Debt and Consumption in Indonesia: Ricardian Equivalence Approach

Prasda Ayunasta¹, Bambang Setiaji², Lukman Hakim¹,³

¹ Faculty of Economics and Business, Universitas Sebelas Maret
² Faculty of Economics and Business, Universitas Muhammadiyah Kalimantan Timur
³ Information and Regional Development Center (PIPW), Universitas Sebelas Maret

Corresponding Author: lukmanhakim@staff.uns.ac.id

Abstract: Debt is a problem that is often discussed in all countries, especially for countries that are experiencing financial difficulties. The Asian crisis that occurred in 1998 and the global crisis in 2008 had a negative impact especially for Indonesia. This caused Indonesia to carry out foreign debt to save the economy. This research applies the Ricardian Equivalence concept in foreign debt problems in Indonesia. Ricardian Equivalence argues that current government debt will be a burden on public expenditure in the coming year. But assuming that the community behaves rationally, the foreign debt burden will not affect the consumption of the community. This study uses secondary data on household consumption, government foreign debt, gross domestic product, tax revenues, central government expenditures, and government budget deficits with the Impulse Response Function (IRF) method and Variance Decomposition with quarterly data from the first quarter of 1997 - fourth quarter 2017. Overall, if viewed from foreign debt, the Ricardian Equivalence does not apply in Indonesia after the Asian crisis in 1998 because foreign debt has an influence on public consumption. Conversely, after the global crisis in 2008 the Ricardian Equivalence prevails in Indonesia because foreign debt has no influence on public consumption.

Keywords: Consumption, Ricardian Equivalence, Government Debt, Fiscal Policy, and Impulse Response Function (IRF)

INTRODUCTION

Foreign debt is a problem that is often discussed recently. According to Belingher (2015) the increasingly high state of foreign debt can have an effect on the economy of a country. Foreign debt is often associated with whether or not understanding Ricardian Equivalence Hypothesis. Ricardian Equivalence Hypothesis is one study that studies how the impact of debt on the economy. This hypothesis was put forward by Barro (1974). Ricardian's view applies consumer logic in assessing the effect of government debt on the economy through public consumption variables.

Research conducted by Marzouk & Oukhallou (2016) in Morocco found that Ricardian Equivalence Hypothesis can be applied because the results obtained indicate that foreign debt policy does not affect public consumption in the short term. Based on this research it can be seen that changes in Moroccan consumption are not influenced by foreign debt but are influenced by other factors outside government policy. The results of research conducted by Marzouk & Oukhallou (2016) are in accordance with the conclusions of research conducted by Kormendi & Meguire (1990) which also supports the enactment of Ricardian Equivalence Hypothesis. In addition, the results of the study with the same conclusion that support the Ricardian Equivalence paradigm were also carried out by Nelson & Emmanuel (2016) in Ghana.

The Ricardian paradigm contrasts with Keynes's theory which states that there is an influence of government policy in the short term. In addition to research conducted by Kormendi (1990), there is research conducted by Marinheiro (2002) in the State of Portugal and research by Belingher (2015) in Romania which results are not the same as that of Kormendi (1990). This research says that Ricardian Equivalence Hypothesis does not apply in Portugal and Romania. Other research that rejects the existence of Ricardian Equivalence...
Hypothesis was conducted by Adji & Alm (2016) who conducted research in Indonesia and Adetiloye, et al (2017) in Nigeria. The differences in the results of this study are interesting to do further research on the application of Ricardian Equivalence Hypothesis in Indonesia.

Furthermore, research conducted by Pickson & Ofori-Abebrese (2018) uses the gross domestic product variable as one of the independent variables in their research on Ricardian Equivalence Hypothesis in 5 countries in Africa, namely Botswana, Ghana, Gambia, Nigeria, and Kenya. Their results found a positive relationship between gross domestic product and public consumption in the 5 countries in Africa. In addition, a study conducted by Mosikari & Eita (2017) in Lesotho which also uses the gross domestic product variable as one of the independent variables found the result of a negative relationship between gross domestic product and the consumption of the Lesotho community.

Meanwhile, Abada (2016) conducted a Ricardian Equivalence Hypothesis study in Nigeria using government debt as one of the independent variables. The results show that government debt influences public consumption so that the Ricardian equivalence hypothesis cannot be applied in Nigeria. Other research conducted by Shamsi & Waqas (2016) in the State of Pakistan where they also said that foreign debt affects the consumption of people in Pakistan.

