The Influence of Investment, Labor, and Government Expenditure on Economic Growth in South Sulawesi

Nursarfiqah [1], Naidah [2], Asdar [3]

a [Faculty of Economics and Business], [Universitas Muhammadiyah Makassar], [Indonesia]

b [Faculty of Economics and Business], [Universitas Muhammadiyah Makassar], [Indonesia]

[*] *Corresponding author. E-mail address: nursarfiqah27@gmail.com*

ARTICLE INFO

Article history:
Received
May 2025

Accepted
July 2025

Keywords
Investment, Labor, Government Expenditure, Economic Growth

A B S T R A C T

This study investigates the effect of investment, labor, and government expenditure on economic growth in South Sulawesi during the period 2014–2024. Using secondary data obtained from the Central Statistics Agency (BPS), the analysis applies multiple linear regression and t-tests with a panel data approach processed through SPSS 25. The dependent variable is regional economic growth measured by Gross Regional Domestic Product (GRDP) at constant prices, while the independent variables include realized investment, labor force participation, and government expenditure. The results reveal that investment shows a negative but insignificant effect on economic growth, indicating that capital inflows have not been effectively directed toward productive sectors that stimulate regional output. Labor exhibits a positive but statistically insignificant influence, suggesting that an increase in workforce quantity is not yet accompanied by sufficient productivity and skills development. Similarly, government expenditure demonstrates a negative and insignificant effect, implying inefficiencies in public spending allocation and a dominant share of non-productive expenditures. These findings highlight the structural challenges faced by South Sulawesi in translating investment, labor force expansion, and fiscal policy into tangible economic outcomes. The study contributes empirical evidence specific to the regional context and suggests that policymakers should focus on improving investment quality, enhancing human capital, and reallocating government spending toward productive sectors to achieve sustainable growth.

1. Introduction

1.1 Background

Economic growth is one of the main indicators in macroeconomic analysis used to assess the extent to which a region's development has succeeded in improving the welfare of its people. Over the past few years, South Sulawesi Province has experienced fluctuations in its economic growth rate. The local government has adopted various strategic policies to encourage accelerated growth, particularly through approaches such as increasing investment, improving the quality and productivity of the workforce, and optimizing government spending in priority sectors. These three variables are conceptually and theoretically important elements in the regional economic development framework, as. they are directly related to increasing the value of Gross Regional Domestic Product (GRDP). Although theoretically these three variables play an important role, empirical results across regions show varying results. Some studies found a significant relationship, while others showed inconsistent or even insignificant results. For example, in a study by Rasyid (2021) in Eastern Indonesia, government spending did not show a significant effect on economic growth. This suggests that the influence of each variable is highly dependent on the structural and managerial conditions in each region.

Based on this phenomenon, there is a need to further examine the empirical relationship between investment, labor, and government spending on economic growth in South Sulawesi Province. This study aims to fill this knowledge gap by providing relevant and up-to-date empirical evidence. The results are expected to not only provide academic contributions but also serve as a reference for local governments in designing more targeted, efficient, and data-driven economic development policies. Therefore, based on the background outlined above, the author conducted this study entitled "The Effect of Investment, Labor, and Government Spending on Economic Growth in South Sulawesi.

1.2 Problem Statement

1. Does investment affect economic growth in South Sulawesi Province from 2014 to 2024?
2. Does labor influence government growth in South Sulawesi Province from 2014 to 2024?
3. Does government spending affect economic growth in South Sulawesi Province from 2014 to 2024?

1.3 Objectives and Scope

Based on the background and problem formulation outlined previously, the objectives of this study are:

1. To determine the effect of investment on economic growth in South Sulawesi Province.
2. To determine the effect of labor on economic growth in South Sulawesi Province.

2. Literature Review

A. Theoretical Review

Investment is a crucial variable in driving a country's economy. Simply put, investment can be defined as the activity of investing funds in one or more assets for a specific period with the expectation of generating income or increasing the investment's value. Investment is the initial step in production activities and a factor in increasing economic growth. Therefore, investment is essentially the initial step in economic development activities. The labor force is the working-age population who are employed, have jobs but are temporarily unemployed, and are seeking work. According to Sulistyaningsih Yudo Swarsono (in Menajang, 2016), labor demand is the number of people required to perform work at a certain wage rate. Labor demand is divided into three categories: short-term labor demand, long-term labor demand, and market labor demand. Basri and Munandar (2010) state that economic growth indicates the extent to which economic activity generates additional income for the community over a given period. Because economic activity is essentially a process of using production factors to produce output, this process, in turn, generates a flow of rewards for the production factors owned by the community. With economic growth, it is hoped that the income of the community as owners of production factors will also increase.

