Fiscal Cyclicality Under State Finances Law in Indonesia

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Abstract

This study aims to analyze the cyclicality of fiscal policy under state finances law in Indonesia. The Indonesian government officially enacted the 2003 and 2004 Laws on State Finances, and it regulates fiscal rules covering the amount of the budget deficit and balanced budget rules. This fiscal rule is expected to encourage fiscal cyclicality to become countercyclical and provide buffering to deal with various economic shocks. This study uses quarterly time-series data from 2001 to 2019. The years 2001-2004 are used as the years prior to implementing the State Finance Law. Moreover, 2005 – 2019 is the time to capture the effects of cyclicality after implementing the Law. This study uses a dynamic distributed lag model to see the effect of GDP on government spending behavior. This study indicates that fiscal cyclicality before implementing the Law on State Finance behaved acyclically. Meanwhile, after implementing the Laws, this fiscal behavior is still procyclical. It means that the fiscal rules have not been effective in changing the direction and behavior of the fiscal to be countercyclical.

Keywords: State Finance Law, Fiscal Policy, Procyclicality, Acyclicality, Countercyclicality, Fiscal Rules.

JEL Classification: E32, E62, H50

INTRODUCTION

Currently, various economic phenomena are described in the economic cycle, mostly known as business cycles. This cycle is defined as the natural fluctuations of the economy in expansion, peak, recession, and trough periods. Various macroeconomic indicators strongly influence the movement of economic fluctuations, for example, Gross Domestic Product (GDP), inflation, interest rates, employment, consumer/government spending, debt, and other indicators. Fiscal policy is government intervention on expenditure and income (Shaw, 1972). Under ideal conditions, the function of fiscal policy is an automatic stabilizer. When the economy is booming, the government will form a buffer against excess income. It is also described an austerity in government budgets to anticipate future shocks. On
the other hand, if the economy is downturned, the government will use the buffer to accelerate economic recovery.

The mechanism of automatic stabilizers reflects a countercyclical pattern of fiscal policy. By implementing a countercyclical policy pattern, each country will have fiscal resilience to deal with economic shocks. This goal is the dream of all countries because they do not have to fear excessively facing an economic recession. Countercyclical policies have generally been implemented in developed and industrialized countries, such as OECD countries (Eyraud et al. 2018; Guerguil et al. 2017; Gupta et al. 2005; Kumhof and Laxton, 2009; Lane, 2003; Villafuerte, 2016). However, several studies in developing countries explain that fiscal policy tends to be procyclical (Gavin and Perotti, 1997; Gootjes and Haan, 2020; Havard and Bleaney, 2011; Ilzetzky and Vech, 2008; Jeffrey, 2011; Kaminsky et al. 2004; Konuki and Villafuerte, 2016; Lane, 2003; Maravalle and Claeys, 2012; Talvi and Vech, 2000, 2005; Vech and Vuletin, 2013). This condition occurs when the economy experiences a boom; the government will increase its spending. On the contrary, when there is a burst, then spending is also tightened.

The turmoil will be very dangerous when there is a recession. The government will experience a budget deficit and fix it through debt procurement. If this condition cannot be overcome, the government will increase debt with a certain interest. Thus, the government’s credibility will decrease and ultimately bring the government into the trap of a “procyclical vicious circle.” In some exceptional cases, the cyclical of fiscal policy shows an acyclical pattern, and there is no clear direction from it. It could be happened when some countries were struggling to move from procyclical to countercyclical fiscal policy. However, the country has not fully implemented it, so the pattern of cyclicity becomes unclear (Abdurohman and Resosudarmo, 2016; Alesina et al. 2008; Jeffrey, 2011; Vech and Vuletin, 2013).

Indonesia, as the object of this research, has experienced an economic downturn during the 1997/1998 financial crisis. The collapse of the monetary sector and the government's inability to control monetary targets forced the Indonesian government to rely on fiscal policy. However, the fiscal resilience at that time was very low, so the process of economic recovery was quite challenging to carry out. Therefore, Indonesia received IMF intervention from 1997 to 2003. The IMF emphasizes implementing fiscal rules and fiscal buffers to support the economy when it experiences a downturn. Reflecting on this experience, the government began exploring the implementation of fiscal rules in the early 2000s. This policy was later embodied in the 2003 and 2004 State Finance Laws.