In addition to gross domestic product and foreign debt, tax revenues and government spending are also factors that influence public consumption in several countries that have been studied. As research conducted by Saraswati (2018) in Indonesia found that taxation revenues and government spending have no influence on the consumption of Indonesian people. Therefore, according to this research, Indonesia supports the Ricardian equivalence hypothesis.

The existence of government spending and unbalanced income reception in a country will cause a government budget deficit. Many researchers who conduct research on the Ricardian equivalence hypothesis use government budget deficits as one of their independent variables. One of them is a study conducted by Marzouk & Oukhallou (2016) in the country of Morocco whose research results support the implementation of Ricardian equivalence in Morocco. In addition, research conducted by Adetiloye et al (2017) in the State of Nigeria states that the government budget deficit has an influence on the consumption of Nigerian people which means that in this study Nigeria rejects the enactment of the Ricardian Equivalence Hypothesis.

**UNDERLYING THEORY**

**Ricardian Equivalence Hypothesis (REH)**

This study of Ricardian Equivalence Hypothesis was first put forward by Barro (1974). According to Barro, this Ricardian view has the opinion that by looking forward, consumers make expenses not only based on the income they receive now but the future income they expect. In principle, government debt is equivalent to future taxes. This means that if consumers look to the future, future taxes will be equivalent to current taxes or in other words government funding obtained from debt is equivalent to funding through taxes. So tax deductions should not cause consumers to increase their spending. Current tax cuts will cause consumers to save to finance tax obligations in the future.

After Barro conducted research on the existence of Ricardian Equivalence, another study was carried out by Kormendi (1983) which was perfected in Kormendi and Meguire (1990) known as the consolidation approach. The consolidation approach is an improvement from the Keynesian standard approach which says that consumption is a function of disposable income. While the consolidation approach uses the consumption function.
Consumption
The main regression models, which are considered the most influential to test the RE hypothesis are the Feldstein (1982), Kormendi (1983), Seater and Mariano (1985) and Modigliani et al. (1985). The consumption function, estimated through Feldstein's multiple regression (1982), is:

\[ C_t = a_0 + a_1Y_t + a_2W_t + a_3SSW_t + a_4G_t + a_5T_t + a_6TR_t + a_7D_t + e_t \]

Where:
- \( Y \) = Revenue Used
- \( W \) = Net worth is measured at the beginning of the year
- \( SSW \) = Value of future social benefits
- \( G \) = Government expenditure
- \( T \) = tax revenue
- \( TR \) = Transfer to individuals
- \( D \) = Net general debt

Because the coefficients of the above equation do not match Feldstein's expectations, he rejects the notion of Ricardian equality for the period 1930-1977 for the United States economy. However, the confidence intervals used are irregular, so the results must be reviewed with skepticism (Ricciuti, 2001). Modigliani et al. (1985) have tested ER for Italy, through the following functions:

\[ C_{p_t} = a_0 + a_1Y_{d_t} + a_2W_t + a_3DEF_t + a_4D_t + e_t \]

Where:
- \( C_{p} \) = personal consumption
- \( Y_{d} \) = income used
- \( W \) = Wealth, including government debt
- \( DEF \) = Government deficit (adjusted for inflation)
- \( D \) = Central bank net debt and foreign ownership

Current Balance Sheet
According to Adji & Alm (2016) Twin deficits are said to exist if the government budget deficit leads to the current account deficit. Neoclassical views predict the prevalence of twin deficits. A decrease in national saving when the government experiences a budget deficit will cause a decrease in net exports, which causes a trade deficit. However, Ricardian's view predicted that there was no relationship between government budget deficits and trade deficits. Individuals must respond to increasing financial deficits by increasing private savings by the same amount, to pay the future taxes needed to pay debts and to leave national savings unchanged. In the trade balance regression of the government budget balance and other control variables, Ricardian equivalence is said to apply if the coefficient of the government budget balance does not differ statistically from zero. However, if the coefficient of the government's budget balance is statistically greater than zero, an increase in the government's budget balance will lead to an increase in the trade balance.

Fiscal Policy
Fiscal policy is one of the macroeconomic policies governed by the government represented by the ministry of finance. This has been regulated in Law Number 17 of 2003 concerning state finances where it is stated that the president gives authority over financial management and state assets to the finance minister as fiscal manager. Fiscal policy can also be interpreted as an economic policy carried out by the government with the aim of changing the economy for the better by making changes to government revenues and expenditures.
Fiscal policy has many objectives to improve a country's economy, for example to increase economic growth, income distribution, and price stability. To realize a better national economy, the government needs to spend more so that this process is not hampered. If seen in theory if government spending increases but the main source of government revenue, namely tax, does not increase, what will happen is the government budget deficit because of the imbalance between government spending and income.