2.1 Related Work

Numerous prior studies have examined the impact of investment, labor, and government expenditure on economic growth, both at the national and regional levels. For example, research conducted by Tambunan (2016) found that investment has a positive and significant influence on Indonesia’s economic growth, particularly in areas with a supportive business climate. This finding is supported by Suryani and Nugroho (2018), who emphasized that an increase in

Domestic Investment (PMDN) directly contributes to the growth of Gross Regional Domestic Product (GRDP) in the Sumatra region. In a related study, Wahyuni and Utami (2019) revealed that the labor force plays a significant role in driving economic growth, especially when linked to improvements in quality through education and vocational training. Their research highlights the critical role of human resources as a key driver of productivity.

In addition, government expenditure has also been a major focus in several previous studies. Kuncoro (2020), for instance, discovered that regional government spending, particularly in infrastructure and education, significantly affects economic growth across various provinces in Indonesia. However, not all studies reported consistent findings. Rasyid (2021), in his study of Eastern Indonesia, concluded that government spending does not have a statistically significant impact on economic growth. This outcome is attributed to the low efficiency in budget allocation and weak fiscal accountability.

2.2 Research Gap

While the relationship between investment, labor, and government expenditure on economic growth has been widely examined, a notable research gap persists, particularly within the regional context of South Sulawesi Province. Existing literature tends to focus predominantly on the national level or economically advanced regions such as Java and Sumatra, leaving a scarcity of empirical studies that investigate these variables in less-studied areas like South Sulawesi. Moreover, prior findings have yielded inconsistent results—some studies report significant impacts of these variables on regional economic growth, whereas others do not. Furthermore, comprehensive models that analyze the simultaneous effect of investment, labor, and government spending remain limited, despite the interdependence of these factors in stimulating regional economic performance. This indicates a critical need for context-specific, data-driven research to provide more accurate insights into how these variables influence economic growth in South Sulawesi.

3. Methodology

3.1 Data Collection

The data used in this study is secondary data, so the analysis method utilizes more descriptive analysis, a form of data processing conducted using tables related to the author's objectives. Data collection often involves quoting or taking information and information obtained from various reading sources and published data documents held by certain institutions. By directly visiting the Central Statistics Agency (BPS), institutions, or other relevant sources, the collected data was then processed and analyzed easily, quickly, and quantitatively using multiple regression.

.

3.2 Analysis Techniques

The technique used is multiple linear regression and t-test using SPSS 25 with a panel data approach. The results of the study indicate that investment has a negative but insignificant effect, labor has a positive and insignificant effect on economic growth in South Sulawesi for the period 2014-2024, government spending has a negative and insignificant effect on economic growth in South Sulawesi for the period 2014-2024

3.3 Validation

a. Multiple Linear Regression Analysis

Data analysis is part of the data testing process, where the results are used as sufficient evidence to draw research conclusions. Data analysis is conducted using qualitative and quantitative methods, which can be linked to existing theories. Quantitative analysis involves managing the data obtained using statistical and econometric methods, while quantitative analysis provides a snapshot of the situation. To observe and analyze investment in labor utilization, a multiple regression model analysis is used with the following equation:

$$Y = \boldsymbol{BO} + \boldsymbol{B1X1} + \boldsymbol{B2X2} + \boldsymbol{B3X3} + \boldsymbol{e}$$

Where:

Y = Economic growth of South Sulawesi Province

X1 = Investment

X2 = South Sulawesi Province's labor force (people)

X3 = South Sulawesi Province's government expenditure (millions of Rupiah)

e = error term

In the equation, the independent variables are investment (PDMN), labor, and government expenditure, while the dependent variable is economic growth.

4. Results and Discussion

a. Economic Growth

In this study, economic growth is used as the dependent variable that reflects the economic performance of a region, particularly in South Sulawesi Province. This variable is measured based on the increase in Gross Regional Domestic Product (GRDP) at constant prices, which represents the total value of goods and services produced by all economic sectors, unaffected by price changes. Economic growth indicates the extent to which a region is able to continuously increase its production capacity from year to year. Thus, GRDP growth becomes an important indicator in assessing the success of regional economic development. In the context of this study, economic growth is presumed to be influenced by three main variables: investment**,** labor, and government expenditure. Data on economic growth was obtained from an official source, namely the Central Statistics Agency (BPS)**,** and further analyzed to determine how much each independent variable influences the increase in economic activity in the region. Economic growth can be observed by comparing the GRDP value generated in a given year with that of the previous year. The GRDP value used is GRDP at constant prices, aimed at eliminating the effects of inflation and price fluctuations. Therefore, the resulting growth figures purely reflect the real growth produced by the region's economic activities during a certain period.

