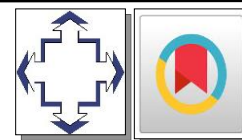


# The Effect of Government Expenditure on Economic Growth in Indonesia



Lelly Cesarina Maulid<sup>a,1\*</sup>, Icku Rangga Bawono<sup>b,2</sup>, Yudha Aryo Sudibyo<sup>c,3</sup>

<sup>a,b,c</sup> Faculty of Economics and Business, University of Jenderal Soedirman, Profesor DR. HR Boenyamin Street, Purwokerto Utara, Banyumas, Indonesia

<sup>1</sup>lealfarucan@gmail.com\*; <sup>2</sup>cukycutes@yahoo.com; <sup>3</sup>yudha.sudibyo@unsoed.ac.id

\* Corresponding author

## ARTICLE INFO

## ABSTRACT

### Article history

Received 13/11/2020

Revised 21/1/2021

Accepted 18/2/2021

### Keywords

Government Expenditure

Economic Growth

GDP

This study aims to examine and analyze the effect of economic growth classified as personnel expenditure, material expenditure, capital expenditure, interest payments, subsidies and social expenditure in Indonesia. The data in this study are time series data from 2005 to 2019. The hypothesis test uses the multiple linear regression method with SPSS 26. The results of testing government expenditure variables during the period 2005 to 2019 shows that components of central government expenditure include personnel, material, capital, interest payments, subsidies and social expenditure have a significant effect simultaneously on economic growth. There is a significant positive effect on the relationship between the variable personnel expenditure and material expenditure on economic growth. There is a significant negative effect on the relationship between the variable capital expenditure on economic growth. The other three variables, which include debt interest payments, subsidies and social expenditure, do not have a significant effect on economic growth.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



## 1. Introduction

The government, as reported on the Ministry of Finance's portal, claims that the management of the State Budget (Anggaran Pendapatan dan Belanja Negara or APBN) during President Joko Widodo governments has been on a positive path . Since 2013, the APBN deficit ratio curve has been declining. At its peak in 2019 as shown in Figure 1 , the APBN deficit ratio is at its lowest position and in 2020 the deficit increased significantly caused by global impact of the corona pandemic.

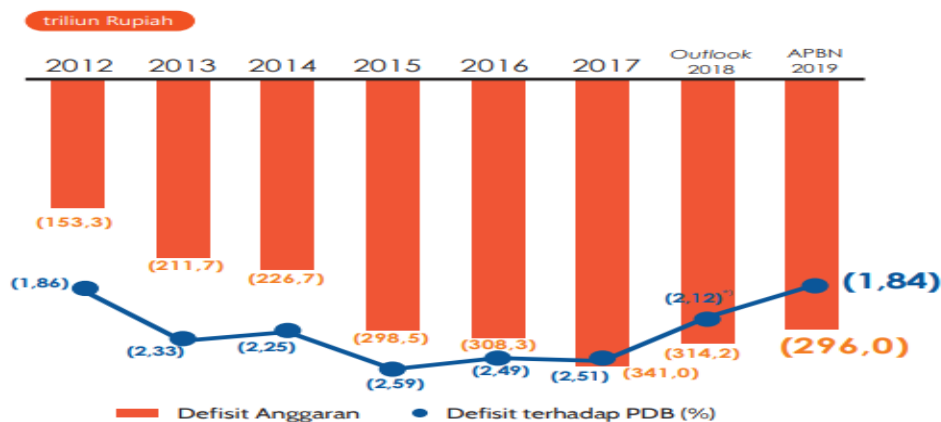


Figure 1. State Budget Deficit Ratio to GDP  
Source: Kementerian Keuangan Republik Indonesia, 2019

The government has the authority to regulate the economy of a country through budgetary intervention on fiscal policy and government spending (Sujianto & Azmi, 2020). The amount of government revenue and expenditure is reflected in the State Budget (APBN) and Municipal Budget (APBD) documents which are intended for local governments (Anitasari & Soleh, 2015). Rural governments also receive rural budget allocations from the State Budget (Bawono & Setyadi, 2020). Therefore, the government needs to organize in formulating policies and budget allocations. Through these means, the government plays a role in realizing the goals and objectives of development programs in society, encouraging equitable distribution of income and supporting economic stability (Bachtiar, Sofilda, & Kusumastuti, 2015).

The classification of central government spending into personnel expenditure, material expenditure, capital expenditures, debt interest payments, subsidies, grants, social, other expenditures and regional expenditure, has been stipulated in Law No. 17 of 2003 concerning State Finance. Figure 2 shows the Proportion of Central Government Expenditure in 2019. Personnel expenditure occupies the highest proportion of 23% of total central government expenditure, followed by material expenditure, debt interest payments, subsidies and capital expenditure. The proportion of the bottom three is occupied by other, social and grant expenditure. Capital expenditure does not rank the highest in the proportion of central government expenditure, even though its existence is important for national development. The first place is occupied by personnel expenditure trigger questions for the public. Personnel expenditure is considered give benefit for a small proportion of society who work as State Civil Servants (ASN) and pension of ASNs. This implies for an appropriate measuring tool to measure government performance. Performance measurement is needed to ensure that the organization is on the right track or requires an increase in (Bawono, Halim, & Lord, 2012).

