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Indonesia Budget Deficit

Arien Sandra Olivia¹, Azwardi², and Anna Yulianita³

¹²³Universitas Sriwijaya, Palembang, Indonesia

Abstract: This study aims to determine the effect of Revenue and World Oil Prices on Deficit Budget (APBN) in 2007-2016. The data used in this research is secondary data from 2007-2016. Based on these objectives, the method of analysis used is multiple linear regression analysis. The results of this study tax revenues and world oil prices have simultaneously affect toward the budget deficit. When viewed on an individual basis so influential in world oil prices. This is because world oil prices are fluctuating while the budget deficit keeps increasing year-on-year. World oil prices also contribute to the income tax of oil and gas where the current income tax decreased. While there is a significant tax revenue. This condition is caused by the contribution of tax revenue towards state revenues more than 60 percent.

Keywords: Budget Deficit; World Oil Prices; Tax Revenue; Budget Income; Expenditure Government (APBN)

Introduction

Indonesia is an archipelagic country formed from large islands and small islands. This makes the uneven development of itself. Equity of development outcomes and high economic growth can create mutual prosperity. Therefore, the government always raises the Budget Income and Expenditure Government (APBN) for the sake of continuity of national development.

Budget Income and Expenditure Government (APBN) is the state government's annual financial plan approved by the House of Representatives (DPR). In preparing a budget must be related between the funds to be spent and the objectives to be achieved. The State Budget (Revenue and Expenditure Budget) contains a systematic and detailed list containing state revenue and expenditure plans within a budget year (Haerani, 2012: 22).

With the state budget can be seen the realization of government expressed in the size of money, both government expenditure policy for a period in the future as well as government acceptance policies to cover expenditures. If the excessive expenditure of revenue then the government's budget can be said to be a deficit. The budget deficit was

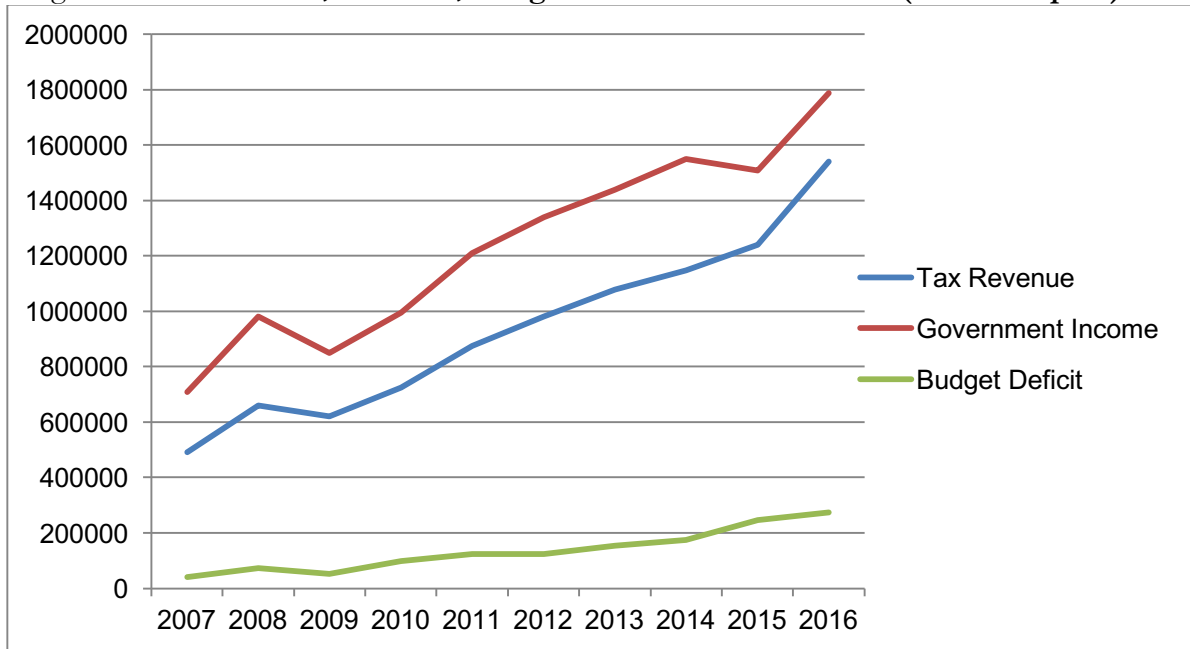
¹arienoliv@gmail.com, ² azwardi_unsri@yahoo.com, ³annayulianita@yahoo.co.id