The following table presents data on GRDP growth at constant prices (ADHK) for South Sulawesi from 2014 to 2023:

year	Constant GRDP (trillion IDR)	Growth (%)
2014	234,0	7,54
2015	250,0	7,19
2016	269,0	7,42
2017	288,8	7,21
2018	309,2	7,04
2019	330,5	6,91
2020	328,2	-0,71
2021	343,4	4,64
2022	360,9	5,10
2023	377,2	4,51

Source: BPS Statistics of South Sulawesi, 2023

Based on Table 4.2, it can be seen that South Sulawesi's economy has experienced positive growth since 2021, after a contraction of -0.71% in 2020 due to the impact of the COVID-19 pandemic. In 2023, South Sulawesi recorded an economic growth of 4.51%, with a value added of IDR 652.57 trillion (current prices) or IDR 377.16 trillion (constant prices). This demonstrates that the region's economy has continued to improve each year following the downturn in 2020.

b. Investment

Investment can be defined as the expenditure or capital spending by individuals or companies to purchase capital goods and production equipment in order to enhance the capacity to produce goods and services within the economy. Investment is not only aimed at maximizing output, but also plays a key role in determining the distribution of labor and income, population growth and quality, and technological advancement (Fadel M., Mallongi S., Arifin, Selong A., 2021).

Private sector investment may come from both domestic and foreign sources. Meanwhile, government investment is made to provide public goods. The amount of government investment can be calculated from the difference between the total government budget and its routine expenditures. Investment is one of the crucial factors in determining the level of national income. Investment activities enable a society to continuously expand its economic activities and employment opportunities, thereby increasing national income and improving prosperity (Sukirno, 2000).

In South Sulawesi Province, investment benefits from its highly strategic location and diverse potentials across 24 regencies/cities. Each region possesses distinct investment opportunities in sectors such as horticulture (agriculture, plantations, and forestry), fisheries, marine resources, tourism, mineral and non-mineral resources, energy, and other promising sectors. In addition to investment, labor also plays an influential role in economic growth. In South Sulawesi, labor indicators have shown a positive trend in line with ongoing economic recovery. Unemployment caused by the COVID-19 pandemic has decreased. This improvement is partly due to the government's efforts in reviving the economy through training programs, assistance, and attracting investors to create job opportunities for the local population (Sulselprov, 2022).

The increase in South Sulawesi's economic growth cannot be separated from the contribution of investments made in the region. Both domestic investment (PMDN) and foreign investment (PMA) in South Sulawesi—measured through realized investment value and growth percentage—are presented in the following table:

Table 4.3

Domestic Investment (PMDN) in South Sulawesi, 2014–2023

year	Domestic investment (billion IDR)	Percentage (%)
2014	4,949,600,000,000	0.07
2015	9,215,300,000,000	0.13
2016	3,345,700,000,000	0.05
2017	1,969,400,000,000	0.03
2018	3,275,900,000,000	0.05
2019	5,672,600,000,000	0.08
2020	9,142,000,000,000	0.13
2021	12,075,400,000,000	0.18
2022	7,596,000,000,000	0.11
2023	11,468,300,000,000	0.17

Based on Table 4.3, it is evident that investment in South Sulawesi Province continued to increase over the 2014–2023 period. The total domestic investment (PMDN) currently stands at IDR 68.63 trillion, reflecting the success of the South Sulawesi Provincial Government in attracting investors and optimizing the region's economic potential.

c. Labor Force

The labor force is a fundamental asset driving the wheels of development. The number and composition of the workforce continually change in line with demographic processes. When a region's ability to produce goods and services increases, the demand for labor input also rises, thereby expanding employment opportunities.

Annual population growth significantly influences labor force growth. As the population increases, so does the number of people entering the labor market. The size of the labor force in a region serves as a positive factor in stimulating regional economic growth. The more individuals employed, the greater the potential for productivity. In addition, other contributing factors such as fiscal policy—government measures involving revenue and expenditure—are designed to achieve objectives such as economic growth and macroeconomic stability. Changes in government budget composition, including taxes and spending, can influence aggregate demand and the level of economic activity. Fiscal policy aims to stabilize prices, output levels, and employment, while also encouraging economic growth (Anitasari & Soleh, 2015).

Labor force variables that influence economic growth include the total labor force size—where the greater the available labor, the greater the potential economic output. However, this must be balanced with labor productivity and quality. Labor force participation rates are also crucial, as higher participation generally supports economic growth. Conversely, a high unemployment rate indicates underutilized labor, which hinders regional economic potential. According to the Manpower Act No. 13 of 2003, labor is defined as anyone capable of working to produce goods or services to meet personal or societal needs. Thus, "labor" broadly refers to individuals aged 15 and above who are able and willing to work.

Gross Regional Domestic Product (GRDP) growth, as an indicator of regional economic growth, is also influenced by public service-related government spending. Regional government expenditure is measured through total routine and development expenditures as allocated in the regional budget. The more productive the regional government spending, the greater the boost to the regional economy (Wibisono, 2003).

