

Contribution of FDI, fiscal policy, and labor force on inequality and economic growth: A case study in South Sulawesi, Indonesia

Tripani, Andi Faisal Anwar*

Faculty of Economic and Islamic Business, UIN Alauddin Makassar, Indonesia

*) Corresponding Author (e-mail: faisal.anwar@uin-alauddin.ac.id)

Abstract

South Sulawesi Province faces a significant problem: economic growth that has not been inclusive. This study analyzes the relationship between foreign investment contribution, fiscal policy, and labor force to inclusive economic growth in South Sulawesi, Indonesia. The results of this study show two relationships, namely direct and indirect relationships. Judging from the direct influence. First, FDI and local native income positively affect the level of inequality. However, in contrast to general allocation funds and labor force variables, each negatively affects inequality. Meanwhile, FDI, general allocation funds, and local original revenues positively affect economic growth. However, in contrast to the variables labor force and inequality, each negatively affects the inequality level. When viewed from its indirect influence, FDI, general allocation funds, labor force, and local native income each positively impact economic growth through levels of inequality. The implication of this study is the importance of governments allocating FDI investments for infrastructure development that supports inclusive growth.

Keywords: FDI, Fiscal Policy, Labor Force, Inequality, Growth

Abstrak

Provinsi Sulawesi Selatan diperhadapkan permasalahan utama, yakni pertumbuhan ekonomi yang belum inklusif. Adapun tujuan dari penelitian ini untuk menganalisis relasi kontribusi investasi asing, kebijakan fiskal dan angkatan kerja terhadap pertumbuhan ekonomi inklusif di Sulawesi Selatan, Indonesia. Hasil penelitian ini menunjukkan dua hubungan, yakni hubungan langsung dan tidak langsung. Dilihat dari pengaruh langsungnya. Pertama, FDI dan pendapatan asli daerah berpengaruh secara positif terhadap tingkat ketimpangan. Namun, berbeda dengan variabel dana alokasi umum dan angkatan kerja yang masing-masing berpengaruh secara negatif terhadap tingkat ketimpangan. Sementara, FDI, dana alokasi umum dan pendapatan asli daerah berpengaruh secara positif terhadap pertumbuhan ekonomi. Namun, berbeda dengan variabel angkatan kerja dan ketimpangan yang masing-masing berpengaruh secara negatif terhadap tingkat ketimpangan. Jika dilihat dari pengaruh tidak langsungnya. FDI, dana alokasi umum, angkatan kerja dan pendapatan asli daerah masing-masing berpengaruh positif terhadap pertumbuhan ekonomi melalui tingkat ketimpangan. Implikasi dari penelitian ini adalah pentingnya pemerintah mengalokasikan investasi FDI untuk pengembangan infrastruktur yang mendukung pertumbuhan inklusif.

Keywords: FDI, Kebijakan Fiskal, Angkatan Kerja, Ketimpangan, Pertumbuhan

How to cite: Tripani, T., & Anwar, A. F. (2023). Contribution of FDI, fiscal policy, and labor force on inequality and economic growth: A case study in South Sulawesi, Indonesia. *Journal of Economics Research and Policy Studies*, 3(3), 169–184. <https://doi.org/10.53088/jerps.v3i3.766>

1. Introduction

The relationship between inequality and economic growth, especially in economic growth, can be interpreted as a two-way causality relationship. Kuznets believes that income inequality will increase first during the early stages of economic growth, then will reach its peak, and eventually will decline in local native income for further stages of economic growth (Ansari, 2022). South Sulawesi has a relatively high economic growth rate, but at the same time, this region also faces the problem of increasing the Gini ratio. Growth seen from GDP prices has continued to grow consistently in the last sixteen years, from 2007 to 2022. Except in 2020, which decreased by 343 billion rupiah due to the COVID-19 pandemic. Meanwhile, the Gini ratio is in the range of high numbers, 0.38 to 0.42. The highest Gini ratio was 0.429 in 2017 (Statistics Indonesia, 2023). This illustrates the high rate of inequality in the region. While viewed from the FDI side, it is pretty fluctuating in this region, but the existing trends show that the foreign investment climate is quite impressive from year to year. Similarly, in terms of government spending and state revenue, it consistently increases from year to year. This confirms the improvement in fiscal policy in this area over the past sixteen years. While viewed from the labor force, it also shows the same trend. Thus, it can be implied that increasing FDI, improving fiscal policy, and increasing the labor force have not been directly proportional to the achievement of reducing inequality and increasing economic growth. This study aims to analyze that further.