covered by means of one of the foreign debt or use leftover use budget in the previous year.

The state budget deficit is the difference between state revenues and expenditures that tend to be negative, meaning that state expenditure is greater than its revenue. Economists tend to calculate the country's budget deficit not from absolute numbers, but measure from the ratio of the state budget deficit to Gross Domestic Product (GDP). If we calculate the state budget deficit as a percentage of GDP, it will get an idea of what percentage of a country can raise funds to cover the deficit. In addition, calculating the percentage of the state budget deficit on GDP also illustrates how much the deficit level has endangered the state of the economy (David, 1999:446).

The occurrence of budget deficit caused by the equity of economic growth one of them by increasing infrastructure spending for the sustainability of the economy. The low purchasing power of the public can affect the budget deficit as it may affect domestic tax revenues. Petroleum as one of the world's major energy sources has an influence on the economy in several countries as well as world oil prices can also affect the budget deficit. Where world oil demand is unpredictable and oil also affects for economic sustainability because if the price of fuel oil rises, the price of staple goods also go up.

Figure 1. Tax Revenue, Revenue, Budget Deficit Years 2007-2016 (Billion Rupiah)



Source: Data processed from CBS, Databoks, MoF

State revenue tends to increase every year. But for the year 2009, the revenue of the country decreased from 981,609.40 billion rupiah in 2008 to 848,763.2 billion rupiah. It also happened in 2015 decreased from 2014 amounted to 1,550,490.80 become 1,508,020.37 billion rupiah.

Tax revenues have an annual increase. The average increase in tax revenues in 2007-2016 about 14 percent. Tax revenues are comprised of domestic taxes and international trade

taxes. Domestic tax revenue is the most dominant of income tax while for international trade tax is the most dominant of import duties.

World oil prices are fluctuating. World oil price is the lowest in 2016 at 50 USD/Barrel while world oil price is highest in the year of 92.41 USD/Barrel. The movement of the oil price itself depends on: 1) world oil supply, especially the supply quotas set by OPEC; 2) reserves of the United States oil, especially those contained in United States oil refineries stored in strategic oil reserves; 3) world oil demand (useconomy.about.com).

For the budget deficit increase every year. In Table 1. Year 2009 experienced a reduction in the previous year from -73.306 billion rupiah to -51.342 billion rupiah. There was also a reduction in 2012 from -124.656 billion rupiah in 2011 to -124.020 billion rupiah in 2012. For other years the APBN deficit increased from the previous year.

The APBN deficit on GDP in 2007-2016 does not exceed 3 percent in line with the budget deficit limits set forth in Law No. 17 of 2003 on State Finance. In Article 12 paragraph (3) of the Act, which states that the budget deficit is limited to a maximum of 3 percent of Gross Domestic Product (GDP).

Literature Review

Theoretical Basis

The budget deficit theory used in this research are 3 (three): Neoklasik, Keynesian, and Ricardian.

Neoclassical Theory

Neoclassical theory proposes an adverse relationship between budget deficits and macroeconomic variables. They argue that budget deficits lead to higher interest rates, hampering private bonds issuance, private investment, and private spending, raising the rate of inflation, and causing a similar rise in the current account deficit and ultimately slowing economic growth through clustered resources outside. The standard neoclassical model has three main features. First, the consumption of each individual is determined as a solution to inter-temporal optimization problems, where loans and loans are allowed at the market interest rate. Second, the individual has a limited lifetime. Every consumer belongs to a particular group or generation, and the life span of successive generations overlaps. Third, the market clearing is generally assumed in the all period.