To understand the development of the working-age population in South Sulawesi from 2014 to 2023, refer to the following table:

Year	labor force			Perentage(%)
	employed	unemployed	Total	
2014	3,527,036	188,765	3,715,801	0.10
2015	3.485.492	220.636	3.706.128	0.10
2016	3.694.712	186.291	3.881.003	0.01
2017	3.598.663	213.695	3.812.358	0.10
2018	3.774.924	213.105	3.988.029	0.11
2019	4.058.595	196.779	4.255.374	0.11

2020	4.006.620	269.817	4.276.437	0.11
2021	4.160.433	252.349	4.412.782	0.12
2022	4.353.650	205.725	4.559.375	0.12
2023	4.490.983	203.5	4.694.483	0.13

Source: BPS South Sulawesi, 2024

As shown in Table 4.4, the labor force in South Sulawesi in 2023 reached 4,694,483 individuals out of a total working-age population of 7.30 million. Of this population, 2.48 million are not actively participating in the labor force but still have the potential to work. According to the National Labor Force Survey (SAKERNAS) by BPS South Sulawesi, the number of employed individuals in the province has shown a general upward trend from 2014 to 2023. Most years recorded an increase in employment, with a positive growth reaching 3,715,801 people in 2014 and increasing thereafter, although some fluctuations were observed in later years.

d. Government Expenditure

In this study, government expenditure is considered an independent variable that is presumed to influence economic growth in South Sulawesi Province. Government spending refers to all financial activities undertaken by regional governments, including both routine and development expenditures, aimed at delivering public services and promoting regional economic development. Such expenditures include employee salaries, goods and services, and capital spending such as infrastructure development, improvement of education and healthcare facilities, and support for other strategic sectors. From a macroeconomic perspective, government expenditure acts as a fiscal instrument that stimulates economic growth by increasing aggregate demand, boosting productivity, and generating employment. In this research, government spending is measured based on the realized budget figures from the South Sulawesi Regional Budget (APBD), adjusted for constant prices to reflect real values without inflation distortion. The data is sourced from official agencies such as the Central Statistics Agency (BPS) and the Ministry of Finance of Indonesia, and analyzed to determine the extent of government expenditure's contribution to regional economic activity.

Anaman (2004) states that insufficient government consumption expenditure may hinder economic growth, while excessive or wasteful spending may also have a negative effect. Generally, however, government spending tends to positively impact economic growth.

NO	YEAR	GOVERNMENT EXPENDITURE	PERENTAGE
1	2014	32,471,665,000,000	0.07
2	2015	37,295,835,000,000	0.08
3	2016	37,710,891,000,000	0.08

4	2017	41,558,820,000,000	0.09
5	2018	41,677,474,000,000	0.09
6	2019	50,432,174,000,000	0.11
7	2020	50,447,854,000,000	0.11
8	2021	59,517,126,000,000	0.13
9	2022	53,099,870,000,000	0.12
10	2023	55,092,670,000,000	0.12

Table 4.5

Government Expenditure in South Sulawesi (2014–2023)
Source: BPS South Sulawesi, 2025

Table 4.5 illustrates that capital expenditure refers to spending with benefits that extend beyond one fiscal year and result in asset acquisition or additions to public sector wealth. These expenditures also lead to increased operational budgets due to maintenance costs (Nordiawan & Hertianti, 2010). According to Yani (2009), capital expenditures involve the procurement of fixed assets or other assets with a useful life exceeding 12 months, for use in governmental activities. These may include land, equipment and machinery, buildings, infrastructure, library books, and livestock.

From the table, the highest realization of capital expenditure occurred in 2023, amounting to IDR 7.83 trillion, while the lowest was in 2021 at IDR 6.62 trillion. The decline in capital expenditure in 2020 and 2021 was mainly due to the COVID-19 pandemic affecting Indonesia, including South Sulawesi Province.

In light of the discussion above, the researcher is interested in analyzing the influence of investment, labor force, and government expenditure on the economic growth of South Sulawesi Province from 2014 to 2024.

4.1 Key Findings

Classical Assumption Test

a. Normality Test

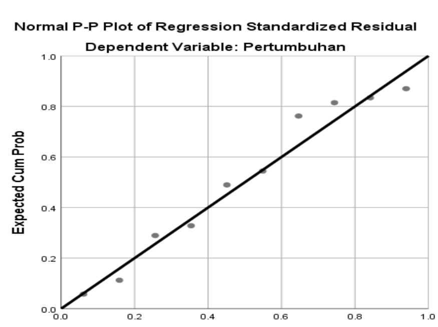

Figure 4.2 Normality Test Graph

Based on Figure 4.2 above, the normal probability plot of regression standardized residuals indicates a normal distribution. This can be observed from the data points that are scattered around the diagonal line. It can be concluded that the regression model is appropriate for use, as it meets the assumption of normality.

b. Autocorrelation Test

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.252[a]	0,063	-0,405	29,04407	2,438

Figure 4.2 Heteroscedasticity Test Result

Based on the scatterplot between the standardized residuals (SRESID) and the standardized predicted values (ZPRED), it can be observed that the data points are randomly scattered both above and below the zero line and do not form any specific pattern. Therefore, it can be concluded that there is no indication of heteroscedasticity in this regression model.