Table 1. GDP Constant Price, Gini Ratio, FDI, General Allocation Fund, Labor Force, South Sulawesi Local Original Income in 2007-2022

Year	GDP Constant Price	Foreign Direct Investment	General Allocation Fund	Local Revenue	Gini Ratio	Labor force
2007	41,332	574,144	599,508	608,694	0.38	2,939,463
2008	44,550	272,630	656,710	1,228,384	0.37	3,136,111
2009	47,326	797,425	663,422	1,242,766	0.39	3,222,256
2010	51,200	4,010,317	706,276	1,545,590	0.4	3,272,365
2011	55,117	785,732	816,758	1,959,516	0.43	3,375,498
2012	202,185	5,487,078	996,940	2,198,776	0.42	3,351,908
2013	217,618	4,888,191	1,089,771	2,560,046	0.43	3,291,280
2014	234,084	3,338,713	1,209,599	3,029,122	0.45	3,527,036
2015	250,803	3,140,327	1,180,010	3,270,829	0.4	3,485,492
2016	269,401	4,964,963	1,394,148	3,449,561	0.4	3,694,712
2017	288,814	9,550,213	2,509,480	3,679,084	0.43	3,598,663
2018	309,156	8,805,655	2,509,480	3,948,349	0.39	3,774,924
2019	330,506	4,275,915	2,586,312	4,138,631	0.39	3,830,096
2020	328,193	3,453,022	2,349,993	4,123,036	0.38	4,006,620
2021	343,403	4,526,000	2,416,531	4,192,436	0.38	4,412,782
2022	384,321	1,242,000	3,450,000	4,480,136	0.39	4,592,327

Note: GDP Constant Price, Foreign Direct Investment, General Allocation Fund, Local Revenue in million rupiah

Source: (Statistics Indonesia, 2023).

Hervina (2020) This study shows that foreign investment is related to imbalance. The influx of foreign investment followed by the exchange of innovations will increase work efficiency, which will thus increase labor wages. It will, then, increase income disparity and inequality. Natha (2021) shows that individual general allocation funds positively affect income inequality in areas/cities in Bali Province from 2008 to 2012. Pradnyaswari et al. (2020) show that the labor force level directly negatively impacts income inequality in districts/urban areas in Bali Province. The novelty of this study is to analyze the relationship between the contribution of foreign investment, fiscal policy, and labor force to inclusive economic growth in South Sulawesi, Indonesia.

2. Literature Review

Inequality

Kuznets states that income inequality in a community will increase the original income of the region in the early stages of economic development and then decrease when the community reaches a higher level of economic development. This circumstance is known as Kuznets' inverse U hypothesis (Martínez-Navarro et al., 2020). Income inequality cannot be separated because it is closely related to poverty. Wallerstein (1976) states that economic growth will always lead to increased inequality between the rich and the poor. This is possible because capital accumulation and technological advances tend to improve the mindset of resource and capital leaders by the "elite" capital leaders of society. Conversely, those who do not have capital will be on the verge of poverty. However, it differs from Harrod (1957) and Douglass (1955), who give special consideration where the role of capital is vital. Investment given to an area will attract capital to the area. Then, the increase in development in the area is due to the increase in income. It also makes one area unequal to another area.

Economic Growth

Classical and neoclassical economists such as Adam Smith, David Ricardo, and Thomas Robert Malthus have proposed several growth theories to solve various economic problems. Adam Smith was a classical economist who first put forward the importance of policy objectives from local native income, a system of mechanisms aimed at maximizing the level of economic development in a community (Ekstedt, 2018; Fuller, 2019; Henrique et al., 2020; Kotásková et al., 2018). Smith (1776) says that if growth has occurred, it will happen continuously. Specialization and division of labor can increase productivity and efficiency. By dividing tasks into smaller, more specific tasks, work can be done more efficiently and quickly, resulting in more goods and services. This can increase output and income, and the region's original income eventually fuels economic growth.

Smith's perspective of expectations of an example of the direction of monetary development contradicts the judgment of Ricardo (1817) and Malthus (1798). Ricardo (1817) and Malthus (1798) are very pessimistic about economic growth over a long period because the economy will create a stationary state that results in no growth at all. This happened with the sanction "The Law of Diminishing Returns". The

embodiment of this hypothesis is that due to limited land, assuming there is population development (expansion of labor), it will result in a decrease in marginal product. The original income of the region at that level will be that workers will get a wage level that is barely enough to live on, while the profit rate will be zero. This state is known as a fixed (stationary) state.

However, it differs from the view of neo-classical economists who have one judgment in advancing their theory of economic growth. Schumpeter (1934) views entrepreneurs as individuals who can create new ideas and introduce innovations in the market. Entrepreneurs are the most critical drivers of economic growth because they fuel innovation and change existing production procedures. Schumpeter emphasized that innovation and change entrepreneurs make is one of the critical factors in generating long-term economic growth. Samuelson and Nordhaus (1995) also put forward the theory of economic growth, namely the theory of fast-track growth. According to Samuelson & Nordhaus (1995), Advocating fast-track growth theory, investment in research and development is critical to achieving faster economic growth. By improving knowledge and technology, productivity and production efficiency can increase, thereby increasing the income and welfare of the population (Ghosh et al., 2023; Maskivker, 2013; M. B. Samuelson et al., 2022; P. A. Samuelson, 2022). In addition, this theory also emphasizes the importance of fiscal policies that can encourage economic growth, such as infrastructure development and human resource development. Monetary policy can also accelerate economic growth by lowering interest rates to encourage investment and consumption.