With the existence of this Law, the government has tried to leave the budget management system in the past which had too much government intervention and excessive fiscal policy discretion without considering fiscal sustainability. These rules are explicitly explained in Law No. 17 of 2003 concerning State Finances and Law No. 33 of 2004 concerning Financial Balance between the Central Government and Regional Governments. The two laws limit the amount of government debt (net borrowing and total gross debt) to avoid excessive discretion in managing the state budget. The enactment of this law is a fiscal consolidation step to create sufficient fiscal space in Indonesia, and a sign for policymakers to determine fiscal steps. Some empirical studies show the vulnerability of Indonesia’s fiscal buffer. Abdurohman and Resosudarmo (2016) Baldacci, et al. (2009); Nizar and Afdi
(2015); Surjaningsih, Utari and Trisnanto (2011) indicate that fiscal policy in Indonesia is still procyclical and sometimes acyclical. Baldacci et al. (2009) explains that budget flexibility in Indonesia is still lack because of procyclical behavior.

Cyclicality of Fiscal Policy in Indonesia

Fiscal policy is part of economic policies regulating taxes and government spending (Shaw, 1972). In practice, the government allows expansion or contraction of the fiscal policy depending on the economic conditions. If economic growth accelerates, the government tries to hold it by increasing taxes and reducing government spending, and thus government can prevent the potential of high inflation. The description of the implementation of fiscal policy during the economic boom is called a contractive fiscal policy.

On the other hand, if there is a burst, the government will refresh and encourage economic activity. It can be done in two ways: increasing government spending and reducing taxes. Thus, the government can avoid a prolonged economic downturn. This picture describes an expansionary fiscal policy. Both expansionary and contractionary fiscal policies have an essential role in maintaining economic stability. It can be seen clearly in the workings of these two policies. When the economy booms, the government will make savings in the context of austerity. The government does not use that excess revenue to increase spending, but it uses them as fiscal buffering. Furthermore, this buffer will play an important role when an economic burst because economic actors need encouragement to stimulate the market.

The government uses this buffer to disburse funds in various fiscal programs and increase the scope for economic activity. This anticipation is ideal for all countries to restore and maintain economic stability. The expansionary and contractionary fiscal policy represents the automatic pattern in stabilizing the economy. To carry out its role as an automatic stabilizer, the government can directly regulate the management of expenditures or taxes without any intervention from policymakers (Boushey et al. 2019). Therefore, the description of automatic stabilizers is an ideal function or desired form of fiscal policy. Maravalle and Rawdanowicz (2020) explain automatic fiscal stabilizers as spontaneous action through changes in government spending and taxes to help stabilize the economy after facing positive or negative shocks.

Several studies on the performance achievements of automatic stabilizers show that this function has shortcomings in terms of speed in influencing or stabilizing economic conditions. After implementing the automatic stabilizer policy, some countries complained about the sluggish response to macroeconomic conditions. It happens when a recession, the economic recovery takes longer than expected. Therefore, policymakers believe there must be concrete ways to accelerate the response. The settlement at that time was to implement a discretionary fiscal policy. This policy gives the government additional authority to add programs or fiscal stimulus to accelerate the economic response. However, the implementation of this policy requires an identification, namely the needs, targets, and fiscal program’s target. Furthermore, the government submitted the fiscal stimulus proposal, and the parliament will desire approval (Boushey et al. 2019).
In the early (1950s), many countries began to adopt discretionary fiscal policies because they were considered very good and could accelerate economic growth. It is done by creating many fiscal stimulus programs and encouraging government spending. When the government's income is constant, the higher the government spending, the more significant the income gap. When the government spends more than its income, it is called a budget deficit. Therefore, to maintain economic stability, the government must cover the size of the deficit, one of which is by procuring debt.

Indonesia has also covered the government's budget deficit through debt. However, it was not a concern of the government because high economic growth still exists in Indonesia. Unfortunately, Indonesia did not wisely perform heaven during economic growth to anticipate bad economic conditions. This debt spike became a major disaster when the Asian financial crisis approached Indonesia.