c. Heteroscedasticity Test

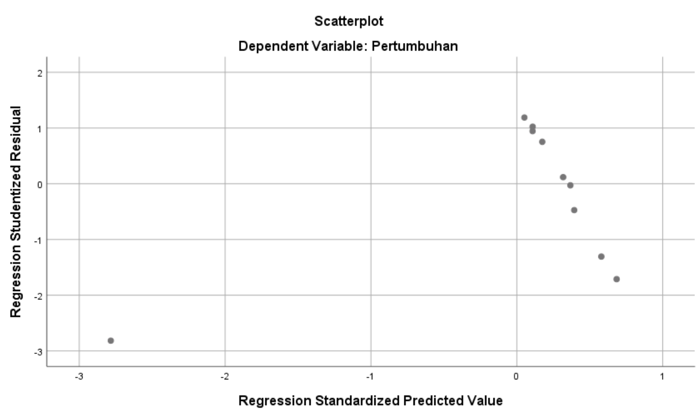

Figure 4.2 Heteroscedasticity Test Result

Based on the scatterplot between the standardized residuals (SRESID) and the standardized predicted values (ZPRED), it can be observed that the data points are randomly scattered both above and below the zero line and do not form any specific pattern. Therefore, it can be concluded that there is no indication of heteroscedasticity in this regression model.

d. Multicollinearity Test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,542	52,045		0,337	0,748
	Investasi	-87,327	260,830	-0,186	-0,335	0,749
	Tenaga kerja	24,291	358,022	0,033	0,068	0,948
	Pengeluaran	-126,069	689,245	-0,106	-0,183	0,861

Based on the t-test results in the Coefficients table, it was found that the three independent variables—namely Investment, Labor, and Government Expenditure—do not show a significant partial effect on economic growth in South Sulawesi. First, the Investment variable has a regression coefficient of -87.327, with a t-value of -0.335 and a significance level of 0.749. Since this significance level far exceeds the 5% threshold (0.05), it can be concluded that investment does not have a statistically significant partial effect on economic growth. This indicates that, although investment is generally considered an important component of economic development, within the timeframe and region of this study, investment has not been able to make a direct and significant contribution to economic growth.

4.2 Interpretation of Results

a. Multiple Linear Regression Analysis

The multiple linear regression model is a mathematical expression that explains the correlation between one dependent/response variable (Y) and two or more independent/predictor variables (Yuliara, 2016).

Table 4.8
Multiple Linear Regression Analysis

Coefficients[a]				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	17,542	52,045	
	Investment	-87,327	260,830	-0,186
	Labor	24,291	358,022	0,033
	Government Expenditure	-126,069	689,245	-0,106

Expenditure (X3)—on the dependent variable, namely Economic Growth (Y), as follows:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

$$\mathbf{Y = 17.542 - 87.327X_1 + 24.291X_2 - 126.069X_3 + e}$$

From the multiple linear regression analysis results shown in Table 4.8, it is evident that the study model involves three independent variables—Investment, Labor, and Government Expenditure—analyzed to observe their influence on the dependent variable, Economic Growth. The findings reveal the following:

1. The regression coefficient for Investment is -87.327, with a t-value of -0.335 and a significance level of 0.749. These values indicate that investment does not have a significant partial effect on economic growth. The negative coefficient suggests an inverse relationship, but the relationship is statistically insignificant. This may be due to the fact that investments have not yet been channeled effectively into productive sectors or because long-term investments have not shown tangible impacts within the timeframe of the study.
2. The regression coefficient for Labor is 24.291, with a t-value of 0.068 and a significance level of 0.948. This also indicates no significant partial effect on economic growth. The positive coefficient reflects a direct relationship between labor and economic growth, but the influence is weak and not statistically significant. This may indicate that the increase in labor quantity is not accompanied by sufficient improvement in quality, skills, or productivity to effectively support economic growth.

The regression coefficient for Government Expenditure is -126.069, with a t-value of -0.183 and a significance level of 0.861. Similar to the previous two variables, government expenditure does not have a significant partial effect on economic growth. The negative coefficient suggests a potential inverse relationship, but since the result is not statistically significant, the influence cannot be considered meaningful. This may be due to the government's spending pattern being more consumptive or inefficient in implementing development budgets

5. Discussion

a. The Influence of Investment on Economic Growth

Based on the research findings, investment has a negative and insignificant effect on economic growth in South Sulawesi Province. This is indicated by a regression coefficient of -87.327 and a significance value greater than 0.05 (0.749 > 0.05). The significance value exceeding the 0.05 threshold indicates that the influence of investment on economic growth is not statistically significant at the 95% confidence level. Furthermore, the negative coefficient suggests that an increase in investment is followed by a decrease in economic growth, although this relationship is not statistically significant. This is supported by a t-value of -0.335 and a standardized beta coefficient of -0.186, indicating that the contribution of investment to economic growth is relatively small and not dominant in the model.