Diamond contends the first attempt to formally study the impact of budget deficits in the context of such models. Diamond argues that a permanent rise in the ratio of domestic debt to national income lowers the ratio of capital labor. At the initial interest rate, consumers do not want to hold the original volume of physical capital and bonds, plus new bonds. The increase in interest rates stimulates additional savings and reduces investment until market equilibrium is re-realized. Thus, the government's deficit continues to rule out the accumulation of private capital. Diamond analysis focuses on permanent changes in deficits, and does not explain the effects of temporary change. Auerbach and Kotlikoff in Anthony (2015: 34) stimulate policy in a much more complex neoclassical model. Their analysis emphasizes that the direct impact of the temporary budget deficit may be very

small, and possibly perverted (temporary deficits can be short-term saving stimulation) (Anthony, 2015: 34).

Keynesian Theory

Keynesians who argue that the budget deficit affects the economy. Keynesian groups assume that economic actors have short-term views (myopic), intergenerational relationships are not tight, and not all markets are always in a balance position. One of the imbalances occurs in the labor market, and in the economy there is always unemployment.

According to the Keynesians, the budget deficit will increase income and welfare, and consumption in the next turn. The budget deficit financed by debt, which means that the current tax burden is relatively mild, will lead to an increase in income that is ready to be spent. An increase in ready-to-spend revenue will increase consumption and overall demand side. If the economy is not yet in full employment, increasing demand-side will drive increased production, and subsequently increased national income. In the next period, an increase in national income will drive the economy through the Keynesian multiplier effect. Because budget deficits increase consumption and income levels simultaneously, savings and capital accumulation rates also increase. According to Keynesians as a whole, short-term budget deficits will benefit the economy (Mafruhah, 2013: 70).

Theory Of Ricardian Equivalence (RE)

The main Ricardian observation is that deficits only delay taxes. This opposite approach is continued by Barro (1989) in known as the Ricardian Equivalence Hypothesis (REH). Ricardian Equivalence or Ricardian Equivalence proposition—Ricardo, is an economic theory which shows that the government budget deficit does not affect the total demand level in the economy. It was originally proposed by 19th century economist David Ricardo. Simply put, the theory can be described as follows. Suppose the government finances extra spending through tax deficits later Ricardo argues that although taxpayers will have more money now, they will realize that they have to pay higher taxes in the future and therefore save extra money to pay future taxes. The extra savings by consumers will actually offset the extra spending by the government, so the overall demand remains unchanged. (Anthony, 2015: 35).

The theory of RE is essentially the development of permanent income theory and the life cycle hypothesis (Permanent Income and Life Cycle Hypothesis or PILCH). In the variable RE theory of government spending, taxes and government debt that do not exist in the PILCH theory are introduced in the model. An important conclusion from the RE theory is that budget deficit policies have no effect on the economy, including levels of consumption, investment, interest rates, and price levels. In the theory of RE it is assumed that in the economy there is only one economic agent (a representative agent) who lives all the time (infinite horizon). The economic performer has perfect foresight to be used in decision making. The economic practitioner is perfectly able to do the optimization to achieve his life goal (Mafruhah, 2013: 67).

Previous Research

In Oltjana research and Madalena (2016), the analyst on budget deficits and economic growth in Albania. The main purpose of this study was to analyze the short-term and long-term impact of the budget deficit on economic growth in Albania (measured by GDP) for the period 1993-2014. To achieve this goal, the Cointegration Test will be used. Dependent variable is GDP, while independent variables are foreign direct investment and net budget deficit. Granger test is used to detect victims relationship between variables. From the analysis results obtained that the relationship of one-sided interaction between GDP and the budget deficit and vice versa. The results show that there is no relationship between direct foreign investment and the budget deficit. The study concludes that budget deficits and economic growth have an inverse relationship in the long term. These results are consistent with the endogenous growth theory, and therefore we can say that there is indeed a continuous relationship between variables.