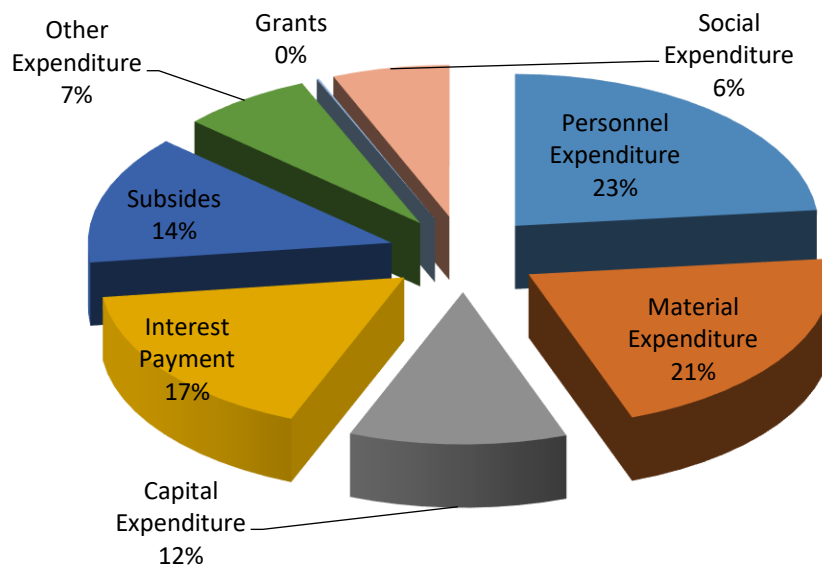


Figure2. Proportion of Central Government Expenditure in 2019  
 Source: Kementerian Keuangan Republik Indonesia, 2020

The real measurement of the government's achievements in implementing its performance is the welfare of the community. The allocation of government expenditure must be managed efficiently and on target so that it can trigger economic growth (Dudzevičiūtė, Šimelytė & Liučvaitienė, 2017). Examining the effect of government expenditure on economic growth is interesting considering the impact of government policy has a major influence for society.

Previous researchers have classified government spending into several types and examined their effect on economic growth. The results of their research are still mixed and further research is needed. Allocation for government spending, both direct and indirect expenditure allocations, has not been able to significantly drive economic growth (Lantu, Koleangan, & Rotinsulu, 2019). Government spending greatly helps economic growth (Sujianto & Azmi, 2020; Wu, Tang, & Lin, 2010). The low benefits of economic growth for Malaysians are due to the inefficiency of government officials in managing government spending for public administration activities, serving business activities and managing spending in the education sector (Dinh Thanh, Hart, & Canh, 2020). Hasnul (2016) shows that government spending in Malaysia has a negative impact on economic growth. The mix results are an interesting topic to study further.

This study aims to assess the effect of central government expenditure which consists of personnel, material, capital expenditures, interest payments, subsidies and social expenditure on economic growth in Indonesia from 2005 to 2019. The reason behind the topic selection is explained in the introduction. In the second part, the authors review the literature on the theory underlying this research, the definition of economic growth and government expenditure. The third part is the research methodology used by the author. The fourth part is results and discussion. In the fifth section the authors draw conclusions and provide possible research ideas for future researchers on similar topics.

## 2. Literature Review

### Keynes's theory

In 1936, John Maynard Keynes sparked the General Theory which is a modern version of classical macroeconomics (Palley, 2017). The theory that includes five things: first Keynes expresses its rejection of the loan interest rate. Interest rates on these loans are considered fiction and

in fact do not exist in the market. On the downside, Keynes did not provide a strong explanation for this argument. Second, Keynes introduced the fundamental uncertainties associated with investing. Expectations about an uncertain future fundamentally impact money demand and spending, including investment. Third, Keynes introduced a new theory to replace the loan fund interest rate theory, namely the theory of liquidity preferences. According to Keynes, the interest rate is highly dependent on the demand for money which is influenced by uncertainty in the future. This fundamental uncertainty can worsen at any time, causing an increase in demand for money and interest rates. According to Keynes, real wages are determined by the level of production so that it affects the marginal product of labor and he states that as his fourth opinion. Companies that have power in the market are able to mark up their real wages. The real wages are also influenced by the competitive structure of their products. Fifth, Keynes argued that in an economy, the price system was unable to provide a full equilibrium of employment. The aggregate revenue is important because it is a driver of a sluggish economy. If the government increases its spending it will result in an increase in the amount of money circulating in society. It encourages society should increase demand through spending. The conclusion from this theory is that government spending has an effect on economic development (Solikin, 2018). The concept of national income with the government expenditure approach is formulated by  $Y = C + I + G + X - M$  (Anitasari & Soleh, 2015). Y is a symbol of national income, C is consumption by the government, I is investment, G is expenditure made by the government, X is the value of exports and M is the value of imports. Economic growth variables represented by Gross Domestic Product (GDP) are used to test this theory (Arjomand, Emami, & Salimi, 2016).

### **Wagner's law**

Another theory related to government spending was put forward by Adolf Wagner in the 19th century. He argued that the more advanced a country's economy has an impact on the size of the government which can be measured through the amount of government spending (Sukartini & Saleh, 2012). Wagner's law places more emphasis on the effect of GDP on government spending. Irandoust (2019) states that Wagner's law is more related to the long-term relationship between per capita income and government management, so that in testing the causality there are possibilities that various hypotheses can have an impact on government economic policy. The neutrality hypothesis occurs if there is no relationship between government spending and GDP. The Wagnerian hypothesis occurs if there is a direct causal relationship of GDP to government spending and public spending to GDP. The last hypothesis is that there is a good two-way causality between GDP and government spending. Several previous researchers compared Wagner's Law with Keynes's Theory because the two opinions contradict each other (Solikin, 2018). Testing Wagner's Law is not our focus, because various studies conducted by previous researchers have concluded that Wagner's Law usually applies to developed countries, which means that the more developed an economy is, the more government spending is affected.

### **Solow-swan theory**

Robert Solow and Trevor Swan in 1956 have put forward a theory of economic growth which is known as the Solow-Swan theory (Piętak, 2014). This theory makes a major contribution to neoclassical economics (Cangiotti & Sensi, 2020). This theory states that economic growth depends on the level of technological progress and the provision of production factors which include population, labor and capital accumulation (Anitasari & Soleh, 2015). Solow-Swan describes economic growth by focusing on technical development. Output can be achieved through a combination of capital and labor. Economic conditions will achieve sustainable growth over a long period of time.

The Solow-Swan model explains that population and technological growth are constant exogenous factors (Firth & Mellor, 2000). The rate of capital growth is the implication of population growth and technology. An economy will have zero capital growth when the rate of growth in labor and technology is zero. The decrease in the accumulated return on capital can assume that the incentive to invest in a country is not maintained, which means there is also no increase in labor and technology. Solow (1999) explained that level of establishment a country will differ from country to another depending on the number of population and its level of investment savings.