This finding contrasts with the view of Mankiw (2007), who emphasized that investment is a crucial factor in promoting long-term economic growth through capital accumulation. Additionally, the result is not in line with the study conducted by Sari and Purnomo (2020), which showed that investment had a positive and significant effect on economic growth in Central Java Province. These differences may be attributed to factors such as the effectiveness of investment allocation, the quality of funded projects, and the region's capacity to manage investment. Therefore, although theoretically investment is regarded as a key driver of economic growth, in the context of this study, it has not yet provided a tangible contribution to enhancing economic performance.

b. The Influence of Labor on Economic Growth

According to the research findings, labor has a positive but insignificant effect on economic growth in South Sulawesi Province. This is shown by a regression coefficient of 24.291 and a significance value greater than 0.05 (0.948 > 0.05). This result is also reflected in the very low t-value of 0.068, as well as the very small standardized beta coefficient of 0.033. This indicates that the role of labor in this model is weak and does not meaningfully contribute to the variation in economic growth. This finding contradicts classical growth theory, which posits that labor is one of the main factors in the production process and economic growth. For example, Todaro and Smith (2011) argue that both the quantity and quality of labor play a significant role in supporting economic growth, particularly in developing countries that rely on labor-intensive development. Similarly, Lestari and Firmansyah (2019) in their study in West Java Province found that labor had a positive and significant effect on regional economic growth.

This discrepancy may be due to local factors in South Sulawesi, such as low levels of educational attainment among the workforce, mismatches between skills and labor market demands, and low productivity and efficiency. Additionally, the COVID-19 pandemic in 2020, which caused a sharp decline and even a halt in economic activity, may have weakened the influence of labor on growth. Thus, while labor is theoretically an important factor in economic development, in the context of the region studied, increasing the number of workers alone is insufficient to produce a significant impact on economic growth unless it is accompanied by improvements in quality and productivity.

c. The Influence of Government Expenditure on Economic Growth

Based on the research findings, government expenditure has a negative and insignificant effect on economic growth in South Sulawesi Province. This is shown by a regression coefficient of -126.069 and a significance value greater than 0.05 (0.861 > 0.05). The significance value far above the critical limit of 0.05 indicates that government spending does not have a statistically significant effect on economic growth in the region. The negative coefficient suggests an inverse relationship between government expenditure and economic growth, although this relationship is weak and not statistically meaningful. In other words, increases in government expenditure tend to correlate with decreases in economic growth, although this effect is marginal. This is also supported by the t-value of -0.183 and standardized beta of -0.106, which indicate that this variable has a low and non-dominant influence in explaining the variation in economic growth in the region. These findings appear to contradict Keynesian theory, which views government expenditure as one of the main fiscal policy tools to stimulate economic growth, especially during periods of economic stagnation. According to Keynesian economics, government spending—particularly in the form of capital expenditure and infrastructure investment—can boost aggregate demand, create jobs, and spur overall economic activity.

In contrast, different results were found in studies such as Rahmawati and Wibowo (2018), which focused on East Java Province and found that government expenditure had a positive and significant effect on regional economic growth. Similarly, Nurhadi and Sulastri (2021) reported that government spending in priority sectors such as infrastructure and education significantly contributed to economic improvement in several Indonesian provinces.

The divergence between this study's findings and previous results may be due to contextual factors. One possible explanation is the effectiveness and efficiency of budget utilization in South Sulawesi. If most government spending is allocated to civil servant salaries or routine expenditures that are not productive, its impact on economic growth will be limited. Furthermore, weak budget planning, low institutional capacity, and inadequate oversight in the implementation of government programs may also contribute to the limited role of public expenditure in supporting economic growth.

Therefore, although government expenditure is theoretically considered a key driver of economic development, in the context of South Sulawesi Province, this research shows that public spending has yet to produce a significant effect on economic growth. To improve its effectiveness, government expenditure should be focused on productive and strategic sectors, accompanied by improvements in budget governance and program oversight

5.1 Comparison with Prior Research

The findings of this study are not in line with those of Bambang Seriawan, Nuruk Anwar, and Suharno (2021), in their research *titled* "The Effect of Investment, Labor, and Government Expenditure on Economic Growth in Central Java Province." Their study found that all three variables—investment, labor, and government spending—had a positive and significant effect on economic growth. This contrasts with the results of the current study in South Sulawesi Province, which showed that these variables did not have a statistically significant impact.

5.2 Limitations

This study has several limitations that should be considered:

1. The research was confined to South Sulawesi Province, which limits the generalizability of the findings to other regions in Indonesia that may have different economic structures and development policies.
2. The time frame covered—2014 to 2024—may be too short to observe the long-term effects of variables such as investment and government expenditure, which often take longer to significantly impact economic growth.
3. The analysis relied on secondary data sourced from official government publications, making the study highly dependent on the accuracy, completeness, and consistency of the available data.
4. Several other potential influencing variables, such as inflation rate, education level, fiscal and monetary policy, and political stability, were not included in the model, thus limiting the comprehensiveness of the analysis.