**Government Debt**
The Indonesian government's foreign debt has increased significantly in the last 10 years. In 2007 government foreign debt amounted to 80,609 million USD and in 2018 government foreign debt had reached 186,220 million USD. This shows that Indonesia cannot escape from foreign debt until now. Government revenues and inadequate domestic resources to carry out development, requires the government to make foreign loans.

Indonesia is a developing country that is carrying out development in all fields to support economic growth. To carry out this development, Indonesia is still hampered by funding and to facilitate the development of the government to carry out foreign debt so that development can continue. Foreign debt has both positive and negative effects. The positive impact of foreign debt is the ongoing development as planned by the government which later is expected that the development will increase economic growth and have good economic stability. But on the other hand foreign debt also had a negative impact, such as the example that had occurred in Indonesia during the crisis of 1998. At that time the value of the rupiah depreciated quite deeply against the US Dollar. This situation makes foreign debt increase to pay debts that are due. And in the end the government implemented a new debt policy. This new debt then causes debt interest payments and principal installments to increase from year to year. So this has an effect on the state budget policies whose performance has declined.

**Hypothesis**

H0 : Allegedly Ricardian Equivalence Hypothesis applies in Indonesia in the 1998 crisis period.

H1 : Allegedly Ricardian Equivalence Hypothesis did not apply in Indonesia during the 2008 global crisis period.

**RESEARCH METHODS**

**Data**
The scope of this research includes an analysis of the effect of government foreign debt, gross domestic product, tax revenue, government spending, and government budget surpluses / deficits on Indonesian people's consumption after the 1998 crisis and the 2008 global crisis. Data used in this study this is secondary data taken from Bank Indonesia Economic and Financial Statistics (SEKI). The secondary data used in this study is in the form of quarterly time series data, calculated from the first quarter of 1997 to the fourth quarter of 2017. Judging from the type of data used, this study uses quantitative research methods. Quantitative research method is a method of scientific approach that assesses a reality that can be explained, concrete, observable and has a definite measure, the relationship between variables is cause and effect where the research data in the form of numbers and analysis conducted using statistics. (Sugiyono, 2010).
Definition of Variable Operations

1. Consumption
   Consumption can be interpreted as an activity that aims to reduce or spend the economic use value of an item. According to Mankiw (2013) consumption can be defined as household spending on goods and services.

2. Government Debt
   According to Bank Indonesia government foreign debt is debt that is owned by the central government, which consists of bilateral or multilateral debt, export credit facilities (FKE), commercial debt, and leasing, including also Government Securities (SBN) issued both inside and in overseas which is owned by non-residents.

3. Gross Domestic Product (GDP)
   Gross domestic product is the final measure of goods and services produced by the resources available in a country for a predetermined period of time, usually measured in one year. In addition, GDP can also be used to study and understand the economy over time or to compare several economies at one time (McEachern, 2000).

4. Tax Revenue
   Tax revenue according to John Hutagaol (2007) is "Tax revenue is a source of revenue that can be obtained continuously and can be optimally developed according to government needs and the conditions of the community". Tax revenue is government revenue obtained from taxes carried out by the people.

5. Government Expenditures
   The State Budget (APBN) is a financial plan prepared annually by the government of a country that has been approved by the House of Representatives. This state expenditure is used for the purposes of conducting or carrying out the tasks of the central government and the implementation of finances which must be balanced between the central and regional governments.

6. Government Budget Surpluses / Deficits
   The government budget deficit is a situation or condition when the state budget exceeds the revenue obtained. There are several causes for budget deficits ranging from reducing costs on capital flows for the development of certain segments to ineffective financial systems and a country's tax policy. The main danger from the budget deficit is inflation, because it can have a negative impact on a country's economy. However, the budget deficit can also have a positive impact, which is to stimulate demand, so as to encourage economic growth. On the contrary, the government budget surplus is a condition or situation where the state budget is less than its income.

Data Analysis Technique

1. Stationary Test
   Unit root test (unit root test) is often called the stationarity test because it is useful to know the stationarity of the data. Data stationarity was used to determine the VAR model used in this study.