The auto-stabilizer function reflects a countercyclical fiscal policy. When the economy overgrows, then the government will make austerity. Austerity is used as a future buffer when facing various economic shocks. This figure shows the ideal condition of fiscal policy in stabilizing the economy.

On the other hand, fiscal policy can also be procyclical and acyclical. It is called procyclical if the government increases its spending when there is an increase in income and tightens the belt when the economy is weak. Meanwhile, an acyclical fiscal policy occurs when government spending is inconsistent with economic conditions. Sometimes a country has tried to implement a countercyclical fiscal policy. Nevertheless, the country has reimplemented a procyclical pattern because of the economic shocks. So that the pattern becomes irregular (Abdurohman and Resosudarmo, 2016; Alesina et al., 2008; Crichton et al., 2015; Kaminsky et al. 2004; Nizar, 2015; Surjaningsih et al. 2011).

Developed countries such as Sweden and Switzerland have implemented a countercyclical fiscal policy. However, based on IMF research (2005), there have been some shifts in the group of countries. Some countries move from procyclical to countercyclical, and the rest move from countercyclical to procyclical and acyclic. These conditions are influenced by economic shocks, financial access, and political regimes (Frankel, 2011). However, Alesina, et al. (2008) and Talvi and Végh (2005) found that fiscal policy is acyclic in developed countries.

Several studies in the early 2000s showed that emerging countries were still implementing procyclical fiscal policies (Chian, 2016; Gavin and Perotti, 1997; Gootjes and de Haan, 2020; Havard and Bleaney, 2011; Ilzetzky and Végh, 2008; Jeffrey, 2011; Kaminsky et al. 2004; Lane, 2003; Maravalle and Claesys, 2012; Talvi and Végh, 2000, 2005; Végh and Vuletin, 2013). One member of these emerging countries is Indonesia. Some literature found that Indonesian fiscal policy is still procyclical and acyclic (Abdurohman and Resosudarmo, 2016; Baldacci et al. 2009; Nizar, 2015; Surjaningsih et al., 2011) It means that the Indonesian government has not shifted to a countercyclical policy.

**Fiscal Problems in Indonesia**

The frightening fiscal problem in Indonesia is the emergence of fiscal procyclical. Baldacci et al. (2009) explains that it is not surprising that fiscal procyclical appears in emerging countries. This group of countries more emphasized achieving economic growth and has not paid much attention to the
impacts that arise in the future. The main procyclicality trap was reflected when Indonesia experienced the financial crisis in 1997/1998. Fiscal implementation before the crisis relied heavily upon implementing a balanced budget. Nevertheless, the government attains a balance by relying on long-term debt. The budget deficit in each period is mostly solved through government debt, and thus, there is an increase in government debt unconsciously.

Government intervention and institutions could also contribute to fiscal problems, triggering procyclical fiscal policies. The fragility of institutions in managing government budgets is a big problem for the abuse of government authority in determining expenditure items. These expenditures tend to be driven by personal or group interests, triggering a "moral hazard," namely acts of corruption (Alesina et al. 2008; Eyraud et al., 2018; Jeffrey, 2011). The higher the fragility of institutions and the corruption rate in a country, the higher the procyclicality of fiscal policy.

Before the crisis, institutions in Indonesia are significantly less transparent in managing budgets. It rises to arbitrary actions against the use of budget, such as excessive discretionary policy. The budget is mainly used for consumable/short-term expenditures and has no long-term impact. Thus, the amount of this expenditure does not reflect sustainable economic growth. The rapid growth of government debt is used for financing the budget deficit. It was proven by the high amount of Indonesian government debt.

After the 1997/1998 crisis, monetary policy lost its power to stabilize the economy. Thus, fiscal policy becomes the only government tool to intervene in the economy. Therefore, the government has disbursed many fiscal programs, mainly labor-intensive activities, and direct assistance to the community. It is done to increase people's purchasing power. The government urgently needed the proper design of fiscal policy to avoid the emergence of excessive discretion and procyclicality of the fiscal policy. The experience during the crisis has become a valuable lesson for the government that saving is essential to pour funds when Indonesia's economic downturn. Thus, the government began to raise considerations further to manage the design of fiscal policy in Indonesia.