6. Conclusion

Based on the research findings on *"The Influence of Investment, Labor, and Government Expenditure on Economic Growth in South Sulawesi Province for the Period 2014–2024"*, the following conclusions can be drawn:

1. Investment has a negative and insignificant effect on economic growth in South Sulawesi Province. This is indicated by the regression coefficient of -87.327 with a significance value greater than 0.05 (0.749 > 0.05).
2. Labor has a positive and insignificant effect on economic growth in South Sulawesi Province. This is shown by the regression coefficient of 24.291 with a significance value greater than 0.05 (0.948 > 0.05).
3. Government expenditure has a negative and insignificant effect on economic growth in South Sulawesi Province. This is demonstrated by the regression coefficient of -126.069 with a significance value greater than 0.05 (0.861 > 0.05).

7. Recommendation

Based on the conclusions above, the following recommendations are proposed:

1. The Provincial Government of South Sulawesi should be more selective in attracting and allocating investments, particularly toward sectors that have a direct and measurable impact on regional economic growth.
2. Improving the quality of the labor force should be a primary focus. Greater emphasis should be placed on developing human capital by providing education and vocational training programs, so that workers, employees, and public servants can contribute more effectively and positively to the economy of South Sulawesi.
3. Government spending should be directed toward productive sectors such as infrastructure, education, and healthcare, which have been proven to enhance public welfare and support sustainable economic growth.

Appendix

Investasi (X1)	Tenaga kerja (X2)	Pengeluaran pemerintah (X3)	Pertumbuhan ekonomi (Y)
0.07	0.10	0.07	7.54
0.13	0.10	0.08	7.19
0.05	0.01	0.08	7.42
0.03	0.10	0.09	7.21
0.05	0.11	0.09	7.04
0.08	0.11	0.11	6.91
0.13	0.11	0.11	-0,71
0.18	0.12	0.13	4.64
0.11	0.12	0.12	5.10
0.17	0.13	0.12	4.51

Acknowledgement

All praises and gratitude be to Allah SWT, for His infinite mercy and guidance continuously bestowed upon His servants. Peace and blessings be upon the Prophet Muhammad SAW, his family, companions, and followers. It is a priceless blessing that this thesis entitled *"The Influence of Investment, Labor, and Government Expenditure on Economic Growth in South Sulawesi"* can be completed. This thesis is written to fulfill one of the requirements for obtaining a Bachelor's degree (S1) at the Faculty of Economics and Business, Universitas Muhammadiyah Makassar.

First and foremost, I would like to express my heartfelt thanks to my beloved grandmother and grandfather, who have always given me hope, encouragement, attention, affection, and sincere prayers. I am also especially grateful to my aunt Atun, who has constantly supported me in everything I do—without her hard work, it would have been impossible for me to experience the world of higher education.

I fully realize that this thesis would not have been possible without the support and encouragement from many parties. Therefore, my highest appreciation and gratitude are respectfully extended to:

1. Dr. Ir. H. Abd. Rakhim Nanda, S.T., M.T., IPU, Rector of Universitas Muhammadiyah Makassar.
2. Dr. Edi Jusriadi, S.E., M.M, Dean of the Faculty of Economics and Business, Universitas Muhammadiyah Makassar.
3. Mr. Asdar, S.E., M.Si, Head of the Development Economics Study Program and also my second supervisor, who generously gave his time to guide and direct me so that this thesis could be completed well.
4. Mrs. Naidah, S.E., M.Si, my first supervisor, for her support and guidance throughout the thesis writing and examination process.
5. All lecturers and assistant lecturers of the Faculty of Economics and Business, Universitas Muhammadiyah Makassar, who have tirelessly shared their knowledge during my studies.
6. All staff and employees of the Faculty of Economics and Business, Universitas Muhammadiyah Makassar.
7. My friends at BPH 21 PIKOM IMM FEB Unismuh Makassar—Safira Almey Tiara, Nursam, Ayu Eka Wardani, Adhe Larasati Safari, Rendi Morhum, Faizal, Elma Januasti, Salsabila Hakim, Awalsyam, and others—who have shared memorable experiences and valuable lessons during my time as a student and IMM cadre.
8. My dearest friends Adelia Atla, Anggita, Sukmawati, and Yana Maharani—thank you for always being there to entertain me and for taking the time to gather despite the distance and our busy schedules. Your presence has always brought comfort in times of sorrow.

REFERENCES

[1] Aji, G., Salsabila, P. T., Stiqomah, M. N., & Ningrum, M. (2023). *Analisis PMDN, PMA, inflasi dan tenaga kerja terhadap pertumbuhan ekonomi Indonesia*. Jurnal Ekonomi Akutansi Dan Manajemen, 1(3), 250–267.