3. Research Method

The type of research used is quantitative descriptive. Local income This study used linear regression testing with path analysis. According to Retherford (1993), Path analysis is a multivariate statistical method used to examine relationships between variables in a model. This study used time series data for the last sixteen years, namely the annual period 2007-2022. The source was obtained through data from BPS South Sulawesi Province. Economic growth data is GDP at constant prices, FDI is foreign investment, and fiscal policy is government spending (General Allocation Fund and Regional Original Revenue), measured in rupiah units. The number of people measures the labor force, and points measure the Gini ratio.

Research hypothesis:

Direct influence:

1. It is suspected that FDI, the General Allocation Fund, the labor force, and local native income negatively affect inequality.
2. It is suspected that the FDI General Allocation Fund, labor force, and local original income positively affect economic growth.
3. It is suspected that inequality negatively affects economic growth.

Indirect influences:

1. It is suspected that FDI, General Allocation Fund, labor force, and local native income positively affect Economic Growth (Y2) through the level of inequality.

The fundamental models used in the study are as follows:

$$Y_1 = f(X_1, X_2, X_3, X_4) \quad (1)$$

$$Y_2 = f(X_1, X_2, X_3, X_4, Y_1) \quad (2)$$

The functions of equations (1) and (2) can be written in the following equation:

$$\text{Ln}Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \varepsilon_1 \quad (3)$$

$$\text{Ln}Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Y_1 + \varepsilon_2 \quad (4)$$

Y1 is inequality, Y2 is economic growth, X1 is FDI, X2 is the General Allocation Fund, X3 is the labor force, and X4 is the local native income. At the same time, α_1 , α_2 , α_3 , α_4 , β_1 , β_2 , β_3 , β_4 , β_5 are regression coefficients of each variable X to Y1 and Y2. α_0 and β_0 are constants where ε_1 and ε_2 are error terms.

4. Results and Discussion

4.1. Results

Referring to Table 2, the FDI variable (X1) has a probability score of $0.0241 < 0.05$, and it can be concluded that the FDI variable has a significant impact and is positively correlated with the income inequality variable where it is by the research hypothesis, then the hypothesis is accepted. The variable general allocation fund (X2) obtained a probability score of $0.0165 < 0.05$, or it can be concluded that the general allocation fund is negatively related and significantly impacts the variable income inequality, which explains why the hypothesis is accepted. The labor force variable (X3) shows a probability score of $0.0348 < 0.05$. It shows that the labor force variable is negatively correlated and significantly impacts the inequality variable, and the research hypothesis accepts the hypothesis. The variable local original income (X4) shows a probability score of $0.0369 < 0.05$, or it can be concluded that the local original income has a positive and significant impact on the variable inequality, then the hypothesis is accepted.

Table 2. Statistical Test Results T Model Y1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.070599	2.603742	1.563365	0.1463
X1	0.026423	0.015867	1.665264	0.0241
X2	-0.069688	0.047035	-2.481636	0.0165
X3	-0.469899	0.257049	-2.828051	0.0348
X4	0.123894	0.052206	2.373174	0.0369

Source: Output Eviews 10 data processed, 2022

The general allocation fund has a probability score of $0.1316 < 0.05$, or it can be concluded that it has a positive but insignificant impact on economic growth, so the hypothesis is rejected. For the labor force variable (X3), the table explains the

probability score of $0.0345 > 0.05$. It confirms that the labor force is negatively related and significantly impacts the economic growth variable, so the hypothesis is accepted. The variable local original income (X4) shows a probability value of $0.1355 < 0.05$ or has a positive but insignificant impact on economic growth, so the hypothesis is rejected. The income inequality variable (Y1) shows a probability value of $0.0014 > 0.05$, or it can be interpreted that the income inequality variable has a negative and significant impact on the economic growth variable, so the hypothesis is accepted.

Table 3. Statistical Test Results T Model Y_2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.231842	24.28199	0.215462	0.8337
X1	0.104692	0.149775	0.698991	0.0005
X2	0.713541	0.434558	1.641992	0.1316
X3	-1.797635	2.475930	-0.726044	0.0345
X4	0.879357	0.541520	1.623869	0.1355
Y1	-0.724988	2.543434	-0.285043	0.0014

Source: Output Eviews 10 data processed, 2022

Table 4. Summary of Research Results

Influence Between Variables	Direct Influence	Significance	Relationship	Support for Hypothesis	Indirect Influence	Relationship	Total Influence	Support for Hypothesis
X1 > Y1	0.026423	0.0241	Significant	Not	-	-	0.026423	-
X2 > Y1	-0.069688	0.0165	Significant	Yes	-	-	-0.069688	-
X3 > Y	-0.469899	0.0348	Significant	Yes	-	-	-0.469899	-
X4 > Y1	0.123894	0.0369	Significant	Not	-	-	0.123894	-
X1 > Y2	0.104692	0.0005	Significant	Yes	-0.0759	Significant	0.028792	Yes
X2 > Y2	0.713541	0.1316	Insignificant	Not	-0.5173	Significant	0.196241	Yes
X3 > Y2	-1.797635	0.0345	Significant	Not	1.3033	Significant	-0.494335	Yes
X4 > Y2	0.879357	0.1355	Insignificant	Not	-0.6375	Significant	0.241857	Yes
Y1 > Y2	-0.724988	0.0014	Significant	Yes	-	-	-0.724988	-

Source: The findings were processed by researchers.