According to Ather, et al. (2011), analyzed about Fiscal Deficits and Economic Growth in Pakistan. This study explains the possible consequences of a fiscal deficit affecting economic growth directly or indirectly. It is also inferred from the above results that the fiscal deficit affects the country's economic growth is very detrimental. In the case of Pakistan, the country faces this fiscal deficit situation from the last few decades. This is mainly due to the narrow tax base, inelastic tax system, complex tax laws, heavy dependence on foreign trade taxes, large tax exemptions and incentives. All these facts create a fiscal deficit situation.

Research Napoleon (2017), to analyze the impact of budget deficits on economic growth and development in Ghana (1994-2014). Modeling underlying variables (inflation, GDP, Real Interest Rate, Gross Investments, Real Exchange Rate) to estimate the quantitative effects of continued budget deficits on the rate of economic growth, governance and development. The sample used for this study is based on panel data between 1994 and 2014. The results obtained from the analysis show the adverse effects of a sustainable budget deficit on the process of economic growth and development. The study recommends adoption and implementation of policies that could reverse an unsustainable budget deficit that causes crowding out of private investment, but puts the economy on a path of sustainable growth and growth in the medium to long term.

According to Antwi, et al. (2013), analyzes the effect of the consequences of budget deficit on economic growth: empirical evidence from Ghana. This study evaluates the sustainability of the budget deficit in Ghana between 1960 and 2010 using the present value budget constraint approach. This study used the ADF, PP, Granger causality and cointegration tests, this study produced a conventional negative sign of speed adjustment to long-run equilibrium following shocks to the system at the 5 percent level of significance.

Anthony et al. (2015), analyzes the dynamics of budget deficits and macroeconomic fundamentals in Nigeria. Using quarterly data from 1970-2012. The variables in this study are budget deficit, real GDP, interest rate and money supply. VAR model used in this research. The results of this study deficit budget initially responded with positive movement for every single positive deviation standard on real gross domestic product, positive or variation of gross domestic product positively generated negative response from

budget balance from period 10 until 172 period. The budget deficit shows signs of decline in the early stages in response to positive innovations in the real interest rate.

Methods

This study focused on Budget Deficit Countries Indonesia where in terms of state budget revenues of the recipient's visits taxes and oil prices. Where the object being studied is the budget deficit as the dependent variable as well as tax revenue and world oil prices as independent variables in 2007-2016. The data were obtained from several sources, such as the Indonesian Central Bureau of Statistics (BPS) and the Ministry of Finance website and related literature studies with this research, taking the existing statistical data along with other relevant and necessary data in this study. Data analysis in this study using descriptive statistics, namely statistical techniques used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalization. In this study, performed data analysis methods regression.

Regression aims to test the influence of one variable to another variable (Nugroho, 2005:43). This study uses multiple regression analysis is used to determine the effect of linearly between the two independent variables (X_1 and X_2) with the dependent variable (Y). This analysis to know the direction of the relationship between independent variables with dependent variable whether by knowing the independent variable related positively or negatively and to predict the value of the dependent variable if the value of the independent variable increased or decreased. The multiple regression model is shown by the equation:

$$DA = \alpha + \beta_1 PPJ + \beta_2 HMD + \epsilon$$

Where:

DA, is Budget Deficit (Billion Rupiah)

α , is the intercept

β_1 , β_2 , is coefficient of regression of each independent variable

PPJ, is Tax Revenue (Billions of Rupiah)

HMD, is the World Oil Prices (USD/barrel)

ϵ , is the error factor

Findings

Total government revenues are detailed on the basis of tax revenues that include tax revenues, state revenues, tax revenue percentage of state revenues, income tax of oil and gas. Income tax of non oil and gas, world oil price, budget deficit and APBN deficit to GDP shown in the following table:

Table 1. Tax Revenue, Revenue, Tax Revenue to Revenue, Tax Oil and Gas, Tax Non-Oil, Oil prices, budget deficit and budget deficit to GDP Year 2007-2016

YEAR	DESCRIPTION							
	Tax Receipts (Billions of Rupiah)	State Revenue (Billions of Rupiah)	Tax Revenue on State Revenue (Percentage)	Income Tax of Oil and Gas (Trillion Rupiah)	Income Tax of Non Oil and Gas (Trillion Rupiah)	World Oil Prices (USD / Barrel)	Deficit of APBN (Billions of Rupiah)	Deficit of APBN to GDP (percent)
2007	490,988.00	707,806.10	69%	44	194.43	79.99	-40,513	-1.26%
2008	658,701.00	981,609.40	67%	77	250.48	100.01	-73,306	-0.08%
2009	619,922.00	848,763.20	73%	50	267.57	58	-51,342	-1.58%
2010	723,307.00	995,271.50	73%	58.87	298.17	77.11	-98,010	-0.73%
2011	873,874.00	1,210,599.70	72%	73.09	358.03	91.39	-124,656	-1.14%
2012	980,518.10	1,338,109.60	73%	83.46	377.94	88.95	-124,020	-1.86%
2013	1,077,306.70	1,438,891.10	75%	88.74	413.81	92.41	-153,338	-2.33%
2014	1,146,865.80	1,550,490.80	74%	87.44	453.07	57.33	-175,354	-1.91%
2015	1,240,418.86	1,508,020.37	82%	49.67	544.46	37.33	-245,895	-2.59%
2016	1,539,166.20	1,786,225.00	86%	36.09	621.06	50	-273,179	-2.46%

Source: Data processed (CBS, Databoks, Ministry of Finance, LKPP)

Increased tax revenues tend manually. The average increase in tax revenues in 2007 - 2016 about 14 percent. The highest percentage increase in tax revenues was approximately 34 percent in 2008 where 2007 amounted to 490,988 billion rupiahs increased to 658,701 billion rupiah. But not for the next year is the year 2009 where tax revenue is reduced compared with the previous year about 6 percent dropped to 619,922 billion rupiah. This is because the global economy is slowing down so this results in Value Added Tax (VAT) and income tax down. After a decreased in tax revenues in 2009, in the next year of 2009 - 2013 there was an increase of about 10 percent to 21 percent. This increase in tax revenues occurs as a result of the enactment of the Asean-China Free Trade Agreement (AC-FTA). So this encourages the increase in import VAT. In 2014 and 2015 the tax was increase at 6 percent and 8 percent. For the year 2016 there was an increase of about 24 percent with the amount of revenue 1,539,166.2 billion rupiah.

For the state budget revenues tend to increase every year. But not for 2009 and 2015 that fell by about 16 percent and 3 percent from a year earlier. For the highest percentage increase in 2008 by 28 percent from a year earlier. While for the lowest increase in 2013 and 2014 by 7 percent. In 2007 and 2008 APBN revenue amounted to 707,806.10 billion rupiah and 981,609.40 billion rupiah. Then fell in 2009 to 848,763.20 billion rupiah. For 2010, 2012 and 2013 increased revenue of APBN to 995,211.50 billion rupiah, 1,210,599.70 billion rupiah and 1,338,109.60 billion rupiah. The increase also occurred in 2013 and 2014 to 1,438,891.10 and 1,550,490.80 billion rupiah billion rupiah. There is decrease in APBN revenue in 2015 its 1.508.020,38 billion rupiah. Then go up in 2016 to 1,786,225 billion rupiah.

Tax revenue is the dominant element in state revenues. This can be seen in Table 1. Where the percentage of tax revenue on state revenues exceeds 60 percent and always increases to 86 percent in the year 2016. As the main source of revenue, this makes taxes very

important in the government's balance sheet. Where the country's census from other sectors has not been able to reach the target.