### **Economic growth**

Economic growth is an improvement in the economic condition of a country and as a measure of development achievement (Abdillah, Handoyo, & Wasiaturrahma, 2020). Acemoglu (2012) describes economic growth as the expansion of economic development with the main topic being technological diffusion. The main differences regarding productivity in all countries of the world are regarding the development of their innovations and technology. That is why there are countries that have high economic progress and some are low.

Economic growth is defined as an increase in the entire value of the production of goods and services in a country over a certain period of time (Wahyunadi, 2019). Through economic growth, the level of activity development in economic sectors in an economy can be measured (Lisandri, Rizani, & Syam, 2017). Economic growth can be measured through the Gross Domestic Product (GDP) and the Gross National Product (GNP) (Badan Pusat Statistik, 2020b)

GDP is the market value of all goods and services produced during a given period of time to take into account all of the output, either it belonged to a stranger or a citizen of Indonesia. This GDP is considered as an appropriate tool for calculating the structure, level and rate of a country's economy over a certain period of time (Badan Pusat Statistik, 2020b). Therefore, many researchers use the concept of GDP to measure and even compare economies between countries. GNP is the market value of the final whole goods and services produced by a country during a certain period with the exclusion of its geographic location (Cutler, 2015). The growth of GNP, especially those located abroad, is assumed to have more impact on the country where the business is located, so that experts use GDP more as a measure of economic growth.

### **Government expenditure**

Government spending is the obligation of the central government which reduces the value of net assets. Expenditures listed in the State Revenue and Expenditure Budget (APBN) consist of state expenditure and transfers to the regions.

Government expenditure is a part of government spending as a form of fiscal policy set out in the APBN (Anitasari & Soleh, 2015). Government spending is allocated productively could have an impact on the economy of a country (Chu, Hölscher, & McCarthy, 2020). Government expenditure that is right on target will affect the progress and welfare of the community, price stability, increase productivity and the growth of job opportunities, so that government spending can have an impact on the rate of economic development.

### **Hypothesis**

#### **Personnel expenditure**

Personnel expenditure is compensation in financial or materials given to State Civil Servants (ASN) and pension of ASNs as a reward for the completion of the assignment. Based on the Keynesian theory, government spending affects economic development, which is supported by the results of studies of previous researchers. Government expenditure in the form of salaries will affect employee consumption of a product so that it affects economic activity to produce these

products (Deswanto, Ismail, & Hendarmin, 2017). The results of other studies show that indirect spending, one of which is personnel expenditure, has not been able to spur economic growth (Lantu *et al.*, 2019). Bachtiar *et al.*, (2015) also concluded that the growth in personnel spending has no effect on economic growth, so the hypothesis of this study is:

H1: Personnel expenditure affects economic growth

### **Material expenditure**

Material expenditure is the government spending of consumable goods and / or services that are used for the entity's operational activities and providing services to the public. Based on Keynes's theory, government spending has an effect on economic development which is supported by several previous studies which state that the Indonesian economy can be affected by government actions in realizing the purchase of goods and services (Azwar, 2016). Pratolo & Yudha (2012) states that economic growth significantly affected by government spending on goods. Government spending for the needs of civil society has a positive impact on economic development, on the other hand, if the expenditure is used for military needs, it has a negative impact on economic growth in the countries of Israel and Egypt (Abu-Bader & Abu-Qarn, 2003). Deswanto *et al.*, (2017) concluded that spending on goods and services had a negative and insignificant impact on economic growth because these expenditures were only used to finance things that were less productive such as government operations. The growth of material expenditure has no effect on economic growth (Bachtiar *et al.*, 2015). Direct expenditure, one of which is material expenditure, has not been able to spur economic growth (Lantu *et al.*, 2019), so the hypothesis of this research is:

H2: Material expenditure affects economic growth

### **Capital expenditure**

Capital expenditure is a planned allocation to purchase / repair / substitute all of entity's assets. Based on the Keynesian theory, government spending affects economic development which is supported by the Solow-Swan theory that capital accumulation can affect economic growth. Several previous research results support this theory, including the variable of capital expenditure having a positive effect on economic growth (Deswanto *et al.*, 2017). Patterns and capital expenditure allocation as determined by the General Allocation Fund may have an impact on the growth economists (Lisandri *et al.*, 2017) . Other research results show that capital expenditure have not been able to spur the economic growth (Lantu *et al.*, 2019; Nurudeen & Usman, 2010). The impact of capital expenditure on economic growth has shown negative results (Bachtiar *et al.*, 2015), so the hypothesis of this study is:

H3: Capital expenditure affects economic growth

### **Interest payments**

Interest payments are government expenditures for interest payments made on the obligation to use principal outstanding, both domestic loans and foreign loans, which are calculated based on the position of short-term or long-term loans. Based on the Keynesian theory, government spending has an effect on economic development which is supported by several previous studies which state that government policies in increasing debt and managing inflation tend to have a positive impact on economic growth so that the poverty rate decreases (Junaedi & Salistia, 2020). Foreign debt does not have a significant effect on Indonesia (Bramantya & Sulasmiyati, 2015). The economic development of a country decreases in the short term, if the country makes foreign debt payments (Karagöl, 2002). A decrease in economic growth occurs when the payment of debt interest increases (Bachtiar *et al.*, 2015)so the hypothesis of this study is:

H4: Payment of debt interest affects economic growth

### Subsidies

Subsidies are providing of financial assistance paid to a business or economic sector. Based on the Keynesian theory, government spending has an effect on economic development which is supported by the results of several previous studies which state that subsidy growth variables have a positive effect on economic growth (Bachtiar *et al.*, 2015). The impact of providing long-term subsidies in the field of education is the improvement of the social welfare of the community (Shindo, 2010). Sukmawati & Siregar, (2014) found that the provision of fertilizer and seed subsidies has not been able to increase GDP growth in the agricultural sector. The amount of subsidies in the Indonesian economy is relatively small, for example in the transportation sector so that it has not had a real impact on economic growth (Afifah, 2008). The research hypothesis is

H5: Subsidies affect economic growth

### Social expenditure

Social expenditure has the main objective of protecting people from social risks. Those who receive this assistance are generally people with a low level of welfare and the nature of the assistance is only temporary. Based on the Keynesian theory, government spending has an effect on economic development which is supported by the results of previous research that the provision of social assistance is able to trigger economic growth in West Kalimantan (Deswanto *et al.*, 2017). The provision of social expenditure affects the economic growth of Sub-Saharan African countries (Museru, Toerien, & Gossel, 2014). The component of indirect expenditure, such as social expenditure, has not been able to trigger economic growth (Lantu *et al.*, 2019). The research hypothesis is:

H6: Social expenditure affects economic growth

This research model is presented in Figure 3.