4.2. Discussion

The Effect of Foreign Investment on Income Inequality

The results showed that the effect of FDI on income inequality had a significance level of 0.0241 and had a positive effect. Based on this value, it can be concluded that FDI significantly affects income inequality because the significance value is < 0.05 . Every increase in FDI increases income inequality. These findings are not in line with the hypothesis. This is because FDI is more likely to flow to the processing industry sectors in South Sulawesi, especially export-oriented sectors or sectors that promise greater profits for foreign investors. This could increase income inequality as most benefits accumulate in these sectors, leaving other sectors with slower growth in South Sulawesi.

This is in line with previous research; one of the causes of income disparity is the massive investment of local original income from local income companies from regional original income capital, so that the proportion of capital income from adding

assets is more significant than the percentage of income from labor, so unemployment increases (Nurmawati, 2022). Similarly, Hervina (2020), this study revealed that the entry of FDI, followed by technology transfer, increases labor productivity and income, exacerbating economic inequality, especially for local workers. In contrast to research, Sea et al. (2020) found that FDI did not substantially influence income disparity in Java from 2008 to 2018. Harrod-Domar said that ideally, good investment could play a role in improving the economic development of a region and reducing poverty and inequality (Mankiw, 2006).

The Effect of General Allocation Funds on Income Inequality

The study results explain that the impact of general allocation funds on income inequality is 0.0165 and has a negative effect. Based on this value, it can be concluded that the general allocation fund significantly impacts income inequality because the significance score is < 0.05 . It can be interpreted that every increase in the General Allocation Fund can reduce income inequality. These findings are in line with the hypothesis. The reason is that increasing general allocation funds can strengthen local government revenues in South Sulawesi, enabling them to provide better public services and infrastructure. Thus, regions that may have previously been underdeveloped can increase competitiveness and improve the welfare of their population, reducing economic disparities between regions, especially in 24 districts and cities in South Sulawesi.

In line with research, Fifit (2020) shows that the general allocation fund partially has a significant negative impact on income distribution inequality, meaning that an increase in the general allocation fund can reduce inequality. However, it differs from the study of Natha (2021), which shows that individual general allocation funds have a significant positive impact on the inequality of income distribution for urban and district areas in 2008-2012 for the native income of Bali province. Rostow (1960) and Musgrave (1959) stress that government spending leads to increased economic development at higher levels and more significant private employment, thus leading to market monopolies and inequality.

The Effect of the Labor Force on Income Inequality

The results of the study explain that the impact of the labor force on income inequality has a significant degree of 0.0348 and has a negative effect. Based on the above values, it can be concluded that the labor force significantly impacts inequality. This means that every increase in the labor force can reduce income inequality. The reason is that the increase in the labor force can occur through economic diversification, where economic sectors develop and create job opportunities in various fields in South Sulawesi. This diversification can help reduce income inequality as people have more employment options and can access growing sectors. The increase in the labor force is related to the growth of the industrial and service sectors. If these sectors expand, they can create new jobs, provide opportunities for workers with varying skill levels, and reduce income inequality. These findings are in line with the hypothesis. This is in line with Pradnyaswari et al. (2020), who explain that the level of employment

opportunities directly negatively impacts the disparity in income distribution in the city and regency areas of Bali province. However, it differs from the study by Nurmawati (2022), which explains that the working-age population positively influences income inequality.

The Effect of Local Revenue on Income Inequality

The study's results explained that local original income impacted income inequality with a significance score of 0.0369 and had a positive effect. Based on this value, it can be concluded that local original income significantly impacts income inequality because the significance score is < 0.05 . That is, every increase in local original income increases income inequality. These findings are not in line with the hypothesis. This is due to the increase in local native income from specific sectors, such as mining or industries in South Sulawesi, that generate significant revenues, causing economic dependence on local native income. If a small percentage of society is involved in the sector, income inequality may increase because most income is concentrated in the hands of certain groups. If regions rely only on the original income of one or two key sectors to generate revenue, the risk of income inequality will increase. Low economic diversification makes regions more vulnerable to price or demand fluctuations in those critical sectors.

This is in line with a study from Putri (2020), which shows that the results of local original income partially have a significant positive impact on income distribution inequality. However, it differs from Huda et al. (2021), which shows that local native income negatively affects income inequality. However, Smith (1776) argues that state revenue is an essential indicator in the economic development of a region; the more significant the revenue of a region, the greater the prosperity and welfare of the people in it. Income inequality occurs due to differences in abilities and skills and the use of capital and natural resources. Smith considered that free markets and healthy competition could overcome income inequality in the economy. Free markets and healthy competition will boost productivity and efficiency, reducing income inequality.