Implementation of State Finance Law in Indonesia

Reflecting on the experience of the 1997/1998 crisis, the Indonesian government wanted to obtain adequate fiscal space, avoid excessive fiscal policy discretion, and reduce dependence on debt. It can be done by implementing the government's countercyclical fiscal policy. Indonesia's government began to formally implement Law Number 17 of 2003 and Law Number 33 of 2004 on State Finance Law. The Law on State Finance Number 17/2003 discusses the limitation of debt, i.e., net borrowing and total gross debt. Article 17 shows that the budget deficit is limited to a maximum of 3% of the Gross Regional Product, and then the loan amount is limited to a maximum of 60%. Therefore, this Law places more emphasis on government financial management.

The Law Number 33/2004 on State Finance discusses the financial balance between the Central and Regional Governments, article 49(2) regulates the cumulative limit of State Budget (APBN) and Regional Budget (APBD) loans to a maximum of 60% of GDP for the year concerned. Article 83(2) limits the APBN and APBD deficits to a maximum of 3% of the Gross Domestic Product (GDP) for
the year concerned. Thus, Indonesia's fiscal rules limit the cumulative borrowing from the State Budget (APBN).

The reference for the size of the budget deficit and the cumulative limit on Indonesian government loans is based on the Maastricht Treaty. The government considers that the numerical limit is a best practice in many countries. This reference has been practical in Indonesia since 2005. Since its enactment, this Law has not changed. In other words, the government is still referring to the budget deficit limit at 3% and the debt limit of regional and central governments at 60%. Thus, these two Laws regulate the synchronization of government expenditures at the central and regional levels. It is hoped that with the enactment of this Law, Indonesia can shift its fiscal policy behavior to a countercyclical one. This expectation aligns with the government's desire to create a buffer for adequate fiscal space. It allows the government to be more anticipatory in dealing with future economic shocks.

From 2001 to 2019, total government spending shows a positive trend (Financial Note, 2001-2019). It also shows that capital expenditure is still below consumption, which contradicts the government's desire to achieve a countercyclical fiscal policy. The government should increase capital expenditures, namely investment in capital goods. Thus, this expenditure will have a long-term impact and can support economic activity in the future. On the other hand, the value of GDP from 2001 to 2019 also showed a positive trend. In other words, these macro indicators indicate economic growth during that period. The government can set aside revenues to create a buffer stock or fiscal space. However, looking at the pattern of government spending, which still emphasizes consumption, fiscal policy after implementing the Law of State Finance is still procyclical.

This description of the procyclicality phenomenon is in line with the findings of Abdurohman and Resosudarmo, 2016; Baldacci et al. 2009; Nizar (2015). Abdurohman and Resosudarmo (2016) explained Indonesia's fiscal procyclicality by estimating capital and consumption expenditures with oil price shock. The results show that the spending behavior of the Indonesian government is procyclical towards output (GDP). One of the leading causes of procyclicality is considerable energy or oil subsidies in government expenditure items. Therefore, government expenditure will increase to cover the subsidy and, finally, a procyclical pattern.

**Alternative Fiscal Policy Design**

From the point of view of this research, the government's efforts to carry out fiscal reforms in the form of Law Number 17 of 2003 and Law Number 33 of 2004 are still quite challenging to implement. Several research developments related to fiscal reform still link the element of rigidity to the boundaries of state financial management (Dioikitopoulos, 2018; Eyraud et al. 2018; Guerguil et al. 2017). Guerguil et al. (2017) research presents the contrasting fiscal policy through budget flexibility. Their research shows that the accuracy of fiscal design dramatically influences the cyclical shift in the economy. Blanchard and Giavazzi (2004) explain that fiscal rules have traditionally been applied to overcome excessive deficits and encourage fiscal discipline. However, most of the literature shows side effects of using this fiscal design, including procyclical fiscal policy and low spending quality (Dioikitopoulos, 2018; Eyraud et al. 2018; Kumhof and Laxton, 2009; Misra and
Ranjan, 2018). Moreover, several new references are being developed to encourage the Law on State Finance to be more flexible, realistic, and implementable. This form of fiscal reform will lead the government to achieve a countercyclical fiscal policy. Therefore, based on the explanation above, the researcher considers it necessary to validate the cyclical behavior of fiscal policy in Indonesia after implementing the Law on State Finance.