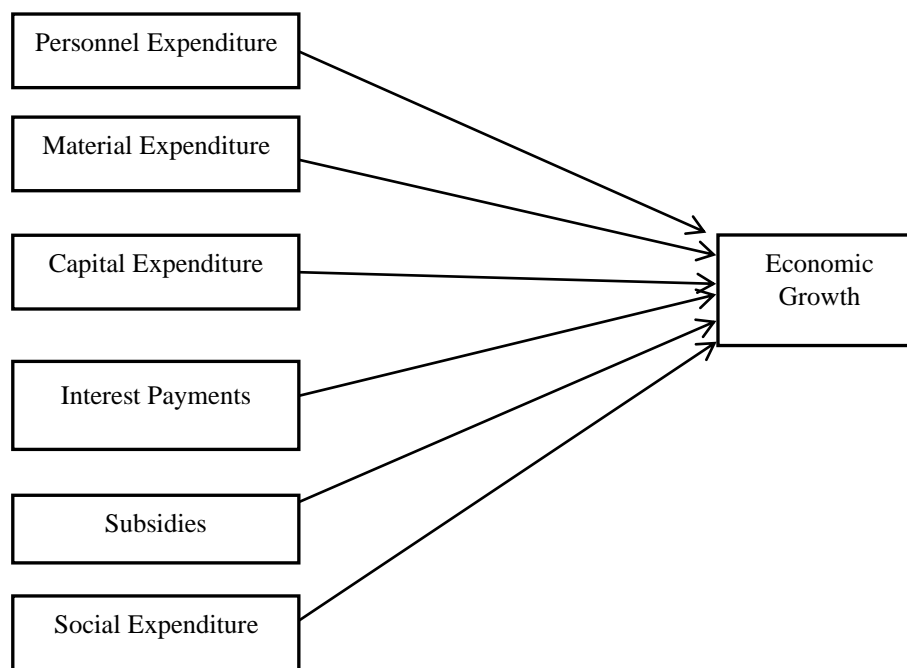


Figure 3. Research Model  
Source: Secondary data processed, 2020

### 3. Research Method

This study uses an explanatory form of causality, which is a study to test and analyze the influence and relationship between the variables studied. The type of data used is time series data for 15 years starting from 2005 to 2019. The independent variables in this study consist of 6 variables, namely personnel expenditures, material expenditure, capital expenditures, interest payments, subsidies and social expenditure. Government spending data is obtained from the realization of the quarterly state budget which can be downloaded through the official website of the Ministry of Finance. The dependent variable is economic growth proxied through the GDP of quarterly expenditures. The use of GDP is expected to reflect more on real economic growth. The method of analysis uses multiple regression which is processed using SPSS 26. Before carrying out multiple linear regression tests, the authors first tested the classic assumptions so that this regression equation provides estimation accuracy.

The effect of X1, X2, X3, X4, X5, X6 on Y is formulated as follows:

$$\ln Y_t = \alpha_0 + \alpha_1 \ln X1_t + \alpha_2 \ln X2_t + \alpha_3 \ln X3_t + \alpha_4 \ln X4_t + \alpha_5 \ln X5_t + \alpha_6 \ln X6_t + \mu_t \dots (3.1)$$

Y = Economic growth (GDP)

t = Period (quarter)

$\alpha$  = Regression coefficient

X1 = Personnel expenditure

X2 = Material expenditure

X3 = Capital expenditure

X4 = Interest payment

X5 = Subsidies

X6 = Social expenditure

$\mu$  = Variable error

### 4. Results and Discussion

It is important to know the description of economic growth and government spending of Indonesia during the period 2005-2019. Therefore, GDP and expenditure data are presented in graphical form. It is intended to assist in further analysis of the condition of the Indonesian economy during this period.

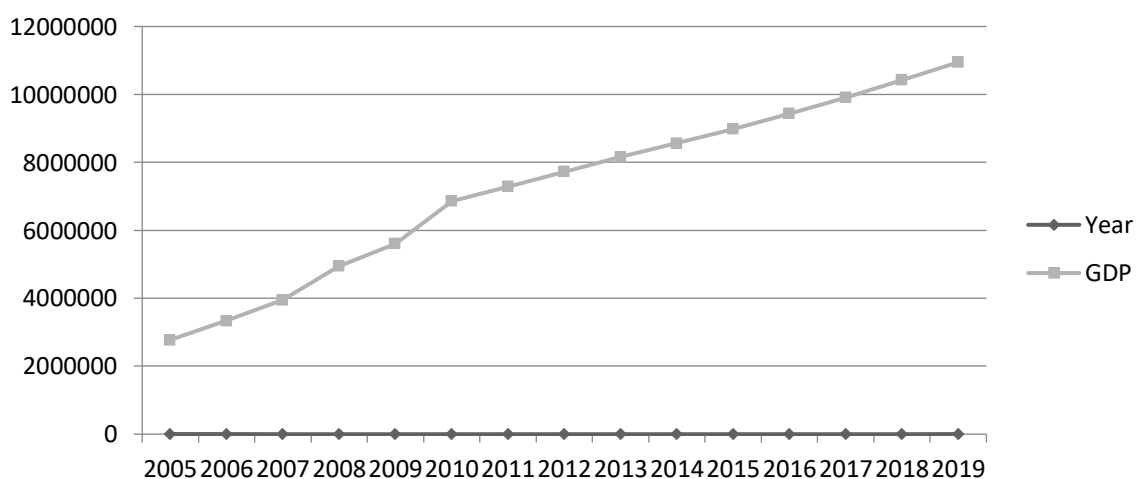


Figure 4. Indonesia's GDP (in billion Rupiah)

Source: Badan Pusat Statistik, 2020a



Based on Figure 3, GDP in Indonesia has increased every year. A significant increase occurred in 2010, as evidenced by the form of a sharper increase in graphs compared to previous and subsequent years. In 2010, the Indonesian government was successful in overcoming the global crisis so that its economic growth became 6.1% (Santoso, 2012). In 2010 - 2019, the chart increase looks more stable.