The Effect of Foreign Investment on Economic Growth

FDI shows a significance of 0.0005 and has a positive effect. Based on this value, it can be concluded that FDI significantly impacts the economic growth rate because the significance score is < 0.05 . Every increase in FDI can increase economic growth. These findings are in line with the hypothesis. This is due to two things. First, foreign investment creates new jobs directly in the companies investing and indirectly in local supply chains. Increasing the labor force can increase people's income, increase purchasing power, and drive economic growth in South Sulawesi. Second, with job creation and income generation, FDI has stimulated domestic consumption and demand for goods and services. This has helped the growth of other economic sectors, such as trade, banking, and consumer services in South Sulawesi.

Hidayat (2020) and Handoyo et al. (2020) explain that FDI significantly impacts economic growth, which is in line with the findings. This can be interpreted if increasing foreign investment scores can lead to increased economic growth. However, it differs

from studies by Alice et al. (2021), which explain that foreign investment does not influence GDP growth or can increase GDP. However, foreign investment does not significantly affect GDP, so efforts must be made to improve it. Smith (1776) affirmed the importance of fixed capital investments such as more efficient and sophisticated modern machinery and equipment, which will help produce more and better products at lower costs. This will help reduce prices and increase competitiveness, ultimately increasing profits and economic growth.

The Effect of General Allocation Funds on Economic Growth

The study results show that the General Allocation Fund for economic growth has a significance level of 0.13166. Referring to the original regional income value, it can be concluded that the general allocation fund does not have a significant positive effect on the economic growth rate because the significant score is > 0.05 . It can be interpreted that any increase in the General Allocation Fund cannot increase economic growth. These findings are not in line with the hypothesis. This is because, first, although the General Allocation Fund provides additional funds to local government revenues when the infrastructure and supporting facilities needed to drive economic growth are still limited, these funds may not be able to have the maximum impact. Second, suppose local governments do not have effective local economic development policies. In that case, additional funds from the General Allocation Fund may not be appropriately directed to encourage sectors that have growth potential. Lack of strategic planning and policy implementation may hamper the positive impact of the General Allocation Fund increase on economic growth in South Sulawesi.

Government spending has not been effective in boosting growth. In line with Suhardjo (2021), it shows different results where the general allocation fund does not influence economic growth. However, it differs in research. Hidayat et al. (2020) explain that the general allocation fund positively impacts economic growth, and every additional allocation can maximize economic growth. Deep Wagner (1883) states that government spending tends to increase with economic growth and social progress. This tendency by Wagner (1883) is called "Wagner's Law" or "Government Expenditure Growth Law". Wagner believed that certain factors drive government spending to increase along with economic growth. One of its prominent is the increasing complexity of modern society, which requires more lavish government spending to facilitate the regulation and coordination of economic and social activities.

The Effect of the Labor Force on Economic Growth

The study results show that the labor force's significance over economic growth is 0.0345, which has a negative effect. This means that any increase in the labor force cannot increase growth. These findings are not in line with the hypothesis. This is due to several things. First, the increase in the labor force occurred in unproductive sectors or low productivity; economic growth did not keep up with the increase in the number of jobs in South Sulawesi. Unproductive work can create jobs but does not contribute significantly to the region's original income or overall economic output. Second, an increase in the size of the labor force is not always followed by an increase in the

quality of work. If the available jobs are low-wage, do not provide social security, or do not provide job security. Society may still face economic challenges despite the increase in the labor force. Third, an open labor force does not match the skills or qualifications of the available workforce. Hence, the mismatch of skills can be an obstacle to economic growth. Increased job opportunities that are not suitable for skills can result in mismatches in the labor market in South Sulawesi. Fourth, the increase in the labor force mainly occurs in one sector of the economy or certain types of work; the economy can become vulnerable to fluctuations within that sector. Mainly in the processing industry sector. Excessive dependence on local revenues from one sector can lead to economic instability in South Sulawesi. This is not in line with the findings of Wijaya et al., who found that the labor force significantly affects growth.

Local Revenue to Economic Growth

The results showed a value of 0.1355 and had a positive effect. It can be concluded that local original income does not affect economic growth because the significance score is > 0.05 . This means that any increase in local native income has not been able to increase growth. These findings are not in line with the hypothesis. This is due to several things. First, the increase in local native income in South Sulawesi comes from specific sectors dependent on natural resource native income or less diverse sectors; economic growth may become vulnerable to fluctuations in commodity prices or market demand. Second, if an increase in local native revenues is not followed by adequate investment in infrastructure, economic growth may be hampered. Adequate infrastructure, such as roads, electricity, and transportation facilities, is needed to support the growth of the economic sector in South Sulawesi. Third, increases in local native incomes that are not followed by active involvement of the private sector in economic development can limit growth potential. Private investment and business sector participation are needed to create a vibrant business ecosystem in South Sulawesi. In contrast to previous research findings, acceptance of local revenue impacts local income and economic growth and increases capital expenditure and the quality of community services. The expenditure aims to optimize advice and facilities to encourage economic growth (Saputra et al., 2021).