[2] Akbar, A. F. Al. (2022). *Analisis pengaruh penanaman modal asing (PMA), penanaman modal dalam negeri (PMDN), dan angkatan kerja terhadap pertumbuhan ekonomi di Provinsi Banten* pada periode tahun 2017-2020. POPULER: Jurnal Penelitian Mahasiswa, 1(4), 142–154.

[3] Bawinti, I., Kawung, G. M. V., & Luntungan, A. Y. (2018*). Pengaruh pengeluaran pemerintah dan investasi swasta terhadap pertumbuhan ekonomi di Kabupaten Kepulauan Talaud*. Jurnal Berkala Ilmiah Efesiensi, 18(04), 23–33.

[4] Cahyono, H. (2017). *Pengaruh PMDN, PMA dan belanja daerah Jawa Timur terhadap pertumbuhan ekonomi di Kota Surabaya dan Kabupaten Banyuwangi.* Media Trend, 12(1), 63–75. https://doi.org/10.21107/mediatrend.v12i1.2538 Dan, P., Kerja, T., & Ekonomi, P. (2024). Jdess 03.02.2024. 3(2), 362–374.

[5] Eliza, Y. (2015). *Pengaruh investasi, angkatan kerja dan pengeluaran pemerintah terhadap pertumbuhan ekonomi di Provinsi Sumatera Barat*. Jurnal Pekbis, 7(3), 200–210.

[6] Fadillah, M., & Anis, A. (2020). *Pengaruh investasi (PMDN), angkatan kerja, pengeluaran pemerintah dan pendidikan terhadap pertumbuhan ekonomi di Indonesia.* Jurnal Kajian Ekonomi Dan Pembangunan, 2(3), https://doi.org/10.24036/jkep.v2i3.12680

[7] Fatimah, K., Amalia, H., V., & *Panggiarti, E. K. (2022). Analisis pengaruh penanaman modal asing (PMA) terhadap pertumbuhan ekonomi.* Jurnal Ekonomi, Manajemen Dan Akuntansi, 1, 68–76.

[8] Nangarumba, M. (2015). *Analisis Pengaruh Struktur Ekonomi, Upah Minimum Provinsi, Belanja Modal, dan Investasi Terhadap Ketimpangan Pendapatan di Seluruh Provinsi Di Indonesia* Tahun 2005- 2014. JESP- Vol. 7, No 2 November 2015.
[9] Nujum, dkk. (2022). Analisis Variabel Ekonomi Makro Terhadap Pertumbuhan Ekonomi Di Sulawesi Selatan. Jurnal Ilmu Ekonomi Vol. 5no. 4, 323- 337. Retrieved from
[10] Parkissing, Y. N. (2020). *Analisis Pertumbuhan Dan Ketimpangan Ekonomi Kabupaten/Kota Di Provinsi Sulawesi Selata*n. Journal of Management Science (JMS) Volume 1, Nomor 1, 148.
[11] Rif'ah Shafwah, J. Z. (2019). *Pengaruh Inflasi, Penanaman Modal Dalam Negeri dan Penanaman Modal Asing Terhadap Pertumbuhan Ekonomi di Kota Makassar* Tahun 2008-2017. Paradoks : Jurnal Ilmu Ekonomi Volume 2. No. 3, 2-3.
[12] todaro, M. P., & Smith, S. C. (2011). *Pembangunan Ekonomi* (Edisi ke-11, Jilid 1). Jakarta: Erlangga.
[13] Lestari, R., & Firmansyah, A. (2019). *Pengaruh Tenaga Kerja dan Investasi terhadap Pertumbuhan Ekonomi di Provinsi Jawa Barat. Jurnal Ekonomi Pembangunan Indonesia*, 19(2), 150–162.
[14] Mankiw, N. G. (2007). Makroekonomi (Edisi ke-6). Jakarta: Erlangga.Sari, M., & Purnomo, H. (2020). *Pengaruh Investasi dan Tenaga Kerja terhadap Pertumbuhan Ekonomi di Provinsi Jawa Tengah. Jurnal Ekonomi dan Kebijakan Publik*, 11(2), 123–134.
[15] Rahmawati, N., & Wibowo, H. (2018). *Pengaruh Pengeluaran Pemerintah dan Investasi terhadap PertumbuhaEkonomi di Provinsi Jawa Timur. Jurnal Ekonomi dan Kebijakan Publik*, 9(2), 123–134.
[16] Nurhadi, M., & Sulastri, D. (2021). *Efektivitas Belanja Pemerintah Daerah terhadap Pertumbuhan Ekonomi: Studi pada Beberapa Provinsi di Indonesia. Jurnal Ekonomi Pembangunan Indonesia,* 21(1), 45–56.
[17] Keynes, J. M. (1936). The General Theory of Employment, Interest and Money. London: Macmillan.