This study will use periodic data from 2001 to 2019, and the 2001 data is used to accommodate the post-crisis transition period. So that the analyses of fiscal cyclicity distinguished between before and after implementing the Law on State Finance. Then by applying the parsimony principle, this study is only limited to two variables, namely total government spending and GDP. The parsimony principle in the regression model is carried out using a simple model with substantial variables. The selection of these two variables refers to the definition of cyclicity, namely the relationship between income and government spending. The rest of the paper is structured as follows. Method explains the econometrics model, and it is followed by the result and discussion. And the last part is conclusion.

**METHOD**

This study uses quarterly data on total government spending and Gross Domestic Product (GDP) from 2001 to 2019. Sources of government spending or government spending come from the Central Government Financial Report. On the other hand, GDP data comes from the Central Statistics Agency (BPS) using the base year 2010. This study uses a dummy variable to capture the difference before and after implementing the Law on State Finance. The year after enacting the Law (2005 – 2019) is the basis year, and the year 2001 – 2004 is called the non-basis year. Thus, the basis year is assigned a value of zero (0) and non-basis with one (1). Furthermore, this study is also developed by adding interacted dummy variables into the model.

**Model Specification**

Referring to Kaminsky et al. (2004) and Talvi and Végh (2005), this study technically describes the cyclical pattern of fiscal policy as the relationship between total government spending \( G \) and Gross Domestic Product \( GDP \).

\[
\begin{align*}
\text{Procyclical} &: +G = +GDP \text{ or } -G = -GDP \\
\text{Countercyclical} &: +G = -GDP \text{ or } -G = +GDP \\
\text{Acyclical} &: +/- G = +/- GDP
\end{align*}
\]

Therefore, the general form of the above cyclicity description is:

\[ G = Y \]  \hspace{1cm} (1)

Considering that the total government expenditure data is determined before the fiscal year and GDP data is reported after the fiscal year, the general model of this research becomes:

\[ G_t = Y_{t-1} \]  \hspace{1cm} (2)

This study includes dummy variables and interaction dummy variables to capture the pattern of fiscal cyclicity due to implementing the Law on State Finance. Therefore, the econometric model is described as follows:
\[ G_t = a + bY_{t-1} + c \text{ Dummy} + d \text{ Dummy} \ast Y_{t-1} \]  

(3)

The use of dummy variables distinguishes the different behavior in 2001-2004 (before the Law on State Finance) and 2005-2019 (after the Law on State Finance).

**Tools of Analysis**

The empirical method for testing procyclicality is generally divided into two approaches. *First*, the correlation-based approach is relatively easy to do but has limitations because it only covers the relationship between two variables. This approach cannot accommodate shocks, simultaneity problems, and endogeneity, which commonly appear in time-series analysis. The empirical method through this correlation approach has been widely used in previous studies. This study uses a Hoddrick-Prescott filter (HP–filter) to correlate government spending and output. The HP-Filter has become the standard method for eliminating trends in the business cycle literature. One of the most famous is Kydland and Prescott (1982), which compares the artificial data from the model with the actual data.

*Second*, the regression-based approach is considered to overcome or minimize problems in the correlation approach. Lane (2003) uses a regression approach to investigate fiscal cyclicality in OECD countries. This method is taken through two stages: Ordinary Least Squared (OLS) and Weighted Least Squared. However, there are criticisms of the assumption that normal distribution is an absolute requirement in the OLS method. The facts show that using time-series data often faces stationarity problems and produces spurious regression. In order to accommodate it, Akitoby et al. (2004) use another time-series regression approach, Error Correction Model (ECM). He examines the cyclicality of fiscal policy in OECD countries by looking at the long-term and short-term effects.

In investigating the cyclicality in Indonesia, Baldacci et al. (2009) also apply the ECM regression approach by including several political indicators into the equation. In addition, Abdurohman and Resosudarmo (2016) also use the ECM approach and other alternatives by including shocks from the government expenditure side in the energy sector. These two studies show that fiscal policy in Indonesia is still procyclical. Based on the several models in previous studies, this study is estimated using the time-series approach, i.e., distributed lag (DL) model. This dynamic model includes current and past values of the explanatory variables. Meanwhile, if the regression model includes the lag of the dependent variable among the independent variables is called the autoregressive model (Gujarati and Porter, 2008). Therefore, in general, this methodology is described as follows:

\[ Y_t = \alpha + \beta X_t + \gamma X_{t-1} + u_t \]  

(4)

Therefore, this research was selected based on data behavior and the parsimony principle. Furthermore, this model is modified by accommodating dummy variables and dummy interactions. It is used to accommodate the differences in the pattern of fiscal interaction.