The Effect of Income Inequality on Economic Growth

The study's results explain that the impact of income inequality on economic growth has a significance value of 0.0014 and has a negative effect. This means that Any increase in inequality decreases economic growth. These findings are in line with the hypothesis. In line with the findings, Romi (2021) explains that the Gini ratio significantly impacts growth. This is due to several things. First, high-income inequality can result in disparities in access to productive work and decent income in South Sulawesi. If a large part of the population experiences economic inequality, the impact can be detrimental to economic growth because people cannot access and use economic resources efficiently. Second, only a tiny percentage of people have access to economic resources in South Sulawesi, such as land or capital, making it difficult for most of society to participate in productive economic activities. This can slow down

overall economic growth. Third, high economic inequality can create social instability and increase societal tensions. Unstable social and political conditions can hinder long-term economic growth in South Sulawesi.

The Effect of FDI on Economic Growth through the Level of Income Inequality

The results showed that the direct influence of FDI on growth was 0.104692, while the indirect influence through the level of inequality was -0.0759. This suggests that the direct impact of FDI on growth rates is more significant than its indirect influence through inequality, thus showing an insignificant relationship. These findings are in line with existing hypotheses. Any increase in FDI can increase economic growth through levels of inequality. This is due to several things. First, FDI can create new jobs in companies that invest and indirectly in supporting sectors. Increasing the labor force can reduce unemployment and increase people's incomes, reducing inequality in South Sulawesi. Second, FDI brings more efficient management practices and more sophisticated production processes. This can increase the productivity and efficiency of economic sectors, whose local native income, in turn, contributes to regional native income economic growth in South Sulawesi. Third, foreign investment brings capital and financial resources that can be used for infrastructure development, research and development, and other economic projects. Increased access to capital can increase investment and economic growth in South Sulawesi.

In line with the findings of Handoyo et al. (2020), FDI affects economic growth in Indonesia. Similarly, Keynes emphasized the role of investment in economic progress, where high investment and savings can increase economic growth. Investment can also develop infrastructure and facilities and utilize existing resources and the native income of a country (Bellofiore, 2013; Eggertsson &).

The effect of the general allocation fund on economic growth through the level of income inequality

The results showed that the direct influence of general allocation funds on growth was 0.713541, while the indirect influence through the level of inequality was -0.5173. This suggests that the direct impact of the general allocation fund on growth rates is more significant than its indirect influence through inequality rates, thus showing an insignificant relationship. These findings are in line with existing hypotheses. Any increase in the general allocation fund can increase economic growth through inequality levels. This is due to several things. First, the increase in general allocation has provided additional funds for infrastructure development such as roads, bridges, ports, and other public facilities. Good infrastructure can improve connectivity, facilitate the mobility of goods and people, and stimulate economic growth in South Sulawesi. Second, through development projects and local economic stimulation in South Sulawesi, the general allocation fund has helped increase local revenues through taxes and other local revenue sources. Increasing local native income can provide sustainability and financial autonomy for regions. Third, funds from the general allocation fund have been allocated to improve education, skills training, and human

resource development in South Sulawesi. Improving the quality of human resources can help create a more productive workforce, supporting sustainable economic growth.

In theory, Wagner (1883) states that government spending will increase as the economy grows. Government spending can be critical in increasing economic growth and people's welfare. However, government spending must be done carefully and efficiently.

The influence of the labor force on economic growth through the level of income inequality

The results showed that the direct influence of the labor force on growth was -1.797635 , while the indirect influence through the level of inequality was 1.3033 . This suggests that the direct impact of the labor force on growth rates is smaller than its indirect influence through levels of inequality, thus showing a significant association. These findings are in line with existing hypotheses. Any increase in the labor force can increase economic growth through levels of inequality. This is due to several things. First, the increase in the labor force increases economic productivity because more people are involved in productive activities in South Sulawesi. Increased productivity can create more goods and services, supporting economic growth. Second, by creating new jobs, the labor force experiences an increase in income. This increase in income not only benefits workers but also increases the purchasing power of the community as a whole, which can boost economic growth in South Sulawesi. Third, the availability of a sufficient labor force can be a determining factor for companies to invest and develop business. Companies seeing market growth potential and labor availability can be more motivated to expand their operations.

The Effect of Local Original Income on Economic Growth through the Level of Income Inequality

The results showed that the direct influence of local original income on growth was 0.879357 , while the indirect influence was through the level of inequality of -0.6375 . This suggests that the direct impact of local native income on growth rates is smaller than its indirect influence through inequality, thus showing an insignificant relationship. These findings are in line with existing hypotheses. Any increase in local native income can increase economic growth through levels of inequality. This is due to several things. First, increased local revenues can be allocated to improve the quality of public services, including education, health, and other essential services. Improving the quality of public services can improve people's welfare, support better education, and create a more skilled workforce. Secondly, with the increase in local original income, the revenue from taxes and levies has also increased. These revenues can be used to finance development projects and public services, which local revenues, in turn, can support economic growth. Third, increasing local native income can be used to support the development of local economic potential, such as tourism, agriculture, or local industries. This effort can increase the region's attractiveness and create added economic value.