In Table 1. world oil prices fluctuate. In 2007 the world oil price of 79.99 USD/Barrel then rose in 2008 amounted to 100.01 USD / Barrel. Oil price movements in the last 10 years in 2008 is the price of oil has the highest value. After the increase in 2008, in 2009 oil prices tended to fall to 58 USD / Barrel. In the next year that is the year 2010 world oil prices rose worth 77.11 USD / Barrel. Then in the year 2011, 2012, and 2013 there is a movement of oil prices up and down but the movement is not too far at 91.39 USD / Barrel, 88.95 USD / Barrel, and 92.41 USD / Barrel. There was a decrease in the next two years, namely 2014 and 2015 amounting to 57.33 USD / Barrel and 37.33 USD / Barrel. World oil price in 2015 was the lowest price during the period 2007 - 2016. For the year 2016 the oil price of 50 USD / Barrel. There are 4 triggers the decline in world oil prices quoted by *CNNMoney*, namely 1) the excess supply; 2) Supply of shale gas from the United States continues to rise; 3) Demand decreases; 4) China's economy is sluggish as its slowdown keeps world commodity prices down, including crude oil; 5) Increase in United States dollar value; 6) Iran is flooding the world with oil due to Iran's nuclear deal with Western countries so that it makes oil flood the market.

Yet the economic recovery in the oil and gas sector was marked by a decline in petroleum ongoing and falling oil prices the contribute with oil and gas income tax. Where the contribution of oil and gas PPh to the highest state revenues reached only 12 percent in 2008 worth 77 trillion. In Table 1. The contribution of income tax of oil and gas to state revenues only has an average of about 8 percent and the lowest in the last 2 years in 2015 and 2016 by 4 percent and 2 percent. Can be seen from these data the government cannot rely on the oil and gas sector as the main income. In this case the government seeks to increase the non-oil sector. When seen in Table 1. The contribution of non-oil income tax to the state revenues have a high rate of around 40 percent and as high in 2015 of 44 percent and the lowest in 2008 and 2012 by 38 percent.

In Table 1. The APBN deficit increased from 2007 to 2016. In 2007 the state budget deficit amounted to 40,513 billion rupiahs then in the following year increased by 73,306 billion rupiah. In 2009 the state budget deficit decreased by 51,342 billion rupiah. The budget deficit has increased in 2010 and 2011 amounted to 98,010 billion rupiah and 124,656 billion rupiah. In 2012 decreased by 124,020 billion rupiah. In the following years, in 2013, 2014, 2015, and 2016 increased by 153,338 billion rupiah, 175,354 billion rupiah, 245,895 billion rupiah, and 273,179 billion rupiah.

In Table 1. The APBN deficit against GDP from 2007 - 2016 has a percentage of about 0.08 percent to -2.46 percent. In 2007, 2008 and 2009, the percentage of the state budget deficit to GDP amounted to -1.26 percent, -0.08 percent and -1.58 percent. In 2010, 2011, 2012 and 2013, the percentage deficit of APBN to GDP was -0.73 percent, -1.14 percent, -1.86 percent, and -2.33 percent. For 2014, 2015, and 2016, the percentage deficit of APBN to GDP is -1.91 percent, -2.59 percent, and -2.46 percent.

Based on the estimation of the regression equation we get the following equation:

Table 2. Coefficients

Model	Unstandardized Coefficient B	Std. Error	Standardized Coefficients Beta	t	sig	Collinearity Statistics Tolerance	VIF
Constant	-32780.185	37408.197		-.876	.410		
Tax Revenue	.218	.021	.907	10.587	.000	.724	1.381
Oil Price	-478.089	315.239	-.130	-1.517	.173	.724	1.381

$$\text{Budget Deficit (DA)} = -32780.185 + 0.218 \text{ PPJ} - 478.089 \text{ HMD}$$

From the multiple linear regression equation obtained above constant value of -32780.185. That is if miscellany bell Deficit (Y) is influenced by both the independent variables or Receipts Tax (X₁) and World Oil Prices (X₂) is zero, then the average magnitude Deficit to be worth - 32780.185.