This study conducted a stationarity test using Augmented Dickey-Fuller (ADF) to avoid spurious regression. The existing unit root is one of the main problems for time series analysis. If the data does not return to its mean value, it
has a unit root, which means the data is not stationer. If the non-stationary data is forced to be estimated, it can produce spurious regression. It will show a high value of \( R^2 \), but the result is not robust. This phenomenon causes stationarity tests to become very popular and used as a pre-test for time series data (Gujarati and Porter, 2008). The stationarity test can be done in three (3) ways. The first is using graphical analysis by plotting the data, and it must be checked whether the data movement is back to its mean value. The second is using the autocorrelation function (ACF) and the correlogram. Then the third is the most popular way, namely the unit root test.

The unit root test is applied in this study. David Dickey and Wayne Fuller developed this test. In statistics, this approach is known as the \( \tau \) (tau) test, and in econometrics, it is called the Dickey-Fuller (DF) test. The form of regression in the DF test is as follows:

1. \( Y_t \) with intercept:
   \[
   \Delta Y_t = \delta Y_{t-1} + u_t
   \]

2. \( Y_t \) without intercept:
   \[
   \Delta Y_t = \beta + \delta Y_{t-1} + u_t
   \]

3. \( Y_t \) with intercept and deterministic trend
   \[
   \Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + u_t
   \]

Description:
\( \Delta \) shows the first difference variable

The hypothesis of the unit root test:

Null Hypothesis \( H_0 : \delta = 0 \) \( \rightarrow \) a unit root is present in time series sample (not stationer).

Alternative Hypothesis \( H_\alpha : \delta < 0 \) \( \rightarrow \) a unit root is not present in the time series sample (stationer).

(Note that we set \( \delta > 0 \) to avoid explosive forms).

DF test assumed that the error forms are uncorrelated. Nevertheless, there are many cases where the errors are correlated. Hence, the initial form of DF must be augmented. The new augmented form is called Augmented Dickey-Fuller (ADF). The regression equation in the ADF model is as follows:

\[
Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^{m} \alpha_i \Delta Y_{t-i} + \varepsilon_t
\]

\( \varepsilon_t \) shows a pure white-noise error term, and \( \Delta Y_{t-1} = (Y_{t-1} - Y_{t-2}) \) applies to the next period. The sum of these different forms of lag makes the error in the ADF equation white noise so that the error forms are not correlated with each other. Then ADF can produce an unbiased estimation value of \( \delta \).

RESULT AND DISCUSSION
The results of the stationarity test using the ADF approach on total government spending (\( G \)) and Gross Domestic Product (\( Y \)) are shown in the following table.
Table 1. ADF Stationarity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level $I(0)$</th>
<th>First Differenced, $I(1)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$G$</td>
<td>-2.8932</td>
<td>-27.7299***</td>
</tr>
<tr>
<td>$Y$</td>
<td>-1.1196</td>
<td>-3.6502**</td>
</tr>
</tbody>
</table>

Source: data processed

Based on Table 1, the t-statistic value of government spending is less than 5% MacKinnon’s critical value, i.e., $|−2.89| < |−3.47|$. It means that the data is not stationer. Furthermore, the t-statistics of GDP is also smaller than MacKinnon’s critical value, i.e., $|−1.12| < |−3.47|$. we can summarize that all variables in this study are not stationer in level $I(0)$. Therefore, it is necessary to do a stationarity test by differencing the data. The results of the stationarity test at difference one or $I(1)$ show that all variables are stationer. The absolute value of the t-statistic for the variables $G$ and $Y$ is greater than the MacKinnon critical value. Therefore, the estimation process can be continued with data in the first difference.

