inequality can perpetuate cycles of poverty and limit opportunities for upward mobility, affecting individual well-being, social mobility, and overall economic productivity.

The relationship between economic growth and income distribution varies across countries and income levels. Different countries may exhibit different channels of impact, highlighting the importance of country-specific characteristics. Furthermore, the relationship may differ depending on the stage of development, with the impact of economic growth on income distribution changing as countries progress. Fiscal policies implemented by governments can also shape income distribution. Redistribution measures aimed at reducing income disparities can promote more equitable income distribution, but they may also impact incentives for work and investment, potentially affecting economic growth. Socio-political factors such as social unrest and political stability can further influence income distribution and economic growth.

In conclusion, there is a complex and context-dependent relationship between macroeconomic development and income distribution. While economic growth can help to lessen income inequality by generating employment opportunities and lowering poverty, it can also widen income gaps if the rewards are not distributed fairly. Policymakers need to comprehend the mechanisms and elements that form this relationship to develop solutions that encourage inclusive growth and lessen income inequality.

References

- [1] Lee, D., Chang, C. Y., & Hur, H. (2020). Economic performance, income inequality and political trust: new evidence from a cross-national study of 14 Asian countries. *Asia Pacific Journal of Public Administration*, 42(2), 66–88. https://doi.org/10.1080/23276665.2020.1755873
- [2] Muhammad, I., Ozcan, R., Jain, V., Sharma, P., & Shabbir, M. S. (2022). Does environmental sustainability affect renewable energy consumption? Nexus among trade openness, CO2 emissions, income inequality, renewable energy, and economic growth in OECD countries. *Environmental Science and Pollution Research*, 2(5). https://doi.org/10.1007/s11356-022-22011-1
- [3] Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of Economic Structures*, 9(1). https://doi.org/10.1186/s40008-020-00214-4
- [4] Ouechtati, I. (2020). The Contribution of Financial Inclusion in Reducing Poverty and Income Inequality in Developing Countries. *Asian Economic and Financial Review*, 10(9), 1051–1061. https://doi.org/10.18488/journal.aefr.2020.109.1051.1061
- [5] Prasetyo, P. E., & Kistanti, N. R. (2020). Human capital, institutional economics and entrepreneurship as a driver for quality & sustainable economic growth. *Entrepreneurship and Sustainability Issues*, 7(4), 2575–2589. https://doi.org/10.9770/jesi.2020.7.4(1)
- [6] SALIM, A., RUSTAM, A., HAERUDDIN, H., ASRIATI, A., & PUTRA, A. H. P. K. (2020). Economic Strategy: Correlation between Macro and Microeconomics on Income Inequality in Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(8), 681–693. https://doi.org/10.13106/jafeb.2020.vol7.no8.681
- [7] Suprayitno, E., Aslam, M., & Harun, A. (2017). Zakat and SDGs: Impact Zakat on Human Development in the Five States of Malaysia. *International Journal of Zakat*, 2(1), 61–69. https://doi.org/10.37706/ijaz.v2i1.15
- [8] Topuz, S. G. (2022). The Relationship Between Income Inequality and Economic Growth: Are Transmission Channels Effective? *Social Indicators Research*, 2(5). https://doi.org/10.1007/s11205-022-02882-0