2. Determination of the Lag Length Optimal
   Determination of the optimal lag aims to establish an optimal long-term cointegration order. In this study the determination of the optimal lag only uses the value of Schwarz Information Criterion (SIC) and Akaike Information Criterion (AIC).

3. Cointegration Test
   The cointegration test is used to consider long-term and short-term relationships in the model. In this study, to see the existence of the cointegration approach was carried out
using the Johansen method, which method uses Trace Statistics and Mac-Eigen Statistics as a comparison.

4. Impulse Response Function (IRF)
Impulse Response Function Test (IRF) is a test that analyzes the response of a variable when it gets a shock (shock) from other variables, which then the results will show the direction and magnitude of the influence of these variables.

RESULTS AND DISCUSSION
Stationary Test Results
The first step used in this study is to do a unit root test (unit root test) aimed at knowing the stationarity of the data. The root test method used in this study is Philips-Perron.

Table 1 Post-Crisis Unit Root Test Results 1998 (1997-2007)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>-2.004005***</td>
<td>-4.582929</td>
</tr>
<tr>
<td>Government Debt</td>
<td>-8.206225</td>
<td>-4.75045</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>-2.051588***</td>
<td>-4.483657</td>
</tr>
<tr>
<td>Tax Revenue</td>
<td>-0.760558***</td>
<td>-7.492362</td>
</tr>
<tr>
<td>Government Expenditures</td>
<td>-2.221078***</td>
<td>-6.443153</td>
</tr>
<tr>
<td>Government budget surplus</td>
<td>-2.555965***</td>
<td>-6.847535</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed

Based on the results of the unit root test above, it can be seen that from the six variables above there is only one variable that passes the stationary level test, namely government debt. Because the treatment of the data must be the same for all six variables, a stationary test is performed at the first difference level in order to make all data reach stationary values. Proven in the above table, we can see that the data from the six variables reach stationary value at the first difference level, so that the data can be continued to the next step.

Table 2 Post-Crisis Unit Root Test Results 2008 (2008-2017)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>-1.530217***</td>
<td>-6.884295</td>
</tr>
<tr>
<td>Government Debt</td>
<td>-1.530217***</td>
<td>-5.919368</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>-1.726248***</td>
<td>-7.59712</td>
</tr>
<tr>
<td>Tax Revenue</td>
<td>-1.509210***</td>
<td>-6.001333</td>
</tr>
<tr>
<td>Government Expenditures</td>
<td>-1.198634***</td>
<td>-6.216489</td>
</tr>
<tr>
<td>Government budget surplus /</td>
<td>0.286945***</td>
<td>-6.294851</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed

Based on the results of the unit root test above, it can be seen that of the six variables none of them passed the stationary level test. Because the data treatment must be the same for all six variables, a stationary test is performed at the first difference level so that all data reach stationary values. Proven in the table above, we can see that the data from the six variables reach stationary value at the first difference level, so that the data can be continued.
Lag Length Test Results

The optimal lag determination in this research uses the value of Schwarz Information Criterion (SIC) and Akaike Information Criterion (AIC). Widarjono (2013) said that the SIC criteria provide a greater scale than the AIC, which means a low SIC indicates a better model.

Table 3 Determination of the Post-Crisis Optimum lag of 1998 (1997-2007)

<table>
<thead>
<tr>
<th>Lag</th>
<th>AIC</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-3.779437</td>
<td>-3.52867</td>
</tr>
<tr>
<td>1</td>
<td>-12.18486</td>
<td>-10.42950*</td>
</tr>
<tr>
<td>2</td>
<td>-13.58031*</td>
<td>-10.32034</td>
</tr>
<tr>
<td>3</td>
<td>-13.06378</td>
<td>-8.29921</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed

Determination of the optimal lag can be seen from the table above by looking at the smallest value of lag 1 (one) and 2 (two) in the value of Schwarz Information Criterion (SC) and Akaike Information Criterion (AIC) while still paying attention to positive and negative signs. Based on the above table, it can be seen that the optimum lag value in the data conducted by the study is one.