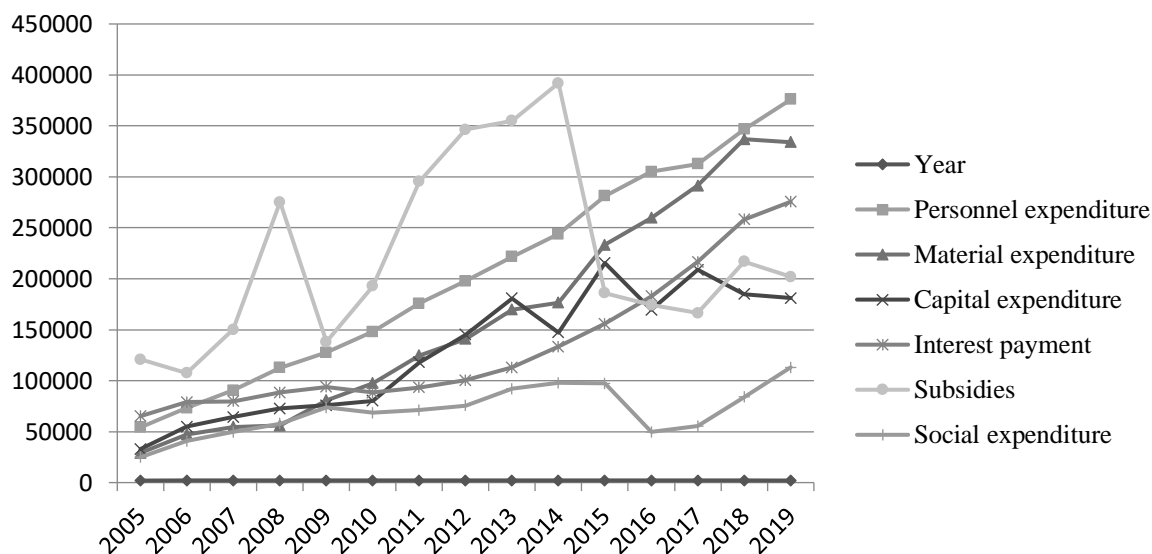


Figure 5. Indonesian State Expenditures (in Billion Rupiah)  
 Source: Kementerian Keuangan Republik Indonesia, 2020b

Figure 4 presents Indonesia's state expenditure from 2005 to 2019, which shows various curve movements. Personnel expenditure is a component of state spending that continues to increase. Goods expenditures and debt interest payments show a trend of an upward movement, even though in certain years the curve slopes or experiences an insignificant decline. Trends in capital expenditure, subsidies and social assistance show fluctuating movements.

First, the data on GDP and government spending is subjected to a classic assumption test. The test results show that these data have met the elements of normality, are free from multicollinearity and heteroscedasticity. Furthermore, the correlation test, simultaneous and partial test are carried out to answer all the proposed hypotheses.

Tabel 1. Correlation Test Results

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.946 <sup>a</sup>	.896	.884	.14457	.896	74.405	6	52	.000	1.369

a. Predictors: (Constant), Social expenditure, Interest payment, Subsidies, Capital expenditure, Personnel expenditure, Material expenditure

b. Dependent Variable: Economic growth

Source : Secondary data processed, 2020

Based on table 1, the R value shows the number 0.946, which is between the interval > 0.75-0.99. This means that the level of correlation and the strength of the relationship between the variables of personnel expenditure, material expenditure, capital expenditure, debt interest payment, subsidies and social expenditure to economic growth is categorized as very strong. The coefficient of determination is 0.896, which means that the variable contribution of personnel expenditure, material expenditure, capital expenditure, debt interest payment, subsidies and social expenditure to economic

growth is 89.6%, while the remaining 10.4% is explained by other factors which were not included in this study.

Tabel 2. Simultaneous Test Results

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.331	6	1.555	74.405	.000 <sup>b</sup>
	Residual	1.087	52	.021		
	Total	10.418	58			

a. Dependent Variable: Economic growth

b. Predictors: (Constant), Social expenditure, Interest payment, Subsidies, Capital expenditure, Personnel expenditure, Material expenditure

Source : Secondary data processed, 2020

Table 2 above illustrates that the calculated F value in multiple regression testing shows a value of 74.405 which is greater than the F table, which is 2.28. The level of significance is 0.000 which is less than 0.05. This means that the variables of personnel expenditure, goods expenditure, capital expenditure, debt interest payments, subsidies and social expenditure have a significant effect simultaneously on economic growth.

Tabel 3. Partial Test Results

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	8.408		
	Personnel Expenditure	.357	.056	.517	6.339	.000
	Material Expenditure	.317	.095	.766	3.333	.002
	Capital Expenditure	-.173	.063	-.429	-2.744	.008
	Interest Payment	.060	.087	.067	.686	.496
	Subsidies	-.014	.020	-.045	-.672	.505
	Social Expenditure	.014	.019	.047	.733	.467

a. Dependent Variable: Economic Growth

Source : Secondary data processed, 2020

T-test analysis in table 3 for variables of personnel expenditure, material expenditure, capital expenditure, debt interest payment, subsidies and social expenditure, there are 3 variables whose t-calculated value is greater than the t table, including variables of personnel expenditure, material expenditure and capital expenditure. The value of t table with a significance level of 5% is 2,004. The three variables have a significance value below 5%, which means that they have a significant effect on economic growth. Three other variables, including interest payments on debt, subsidies and social expenditure, the value of the t table is smaller than the t count and the significance level is above 5%. This means that the variable interest payments, subsidies and social expenditure do not have a significant effect on economic growth.