In this case, local revenues can play an essential role in supporting government policies to reduce income inequality, as they can be used to finance social and infrastructure programs that can directly help underprivileged groups. In line with Keynes's view, increased government spending through social programs and infrastructure can increase aggregate demand and create new jobs, promoting economic growth.

5. Conclusion

The results of this study show two relationships, namely direct and indirect relationships. Judging from the direct influence. First, FDI and local native income positively affect the level of inequality. However, in contrast to general allocation funds and labor force variables, each negatively affects inequality. Meanwhile, FDI, general allocation funds, and local original revenues positively affect economic growth. However, in contrast to the variables labor force and inequality, each negatively affects the inequality level. When viewed from its indirect influence. FDI, general allocation funds, labor force, and local native income each positively affect economic growth through levels of inequality. The implication of this study is the importance of the government allocating FDI investment for infrastructure development that supports inclusive growth so that it can benefit all communities and economic sectors. It is essential to encourage the diversification of regional revenue sources to reduce dependence on local original income for specific revenue sources so that fiscal policy is more effective in increasing economic growth. Finally, the government needs to encourage increased human capital to increase accessible employment opportunities, increase income, reduce inequality, and increase economic growth.

Acknowledgements

Thank you, academics at the Department of Economics, UIN Alauddin Makassar, for their input so that the article becomes relevant for publication.

References

- Alice, Ekklesia, Sepriani, L., & Yohana Juwitasari Hulu. (2021). The Effect of Investment on Economic Growth through Increasing Gross Domestic Product in Indonesia. *ECONOMIC DISCOURSE (Journal of Economics, Business and Accounting)*, 20(2), 77–83. <https://doi.org/10.22225/we.20.2.2021.77-83>
- Annisa, M. K. (2019). Analysis of the effect of the General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sharing Fund (DBH) on the inequality of income distribution of districts/cities in West Sumatra. *Diploma thesis*.
- Ansari, M. A. (2022). Re-visiting the Environmental Kuznets curve for ASEAN: A comparison between ecological footprint and carbon dioxide emissions. *Renewable and Sustainable Energy Reviews*, 168, 112867.
- Bellofiore, R. (2013). A heterodox structural Keynesian: Honouring Augusto Graziani. *Review of Keynesian Economics*, 1(4), 425–430. <https://doi.org/10.4337/roke.2013.04.04>

- Douglass, C. N. (1955). Location Theory and Regional Economic Growth. *The University of Chicago Press Journal*, 63.
- Eggertsson, G. B., & Petracchi, C. (2021). *Mr. Keynes and the "Classics": A Suggested Reinterpretation*. National Bureau of Economic Research.
- Ekstedt, H. (2018). Economics, Ethics and Power: From Behavioural Rules to Global Structures. In *Economics, Ethics and Power: From Behavioural Rules to Global Structures*. Taylor and Francis. <https://doi.org/10.4324/9781315271392>
- Fuller, E. W. (2019). Keynes and the ethics of socialism. *Quarterly Journal of Austrian Economics*, 22(2), 139–180. <https://doi.org/10.35297/qjae.010010>
- Ghosh, S., Nath, S., & Srivastava, S. (2023). Productivity and real exchange rates for India: does Balassa-Samuelson effect explain? *Indian Growth and Development Review*, 16(1), 41–73.
- Gill-McLure, W. (2013). The political economy of public sector trade union militancy under Keynesianism: The case of local government. *Capital and Class*, 37(3), 417–436. <https://doi.org/10.1177/0309816813503172>
- Handoyo, R. D., Erlando, A., & Septiyanto, I. (2020). The impact of external factors on Indonesia's economic growth. *EcceS: Economics Social and Development Studies*, 7(1 SE-Volume 7 Number 1, June 2020), 1–21. <https://doi.org/10.24252/ecc.v7i1.13382>
- Harrord, D. (1957). *Theory of Growth Models*. PT. King Grafindo Library.
- Henrique, F., Terra, B., Filho, F. F., Cezar, P., & Fonseca, D. (2020). *Review of Political Economy*, v. 32, n. 3, 2020. 1–14.
- Hidayat, A. N. (2020). : The Effect of Foreign Direct Investment (PMA), Domestic Investment (PMDN), Labor, and Inflation on Economic Growth in Lampung Province in the Perspective of Islamic Economy in 2007 – 2017. *SELL Journal*, 5(1), 55.
- Hidayat, E. W., Rosyadi, & Bariyah, N. (2020). Human Development Index, Unemployment and Poverty Rate in West Kalimantan. *Annual Academic Seminar on Economics and Development Studies (SATIESP 2020)*, 12–23.
- Kotásková, S. K., Procházka, P., Smutka, L., Maitah, M., Kuzmenko, E., Kopecká, M., & Hönl, V. (2018). The impact of education on economic growth: The case of India. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 66(1), 253–262. <https://doi.org/10.11118/actaun201866010253>
- Lorentino, L. T., Arinda, P. S., & Septiani, Y. (2020). The effect of PMA, PMDN, TPAK, GDP per capita, government expenditure on Javanese income disparity. *Stability: Journal of Management and Business*, 3(2), 21–34. <https://doi.org/10.26877/sta.v3i2.7781>
- Malthus, T. R. (1798). *An Essay on the Principle of Population*. J. Johnson.
- Mankiw, N. G. (2006). *Introduction to Macroeconomics. Third Edition*. Salemba Four.
- Martínez-Navarro, D., Amate-Fortes, I., & Guarnido-Rueda, A. (2020). Inequality and development: is the Kuznets curve in effect today? *Economía Política*, 37(3), 703–735.
- Maskivker, J. (2013). Self-Realization and Justice: A Liberal-Perfectionist Defense of