Table 4 Determination of the 2008 Post-Crisis Optimum lag (2008-2017)

<table>
<thead>
<tr>
<th>Lag</th>
<th>AIC</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-13.78566</td>
<td>-13.52443</td>
</tr>
<tr>
<td>1</td>
<td>-23.43385</td>
<td>-21.60524*</td>
</tr>
<tr>
<td>2</td>
<td>-23.31589</td>
<td>-19.9199</td>
</tr>
<tr>
<td>3</td>
<td>-23.50650*</td>
<td>-18.54313</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed

Determination of the optimal lag can be seen from the table above by looking at the smallest value of lag 1 (one) and 2 (two) in the value of Schwarz Information Criterion (SC) and Akaike Information Criterion (AIC) while still paying attention to positive and negative signs. Based on the above table, it can be seen that the optimum lag value in the data conducted by the study is one.

Cointegration Test Results

In this study, to see the existence of the cointegration approach was carried out using the Johansen method, which method uses Trace Statistics and Mac-Eigen Statistics as a comparison. Data can be said to be cointegrated if the Trace Statistics and Mac-Eigen Statistics values are greater than the critical value of 0.05, but if the Trace Statistics and Mac-Eigen Statistics values are less than 0.05, it can be said that the data is not cointegrated.

Table 5 Post Crisis Integration Test 1998 (1997-2007)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trace Statistic</th>
<th>Max-Eigen Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>186.3273*</td>
<td>92.18176*</td>
</tr>
<tr>
<td>At most 1</td>
<td>94.14554*</td>
<td>52.92677*</td>
</tr>
<tr>
<td>At most 2</td>
<td>41.21877</td>
<td>15.00073</td>
</tr>
<tr>
<td>At most 3</td>
<td>26.21804</td>
<td>11.86902</td>
</tr>
<tr>
<td>At most 4</td>
<td>14.34902</td>
<td>9.522069</td>
</tr>
<tr>
<td>At most 5</td>
<td>4.826951*</td>
<td>4.826951*</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed
Based on the table above it can be seen that cointegration has been fulfilled at the level of 1 (one) rank. This shows that there is a long-term relationship between the variables used.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trace Statistic</th>
<th>Max-Eigen Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>101.5003*</td>
<td>47.04989*</td>
</tr>
<tr>
<td>At most 1</td>
<td>54.45041</td>
<td>23.31704</td>
</tr>
<tr>
<td>At most 2</td>
<td>31.13337</td>
<td>13.69157</td>
</tr>
<tr>
<td>At most 3</td>
<td>17.44179</td>
<td>10.50367</td>
</tr>
<tr>
<td>At most 4</td>
<td>6.938118</td>
<td>6.138893</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.799226</td>
<td>0.799226</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, processed

Based on the table above it can be seen that cointegration has been fulfilled at the level of 1 (one) rank. This shows that there is a long-term relationship between the variables used.

Impulse Response Function (IRF) Results

In this study the analysis of the Impulse Response Function (IRF) test is focused on the response of household consumption variables to shocks from government foreign debt, gross domestic product, tax revenue, government spending, and government budget surplus / deficit.

The picture above is the result of the response test of household consumption variables to the shock of the government foreign debt variable, gross domestic product, tax revenue, government expenditure, and the state budget. From the picture above we can find out the response of the household consumption variable as the dependent variable due to the shock of the independent variable, namely government foreign debt, gross domestic product, tax revenue, government expenditure, and the state budget. The presence of shocks to the government's external debt variable caused household consumption to decline the most in the 8th period at -0.076. Then the trend continues to increase and is stable in the 19th period, namely at the point -0.068.

Source: Bank Indonesia, processed
The shock to the variable gross domestic product caused household consumption to increase quite dramatically until the 3rd period, which was at the point 0.032. Then drop sharply in the 9th period to the point 0.012. After that the trend starts to stabilize in the 14th period at the point 0.014.

Shocks to the variable income tax cause household consumption to decrease in the second period which reached the point of -0.017, then increased in the 8th period at the point 0.009. After that the trend is relatively stable starting from the 12th period at the point 0.007.

The shock to the government expenditure variable causes household consumption to increase the most in the 8th period at the point of 0.034, then the trend has experienced stability in the 13th period which is at the point of 0.030.

**Figure 2 Post-Crisis 2008 Impulse Response Function**

The picture above is the result of the response test of household consumption variables to the shock of the government foreign debt variable, gross domestic product, tax revenue, government expenditure, and the state budget. From the picture above we can find out the response of the household consumption variable as the dependent variable due to the shock of the independent variable, namely government foreign debt, gross domestic product, tax revenue, government expenditure, and the state budget. The presence of a shock on the government foreign debt variable causes household consumption to decrease in the 2nd period. In the 4th period the trend is up, after that the trend fluctuates in the 6th to the 16th periods, and in the end the trend is stable in the 17th period. at the point 0.0001.