### The effect of personnel expenditure on economic growth

We prove that our first hypothesis is accepted. Personnel expenditure has a significant impact on economic growth. A positive value in the t test shows that higher personnel expenditure has an impact on high economic growth. This supports Keynes's theory that government spending affects economic growth and is in accordance with research which states that the large composition of personnel spending has a significant positive impact on economic growth (Deswanto *et al.*, 2017; Lantu *et al.*, 2019). The expenditure for Indonesian government employees, as presented in Figure 4, continues to increase every year. The provision of a decent salary has an impact on the welfare of employees so as to increase the amount of consumption. Household consumption expenditure is one

component of GDP in the expenditure sector which has implications for economic growth (Badan Pusat Statistik, 2020b). Personnel expenditure can also encourage local government officials to provide good performance (Pratolo & Yudha, 2012). The payroll system provided by the government is able to motivate ASN to provide good services to the community so as to encourage economic growth.

#### **Material expenditures on economic growth**

We tested the second hypothesis and the results were accepted. Economic growth can be significantly and positively influenced by government spending on material expenditure. The results of this study provide support for Keynes's Theory and are in line with research conducted by Azwar (2016) and Pratolo & Yudha (2012) which states that spending for materials can have a positive impact on the economy. Material expenditure items include the purchase of consumables, paying and daily operational activities of entities required to support the duty of government agencies. The provision of an effective allocation of goods spending to carry out government tasks through the provision of services to the community can have a positive impact on economic growth.

#### **Capital expenditure on economic growth**

We prove that capital expenditure has an impact on economic growth through testing the third hypothesis, and the results show a negative direction. This contradicts the Keynesian Theory and Sollow-Swan Theory that the more capital allocated should increase economic growth. The results of this study are in line with research conducted by Bachtiar *et al.*, (2015) which states that the real value of capital expenditure cannot be felt by the public. Kristanto (2009) describes various forms of weakness in internal control of government capital expenditures, including the presence of executive and legislative officer who intervene in the procurement of assets, mark up capital expenditures by distributing the remaining money to employees. They use their position and authority to perpetuate corruption (Sudibyso & Jianfu, 2015). This has an impact on not receiving real benefits from the total expenditure issued by the government for the community so that the provision of capital expenditures can have a significant negative effect on economic growth.

#### **Payment of debt interest on economic growth**

Based on the results of the fourth hypothesis, interest payments have no effect on economic growth. This cannot prove Keynes's theory because interest payments as a component of spending have not been able to have an effect on economic growth. This supports the results of Bramantya (2015) which states that foreign loan has no effect on Indonesia's economic growth. Payment of interest in Indonesia is used to pay domestic and foreign loan (Kementerian Keuangan Republik Indonesia, 2019). Loans have both positive and negative impacts on a country's economy. The fact is that loans used to finance national development activities are able to increase a country's economic growth. Conversely, a debt interest burden that is too large can also harm a country's economy. (Karagöl, 2002) states that payment of interest results in a country being very sensitive to international economic shocks because the foreign exchange owned by the country is drained to pay interest. This contradiction in the opinion of the author implies that there is no effect of debt interest payments on economic growth in Indonesia.

#### **Subsidies on economic growth**

The results of the fifth hypothesis test indicate that the provision of subsidies by the government has no impact on economic growth, so the results of this study cannot prove Keynes's theory. In line with the research of Sukmawati & Siregar (2014) which found that the provision of fertilizer and seed subsidies had not an impact on GDP growth in the agricultural sector. The amount

of subsidies in the Indonesian economy is relatively small, for example in the transportation sector so that it has not had a real impact on economic growth (Afifah, 2008).

Subsidies are the provision of budget allocations to state institutions or parties that control the lives of many people, where in the 2019 State Budget structure the government provides energy subsidies as much as 71.3% of the total subsidy budget and the rest for non-energy subsidies (Kementerian Keuangan Republik Indonesia, 2019). Energy subsidies consist of fuel oil, LPG 3 kg cylinders and electricity. Often the subsidies provided by the government are not well targeted. The 3 Kg Cylinder LPG, for example, does not only target the poor, even though it has stated its designation. Therefore, the provision of subsidies by the government requires further evaluation because it has not had an impact on economic growth.

### **Social expenditure on economic growth**

We tested the sixth hypothesis and the results showed that social expenditure has no effect on economic development in Indonesia. This result cannot provide support for Keynes's theory. This is support the research conducted by Lantu *et al.*, (2019) which categorizes social assistance as indirect expenditure and has not been able to contribute to the economic growth of Bitung. The Social Program for the Indonesian people consists of the Smart Indonesia Program (PIP), the National Health Insurance Program (JKN-KIS), the Family Hope Program (PKH), and Bansos Rastra / Non-Cash Food Assistance (Kementerian Keuangan Republik Indonesia, 2020a). The social program provided by the government has not been able to increase economic growth because the limitation of nominal value. This program can only be used for consumptive purposes and has not been able to increase community productivity. Another problem is that often the recipients of this program are not the low income society. Hendrajaya, Putra, & Julihartha (2020) proposed a web-based geographic mapping of social rocks so that the recipients of this aid are right on target. The right recipients and the appropriate number are expected to be able to drive economic growth.

## **5. Conclusion**

The results of testing government spending variables during the period 2005 to 2019 shows that government expenditure which includes personnel expenditure, material expenditure, capital expenditures, interest payments, subsidies and social expenditure simultaneously have a significant effect on economic growth. Partially, there is a significant positive effect on the relationship between the variable personnel expenditure and goods expenditure on economic growth. There is a significant negative effect on the relationship between the variable capital expenditure on economic growth. The other three variables, which include debt interest payments, subsidies and social assistance, do not have a significant effect on economic growth

The government needs to manage its policies to allocate spending so that it has an impact on the economic growth of the community. The use of capital expenditure must be selective and effective so can contribute to economic growth. The government needs to limit loan because the payment interest is quite large. Loans must be prioritized for sectors capable of driving economic growth. The provision of subsidies and social expenditure must be able to increase the productivity of the community so that it has implications for increasing economic growth.

The researcher realizes that this study has limitations. This research emphasizes proving Keynes's Theory and has not raised Wagner's Law which has been used in developed countries. The path of future research is open to prove Wagner's Law in Indonesia.