- the Right to Freedom from Employment. In *Self-Realization and Justice: A Liberal-Perfectionist Defense of the Right to Freedom from Employment*. Taylor and Francis. <https://doi.org/10.4324/9780203127636>
- Musgrave, R. (1959). *The Theory of Public Finance*. Mc GrawHill.
- Nurhuda, R., Muluk, M. R. K., & Prasetyo, W. Y. (2012). Development Inequality Analysis. *Journal of Public Administration (JAP)*, 1(4), 110–119.
- Nurmawati, S. (2022). Analysis of Income Inequality in Sulawesi Island. *Thesis, Hasanuddin University*.
- Oner, E. (2015). Comparative Interpretation of Classical and Keynesian Fiscal Policies (Assumptions, Principles and Primary Opinions). *International Journal of Finance & Banking Studies* (2147–4486), 4(2), 11–20. <https://doi.org/10.20525/ijfbs.v4i2.213>
- Pradana, M. H. A. (2018). The effect of foreign investment on income inequality in Indonesia. *Undergraduate Thesis*.
- Pradnyaswari, N. M. W., Darsana, I. B., & Setiawina, N. D. (2020). The Effect Of Wages And Human Capital On Labor Force Participation Rates And Income Distribution Districts / Cities In Bali Province Ni. *E-Journal Of Development Economics Udayana University Vol. 10 No 4 APRIL*, 10(4), 1596–1623.
- Putri, N. putu V. S., & Natha, I. K. S. (2014). The Effect of Local Original Revenue, General Allocation Fund and Capital Expenditure on Income Inequality. *E-Journal of Development Economics, Udayana University*, 4(1), 41–49.
- Retherford, R. D. (1993). *Statistical Models For Causal Analysis*.
- Ricardo, D. (1817). *Principles Of Political Economy And Taxation*.
- Romi, S. (2021). Study of income distribution inequality and economic growth in East Luwu District. *ICOR: Journal of Regional ...*, 1–108.
- Rostow, W. . (1960). *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge University Press.
- Samuelson, M. B., Reid, E. V, Drijber, R., Jeske, E., Blanco-Canqui, H., Mamo, M., Kadoma, I., & Wortman, S. E. (2022). Effects of compost, cover crops, and local conditions on degradation of two agricultural mulches in soil. *Renewable Agriculture and Food Systems*, 37(2), 128–141.
- Samuelson, P. A. (2022). Paul Raises the Keynesian Cross. *The Making of Modern Economics: The Lives and Ideas of the Great Thinkers*, 357.
- Samuelson, P. A., & Nordhaus, W. D. (1995). *Macro-Economics* (14th ed.). Erlangga.
- Saputra, M. R., Haliah, & Indrijawati, A. (2021). The Effect of Capital Expenditure on Regional Economic Growth with Local Original Income as an Intervening Variable. *Accruals: Journal of Business and Contemporary Accounting*, 14(2), 129–134.
- Schumpeter, J. (1934). *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit*. Interest and the Business Cycle.
- Skidelsky, R. (2011). The relevance of Keynes. *Cambridge Journal of Economics*, 35(1), 1–13. <https://doi.org/10.1093/cje/beq043>
- Smith, A. (1776). the Wealth of Nations. *London Business School Review*, 26(3), 46–

49. <https://doi.org/10.1111/2057-1615.12058>

Statistics Indonesia. (2023). *Indonesian Sustainable Development Goals Indicators*.

Sundoro, F. M., & Suhardjo, Y. (2021). *Capital Expenditure As A Mediating Variable*. 19(3), 141–152.

Wagner, A. (1883). *the increasing of state activity*.

Wallerstein, I. (1976). *Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. Academic Press.

Wijaya, A., Kasuma, J., Tasen?e, T., & Caisar Darma, D. (2021). Labor force and economic growth based on demographic pressures, happiness, and human development: Empirical from Romania. *Journal of Eastern European and Central Asian Research (JEECAR)*, 8(1 SE-Manuscripts), 40–50. <https://doi.org/10.15549/jeecar.v8i1.571>