The shock to the variable gross domestic product caused household consumption to increase quite dramatically until the second period which was at the point of 0.0105. Then it fell sharply in the 4th period to the point 0.0038. After experiencing a drastic decline, household consumption has increased again in the 6th period at the point 0.0069. Then in the eke-8 to the 15th period the trend fluctuates and after the eke-15 the trend shows a stable graph at the point 0.0061.

Shocks to the variable income tax cause household consumption to decrease in the 3rd period which reached the point of -0.0043, then an increase in the 4th period of the period, namely at the point of -0.035. After that the trend has decreased until the 10th period. The trend began to be relatively stable starting from the 11th period at the point of -0.0052.
The shock on the government expenditure variable causes household consumption to decrease quite dramatically in the 4th period, namely at the point of -0.0074, then the trend has increased in the 5th period at the point of -0.0052, after that the trend has decreased again at 7th period which is at -0.007, then the trend fluctuates until the 10th period, finally the trend starts to stabilize at -0.0069.

The shock on the budget APBN variable causes household consumption to decrease quite dramatically in the 2nd period, namely at the point of -0.0057, then the trend has decreased again in the 7th period, namely at the point of -0.0072, then the trend begins to stabilize at the 10th period at the point -0.0073.

The shock on the budget APBN variable causes household consumption to decrease in the 4th period at the point of -0.020, then the trend has increased in the 12th period at the point of -0.010, then the trend begins to stabilize at the 13th period at the point - 0.011.

**CONCLUSION AND SUGGESTION**

**Conclusion**

This study examines the validity of the Ricardian Equivalence Hypothesis (REH) in Indonesia after the 1998 crisis and the 2008 crisis. This study uses variable government external debt, gross domestic product, tax revenue, government spending, and government budget surplus / deficit as variables independent of household consumption as the dependent variable. Based on the discussion that has been described in the previous chapter, some conclusions can be concluded as follows:

1. Post the 1997 crisis
   a. The Impulse Response Function shows that the variable government external debt and central government expenditure have a strong influence on household consumption in Indonesia. Whereas the variable gross domestic product, taxation income, and the government budget surplus / deficit do not have a strong influence on Indonesian household consumption.
   b. Judging from the variable external debt in the period 1997 to 2007 shows that foreign debt has a strong influence on household consumption. This means that the Indonesian economy in the post-crisis period of 1998 rejected the Ricardian Equivalence Hypothesis and accepted Keynes's theory which states that foreign debt influences public consumption.
   c. Most of the independent variables used in this study do not have a significant influence on changes in consumption in Indonesian society. The Ricardian Equivalence Hypothesis (REH) about the neutral influence of fiscal policy on household consumption is supported by the results of this study. It can be said that REH was in effect in the Indonesian economy for the period 1997 to 2007. The Indonesian economy for the period 1997 to 2007 rejected the theory proposed by Keynes, which states that there is an influence of fiscal policy on household consumption.

2. Post-Crisis 2008
   a. The Impulse Response Function shows that the government's external debt variable does not have a strong influence on household consumption in Indonesia. Whereas the other variables namely gross domestic product, taxation income, government expenditure, and government budget surplus / deficit have a strong influence on Indonesian household consumption.
   b. Judging from the variable external debt in the period 2008 to 2017 shows that foreign debt does not have a strong influence on household consumption. This means that the Indonesian economy in the post-global crisis period in 2008 accepted the Ricardian
Equivalence Hypothesis and rejected Keynes's theory which states that foreign debt affects people's consumption.

c. Most of the independent variables used in this study have a significant influence on changes in consumption in Indonesian society. Ricardian Equivalence Hypothesis (REH) about the existence of a neutral influence of fiscal policy on household consumption is not supported by the results of this study. It can be said that REH does not apply in the Indonesian economy for the period 2008 to 2017. The Indonesian economy for the period 2008 to 2017 accepts the theory put forward by Keynes, which states that there is an influence of fiscal policy on household consumption.

Suggestion
1. For the Government
   Expansive fiscal policy, both through reducing taxes and increasing government spending, is expected to improve national economic conditions. The government is expected to be able to implement policies that can expand fiscal space for capital expenditure needs, so as to encourage economic growth for the better.

2. For Further Researchers
   It is expected to be able to analyze in more depth the effect of fiscal policy variables on public consumption both in the long and short term.

REFERENCES