The regression coefficient for the Tax Revenue variable (X₁) is positive, indicating a direct relationship between Tax Revenue (X₁) and APBN Deficit (Y). X₁ variable regression coefficient of 0.218 for each additional means of Tax Revenue (X₁) of one unit will cause increased Budget deficit (Y) of 0.218. While based on the probability value of 0.000 < 0.05 means that tax revenue significantly affects the budget deficit. This condition is caused by the contribution of tax revenue to the state budget receipts most dominant can be seen from Table 1. Percentage of tax revenue to the Government Income is 69 percent until 86 percent and increasing every year. Tax revenues are comprised of domestic taxes and international trade taxes. Domestic tax revenue is the most dominant of income tax while for international trade tax is the most dominant of import duties.

The regression coefficient for the variable World Oil Prices (X₂) is negative, it means that there is no direct affect between the World Oil Prices (X₂) on Deficit (Y). While the probability value of 0.173 > 0.05 it means no significant effect. This condition is due to the oil and gas income tax have contributed little to the income tax. Where Indonesia export crude oil and import of oil that has been managed so that it can be used as fuel oil. Contribution of oil and gas exports about ± 40 percent of domestic consumption and the rest of oil and gas imports ± 60 percent.

Oil and gas income tax is a tax the income derived from the Tax Office upstream oil and gas company (or better known as the Oil and Gas Contractors) for the acquisition of income from the oil obtained. (*hitungpajak.wordpress.co.id*). The contribution of income tax of oil and gas does not exceed 30 percent of income tax.

In the multicollinearity test results on the coefficients table. The VIF value for the Tax Revenue (PPJ) and World Oil Prices variables have the same value of 1,381, while the Tolerance value is 0.724. because the VIF value of the two variables no larger than 10 then it can be said nothing multicollinearity on both independent variables. Based on the classical assumption of linear regression with OLS, a good linear regression model is free from multicollinearity. Thus, the model has been free from the existence of multicollinearity.

Table 3. **Model Summary^b**

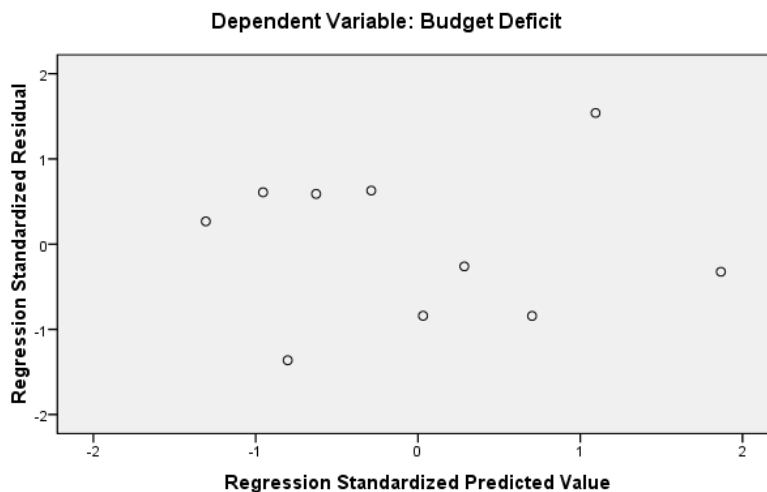
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.981 ^a	.963	.952	17044.17231	2.827

a. Predictors: (Constant), World Oil Price, Tax Revenue
 b. Dependent Variable: Budget Deficit

Based on Table 3. The obtained value of multiple correlation coefficient (R) of 0,981. This value indicates a strong positive correlation between Tax Revenue (PPJ) and World Oil Price (HMD) simultaneously with Indonesia's Budget Deficit (DA) of 98.1 percent. The coefficient of determination (R^2) of 0.963. This shows that the model can explain the existing data variation of 96.3 percent. In other words, there is the effect of Tax Revenue (PPJ) and World Oil Price (HMD) simultaneously influence with Budget Deficit (DA) of 96.3 percent, while the rest of 3.7 percent is influenced by other factors not observed in this research.