## References

- Abdillah, K., Handoyo, R. D., & Wasiaturrahma, W. (2020). The Effect of Control Corruption, Political Stability, Macroeconomic Variables on Asian Economic Growth. *Ekulilibrium : Jurnal Ilmiah Bidang Ilmu Ekonomi*, 15(2), 161. <https://doi.org/10.24269/ekulilibrium.v15i2.2678>
- Abu-Bader, S., & Abu-Qarn, A. S. (2003). Government Expenditures, Military Spending and Economic Growth: Causality evidence from Egypt, Israel, and Syria. *Journal of Policy Modeling*, 25(6–7), 567–583. [https://doi.org/10.1016/S0161-8938\(03\)00057-7](https://doi.org/10.1016/S0161-8938(03)00057-7)
- Acemoglu, D. (2012). Introduction to Economic Growth. *Journal of Economic Theory*, 147(2), 545–550. <https://doi.org/10.1016/j.jet.2012.01.023>
- Afifah, E. N. (2008). Kajian Kerangka Subsidi di Indonesia. *Institute for Development of Economics and Finance (INDEF)*, 9(3), 1–111.
- Anitasari, M., & Soleh, A. (2015). Pengaruh Pengeluaran Pemerintah terhadap Pertumbuhan Ekonomi di Provinsi Bengkulu. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis*, 3(2), 117–127. <https://doi.org/10.37676/ekombis.v3i2.139>
- Arjomand, M., Emami, K., & Salimi, F. (2016). Growth and Productivity: the Role of Budget Deficit in the MENA Selected Countries. *Procedia Economics and Finance*, 36(16), 345–352. [https://doi.org/10.1016/s2212-5671\(16\)30046-6](https://doi.org/10.1016/s2212-5671(16)30046-6)
- Azwar. (2016). Peran Alokatif Pemerintah melalui Pengadaan Barang/Jasa dan Pengaruhnya terhadap Perekonomian Indonesia. *Kajian Ekonomi Keuangan*, 20(2). Retrieved from <http://fiskal.kemenkeu.go.id/ejournal>
- Bachtiar, H. F., Sofilda, E., & Kusumastuti, S. Y. (2015). Pembayaran Bunga Utang , dan Subsidi terhadap Pertumbuhan Ekonomi Indonesia Tahun 1999-2013. *Seminar Nasional Cendekiawan 2015*, 682–688. Jakarta Barat: Lembaga Penelitian Universitas Trisakti.
- Badan Pusat Statistik. (2020a). Data BPS. Retrieved January 28, 2021, from <https://www.bps.go.id/>
- Badan Pusat Statistik. (2020b). *Pendapatan Nasional (National Income of Indonesia) 2015-2019*. Jakarta: Badan Pusat Statistik.
- Bawono, I. R., Halim, A., & Lord, B. (2012). Public Sector Performance Measurement and Budget Allocation : an Indonesian Experiment. *Management Accounting Conference*, 1–22.
- Bawono, I. R., & Setyadi, E. (2020). *Panduan Penggunaan dan Pengelolaan Dana Desa*. Jakarta: Grasindo.
- Bramantya, A. W., & Sulasmiyati, S. (2015). Pengaruh Suku Bunga, Utang Luar Negeri, Tingkat Pengangguran terhadap Pertumbuhan Ekonomi (Studi pada 5 Negara dengan Populasi Terbesar di Dunia 2006-2015). *Jurnal Administrasi Bisnis*, 48(1), 147–154.
- Cangiotti, N., & Sensi, M. (2020). *Exact solutions for a Solow-Swan Model with Non-Constant Returns to Scale*. 1–10. Retrieved from <http://arxiv.org/abs/2008.05875>
- Chu, T. T., Hölscher, J., & McCarthy, D. (2020). The Impact of Productive and Non-Productive Government Expenditure on Economic Growth: an Empirical Analysis in High-income Versus Low- to Middle-Income Economies. *Empirical Economics*, 58(5), 2403–2430. <https://doi.org/10.1007/s00181-018-1616-3>
- Cutler, T. (2015). New Managerialism and New Public Sector Management. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (Second Edi, Vol. 16). <https://doi.org/10.1016/B978-0-08-097086-8.28063-X>
- Deswantoro, D. B., Ismail, A., & Hendarmin, H. (2017). Pengaruh Belanja Daerah Berdasarkan Klasifikasi Ekonomi terhadap Pertumbuhan Ekonomi dan Kesejahteraan Masyarakat di Kabupaten/Kota Provinsi Kalimantan Barat Tahun 2010 - 2015. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, 6(3), 187. <https://doi.org/10.26418/jebik.v6i3.23256>
- Dinh Thanh, S., Hart, N., & Canh, N. P. (2020). Public Spending, Public Governance and Economic Growth at the Vietnamese provincial level: A Disaggregate Analysis. *Economic Systems*, (May 2019), 100780. <https://doi.org/10.1016/j.ecosys.2020.100780>
- Dudzevičiūtė, G., Šimelytė, A., Liučvaitienė, A. (2017). Government Expenditure and Economic Growth in the European Union Countries. *International Journal of Social Economics*. <https://doi.org/https://doi.org/10.1108/IJSE-12-2016-0365>