Table 2. Estimation Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>$C$</td>
<td>-41.83918</td>
<td>17.03972</td>
<td>0.0166</td>
</tr>
<tr>
<td>$D(Y(-1))$</td>
<td>2.026126</td>
<td>0.313160</td>
<td>0.0000</td>
</tr>
<tr>
<td>Dummy</td>
<td>32.81031</td>
<td>38.32046</td>
<td>0.3948</td>
</tr>
<tr>
<td>Dummy*D(Y(-1))</td>
<td>-0.857356</td>
<td>1.076625</td>
<td>0.4285</td>
</tr>
</tbody>
</table>

Source: data processed

The estimation results show that $D(Y(-1))$ coefficient is positive and significant to $G$. This empirically proves a positive relationship between government spending and GDP. Therefore, the cyclical behavior of fiscal policy after implementing the Law on State Finance from 2005 to 2019 is still procyclical. The fiscal policy will react expansively when the macroeconomics’ performances show a positive movement. Meanwhile, the base year (2001-2004) coefficient is obtained by adding up the $D(Y(-1))$ coefficient and the coefficient of an interacted dummy variable. It is gained a positive result, but the $P$-value is not significant. So, it can be concluded that fiscal policy in 2001-2004 was acyclical or it could be stated the movement still show the irregularities. This finding aligns with Abdurohman and Resosudarmo (2016) and Nizar (2010). The enacted fiscal policy still shows irregular movement.

The results emphasize that Indonesian fiscal reform by implementing the Law of State Finance has not been appropriately implemented. The procyclicality still happens in government spending, and the fact shows that the government still increases spending when the economy is booming and tightens when the economy is bursting. The government has not reached out to the ideal condition of fiscal policy, countercyclical. Before implementing the Law on State Finance, it was seen that Indonesia's fiscal policy was acyclical. It is very likely to happen given the extensive intervention of foreign financial institutions, such as the IMF as Indonesia's aid provider, to get out of the 1997/1998 economic crisis. The IMF has always emphasized that Indonesia maintains fiscal sustainability and does not waste
the budget, and the utilization of government spending must be efficient and effective.

The coefficient of the economic downturn during the crisis still requires the government to increase spending in some sectors to develop and encourage people's economic activities. This condition is very dilemmatic because the government faces the choice of either creating fiscal space or encouraging economic activity through government programs. Thus, this is one of the reasons why the pattern of government spending is unclear. Based on this empirical evidence, this study emphasizes a review of fiscal reform in Indonesia. The Law on State Finance has not effectively influenced the shift in fiscal policy to a countercyclical. The important thing that needs to be considered, since the Law was effectively implemented in 2005, it has not undergone any changes. At the same time, shocks and economic fluctuations are very dynamic.

The Law seems to be very rigid and applied permanently (Dioikitopoulos, 2018; Eyraud et al. 2018; Guerguil et al. 2017; Kumhof and Laxton, 2009). It limited the government's space and movement, so it tends to make procyclical fiscal policy. Therefore, this research contributes to the findings of the procyclicality of fiscal policy in Indonesia. One of the reasons is the rigid design of the current Law of State Finance. Furthermore, it is necessary to analyze several fiscal designs in other countries that have successfully transitioned to a countercyclical fiscal policy.

CONCLUSION

This research is one of the developments to see the cyclical behavior of fiscal policy in Indonesia. After the financial crisis in 1997/1998, the government began to improve fiscal management in Indonesia. It is conducted to avoid budget bias and ultimately falls into the procyclicality trap. The government issued the Law on State Finance Laws in 2003 and 2004 to overcome this problem. However, until 2019, there is no adjustment to this Law. It is conducted permanently on fiscal policy. There are two main conclusions in this study. First, this study shows that fiscal policy in Indonesia before the effectiveness of the Law (2001 – 2004) still showed an acyclical fiscal policy. This condition occurs because international financial institutions and countries that provide aid want Indonesia to make budget savings. However, on the other hand, the government must also encourage economic activities. This condition creates uncertainty in fiscal policy in Indonesia, so the movement is still acyclic. Furthermore, the behavior of fiscal policy after implementing the Law on State Finance is procyclical. This finding is no longer in line with the government's objective in managing state finances to achieve a countercyclical fiscal policy. In other words, the government cannot build fiscal resilience by creating buffers stocks during the economic boom. This condition illustrates that the Law has not succeeded in getting Indonesia out of the procyclicality trap.

REFERENCES