The data used to estimate the linear regression model is the time series data then it is necessary to test the assumption free from autocorrelation. The results of the autocorrelation test can be seen in the last column in Table 3. Model Summary. The value of durbin watson count is 2,827. The d_L and d_U values can be seen on the DW table with 5 percent significance level (error). Durbin Watson's table shows that $d_L = 0.697$ and $d_U = 1.641$ can be determined $4-d_U = 2,359$ and $4-d_L = 3,303$. The DW value of 2,827 is bigger than $4-d_U = 2,359$ and less than $4-d_L = 3,303$ it cannot be concluded that there is autocorrelation or no autocorrelation.

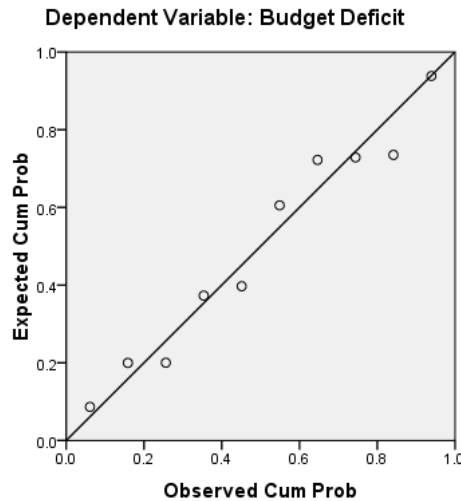
Figure 2. **Heteroscedasticity Test Scatterplot**



The result of heteroscedasticity can be seen in the Figure 2. Scatterplot above. From the picture above shows that the spreading point does not form a particular pattern / path, so it can be concluded there is no heteroscedasticity or in other words homoscedasticity occur. The classical assumption about heteroscedasticity in this model is fulfilled that is free from heteroscedasticity.

Figure 3. Normality Test

Normal P-P Plot of Regression Standardized Residual



Normality test results can be seen from Figure 3 above. The distribution of dots from figure 2 above is relatively close to a straight line, so it can be concluded that (data) residual is normally distributed. This result is in line with the classical assumption of linear regression with OLS approach. The criterion of a residual data is normally distributed or not with the Normal P-P Plot approach can be done by looking at the distribution of dots on the picture. If the dots are close or close in a straight line (diagonal) it is said that the residual data is normally distributed, but if the distribution of the points away from the line is not normally distributed.

Conclusion

Efforts are made to find the relationship between Tax Revenues and Oil Price to Indonesia budget deficit. Where the budget deficit made while the dependent variable of Revenue and World Oil Prices as independent variables. All variables have a stationary level a significance 5 (five) percent. Based on the coefficient table, the tax revenue has a positive relationship or direction and significant to the budget deficit. A unidirectional relation means that when tax revenues increase, the budget deficit also rises. This happens because of the equity of economic growth. Where the government also raises government spending or spending in the same direction with the increase of government revenue from taxes.

While the world oil price has a negative relationship or 2 (two) directions and not significant to the budget deficit. This shows that if world oil prices rise, the amount of the budget deficit decreased. Contribution of oil and gas exports about ± 40 percent of domestic consumption and the rest of oil and gas imports ± 60 percent. This can be seen in income tax revenue from oil and gas has average of 8 percent and declining each year. Two independent variables (taxes and oil prices) that simultaneously have an influence on the state budget deficit amounted to 96.3 percent, while 3.7 percent are influenced by other variables that are not observed in this study.

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