- Firth, L., & Mellor, D. (2000). Learning and the New Growth Theories: Policy Dilemma. *Research Policy*, 29(9), 1157–1163. [https://doi.org/10.1016/S0048-7333\(99\)00078-5](https://doi.org/10.1016/S0048-7333(99)00078-5)
- Hasnul, A. gifari. (2016). The Effects of Government Expenditure on Economic Growth : the Case of Malaysia. *MPRA Paper No. 71254*. Retrieved from [https://mpra.ub.unimuenchen.de/71254/1/MPRA\\_paper\\_71254.pdf](https://mpra.ub.unimuenchen.de/71254/1/MPRA_paper_71254.pdf)
- Hendrajaya, I. P., Putra, I. G. J. Ek., & Juliharta, I. G. P. K. (2020). Sistem Informasi Geografis Pemetaan Masyarakat Penerima Bantuan Sosial Tepat Sasaran pada Desa Sulangai Berbasis Web. *Jurnal Teknologi dan Informasi Komputer*, 6(3), 278–287.
- Irandoust, M. (2019). Wagner on Government Spending and National Income: a New Look at an Old Relationship. *Journal of Policy Modeling*, 41(4), 636–646. <https://doi.org/10.1016/j.jpolmod.2019.02.003>
- Junaedi, D., & Salistia, F. (2020). Pengaruh Utang Luar Negeri terhadap Perekonomian dan Kemiskinan : Komparasi Antarezim Anggaran di Indonesia. *Al -Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Islam*, 1(2), 1–21.
- Karagöl, E. (2002). The Causality Analysis of External Debt Service and GNP : The Case of Turkey. *Central Bank Review*, 39–64.
- Kementerian Keuangan Republik Indonesia. (2019). *Informasi APBN 2019*. Retrieved from [www.anggaran.kemenkeu.go.id](http://www.anggaran.kemenkeu.go.id)
- Kementerian Keuangan Republik Indonesia. (2020a). Bantuan Sosial dan Akuntabilitasnya. Retrieved from [www.kemenkeu.go.id](http://www.kemenkeu.go.id)
- Kementerian Keuangan Republik Indonesia. (2020b). Data Realisasi Triwulanan APBN. Retrieved from <http://www.data-apbn.kemenkeu.go.id/>
- Kristanto, S. B. (2009). Pengaruh Ukuran Pemerintahan , Pendapatan Asli Daerah (PAD) dan Belanja Modal sebagai Prediktor Kelemahan Pengendalian Internal. *Jurnal Akuntansi UKRIDA*, 9(1), 1–17.
- Lantu, Y. S. M., Koleangan, R. A. M., & Rotinsulu, T. O. (2019). Pengaruh Belanja Pemerintah terhadap Pertumbuhan Ekonomi dan Pengentasan Kemiskinan di Kota Bitung. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 19(2), 1–19. <https://doi.org/10.35794/jpekd.15785.19.2.2017>
- Lisandri, Rizani, F., & Akhmad Yafiz Syam. (2017). Pengaruh PAD dan DAU terhadap Pertumbuhan Ekonomi dengan Belanja Modal sebagai Variabel Intervening pada Pemerintah Kabupaten/Kota di Provinsi Kalimantan Selatan. *Jurnal Spread*, 7(2), 111–122.
- Museru, M., Toerien, F., & Gossel, S. (2014). The Impact of Aid and Public Investment Volatility on Economic Growth in Sub-Saharan Africa. *World Development*, 57(1966), 138–147. <https://doi.org/10.1016/j.worlddev.2013.12.001>
- Nurudeen, A., & Usman, A. (2010). Government Expenditure and Economic Growth in Nigeria, 1970-2008: a Disaggregated Analysis. *Business and Economics Journal*, 1(1), 1–11.
- Palley, T. (2017). The General Theory at 80: Reflections on the History and Enduring Relevance of Keynes' Economics. *Investigacion Economica*, 76(301), 87–101. <https://doi.org/10.1016/j.inveco.2017.12.003>
- Piętak, Ł. (2014). Review of Theories and Models of Economic Growth. *Comparative Economic Research. Central and Eastern Europe*, 17(1), 45–60. <https://doi.org/10.2478/cer-2014-0003>
- Pratolo, S., & Yudha, B. S. (2012). Peran Faktor-Faktor Keuangan dan Pertumbuhan Ekonomi terhadap Penerimaan Pendapatan Asli Daerah. *Jurnal Akuntansi Dan Investasi*, 12(2), 144–160.
- Santoso, I. H. (2012). Dampak Krisis Ekonomi terhadap Kinerja Ekonomi Nasional dan Kemiskinan. *Journal of Chemical Information and Modeling*, 10(1), 71–96.
- Shindo, Y. (2010). The Effect of Education Subsidies on Regional Economic Growth and Disparities in China. *Economic Modelling*, 27(5), 1061–1068. <https://doi.org/10.1016/j.econmod.2010.04.003>
- Solikin, A. (2018). Pengeluaran Pemerintah dan Perkembangan Perekonomian (Hukum Wagner) di Negara Sedang Berkembang: Tinjauan Sistematis. *Info Artha*, 2(1), 65–89. <https://doi.org/10.31092/jia.v2i1.237>
- Solow, R. M. (1999). Chapter 9 Neoclassical Growth Theory. *Handbook of Macroeconomics*, 1(PART A), 637–667. [https://doi.org/10.1016/S1574-0048\(99\)01012-5](https://doi.org/10.1016/S1574-0048(99)01012-5)
- Sudibyo, Y. A., & Jianfu, S. (2015). Institutional Theory for Explaining Corruption: an Empirical Study on

- Public Sector Organizations in China and Indonesia. *Corporate Ownership and Control*, 13(1CONT8), 817–958. <https://doi.org/10.22495/cocv13i1c8p1>
- Sujianto, A. E., & Azmi, M. F. U. (2020). Associative Study on Government Spending, Inflation, Trade Balance, and Gross Domestic Product. *Ekulibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 15(1), 27. <https://doi.org/10.24269/ekulibrium.v15i1.2363>
- Sukartini, Ni Made; Saleh, S. (2012). Pengujian Hukum Wagner dalam Perekonomian Indonesia Kajian Pengeluaran Pemerintah Pusat dan Pemerintah Provinsi. *Bisnis Dan Ekonomi (JBE)*, 19(1), 1–24.
- Sukmawati, A., & Siregar, H. (2014). Implementasi Penyusunan Rencana Kerja dan Anggaran Belanja Kementerian Pertanian Sektor Pertanian Tahun 2005-2012. *Jurnal Manajemen & Agribisnis*, 10(3), 182–191. <https://doi.org/10.17358/jma.10.3.182-191>
- Wahyunadi, W. (2019). Konvergensi Pertumbuhan Ekonomi di Nusa Tenggara Barat Periode Tahun 2010 – 2015. *Elastisitas - Jurnal Ekonomi Pembangunan*, 1(2), 79–90. <https://doi.org/10.29303/e-jep.v1i2.9>
- Wu, S. Y., Tang, J. H., & Lin, E. S. (2010). The Impact of Government Expenditure on Economic Growth: How Sensitive to the Level of Development? *Journal of Policy Modeling*, 32(6), 804–817. <https://doi.org/10.1016/j.jpolmod.2010.05.011>.