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Determinants of Government External Debt: Assessing Government Revenues from Tax Amnesty

Shofiyah Salsabila, Hermanto Siregar, Dedi Budiman Hakim
Economics, Faculty of Economics and Management
IPB University
Bogor, Indonesia
shofiyah.ssalsabila@gmail.com

Abstract-The expansive economic policy is applied in Indonesia as seen from the greater expenditure than revenue. Accordingly, the government took steps to make external debt to fund the expenditure. This decision is taken to catch up with the overseas economic growth. Therefore, the government external debt become essential to be monitored since this decision has an impact on the economy of the recipient state. The problem of this research focused on analyzing the factors that influence government external debt and reviewing government revenues through Tax Amnesty on Indonesian external debt in the short and long term. This research uses secondary data from 1981-2021 concerning the relationship between government expenditure, currency rate, rupiah exchange rate, inflation, tax, government securities (SBN), and tax amnesty policy toward government external debt. Using the ARDL bound test with structural break as the econometric approach and Dummy Test Tax Amnesty. The result of this study explains that government expenditure lag 1, BI rate, exchange rate, exchange rate lag 1, inflation, tax, tax lag1, government securities, government securities lag 1, and Tax Amnesty are significant for short-term government expenditure. Besides, only inflation, tax, and government security are significant for the long term.

***Keywords* – External debt, budget deficit, government expenditure, Tax Amnesty, ARDL**

I. INTRODUCTION

External debt are one source of state revenue to assess the budget deficit. It is beneficial to pay attention to this policy since it affects the effectiveness of external debt toward the state economy. Burnside and Dollar (2000) stated that the effectiveness of external debt in supporting a state's economic development is influenced by government policies in managing loans, including how these loans are allocated. One of the allocations of external debt is used for development. Development is a systematic and planned effort carried out by every state and all of the components to change the situation for a better situation by utilizing available resources optimally, effectively, efficiently and accountable, to improve the community's quality of life to be more prosperous (KPPN, 2015).

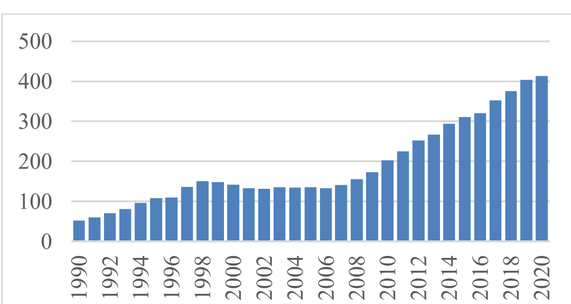

Fig. 1. Total External Debt (million USD)

Source: Indonesian Bank, 2021 (processed data)

According to Fig. 1. The Indonesian government's external debt are seen to be inclined annually. It has been noted by the International Debt Statistics (IDS) report in 2022, that Indonesia is included in the 10 countries with the highest external debt, which is in 7th place at US$ 402,08 billion (World Bank, 2021). The data shows Indonesia external debt have increased every year for the last 30 years.

External debt are very difficult to avoid to finance the state economy knowing that expansive fiscal policy is applied by the Indonesian government, hence this policy automatically issues greater expenditure than revenue to encourage the economy to continue growing (Kemenkeu, 2020). Government external debt assist in financing the budget deficit triggered by the difference between domestic revenues and state expenditures. Apart from the collectible benefit, there are several negative impacts from external debt which become a burden in the future. Although burdensome in the long term, the policy of borrowing from foreign and international sources remains the most widely used method to assist the deficit financing. Some countries may need to borrow for growth, achieve capital accumulation and accelerate economic growth. However, the increased amount of debt will pose various risks (Shoorekchali and Eltejaei, 2021). One of

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them is burdening the state budget and the further government. In the long term, external debt can cause various kinds of economic problems, such as economic crises and ever-increasing budget deficits. Financial deficit is a classic problem that is often faced by various countries which are usually covered by external debt, both in the form of assistance and loans (Brixi and Mody, 2002). As stated by (Blanchard O, 2017) external debt occur due to budget reductions. The high reduction in the budget was influenced by the increase of expenditure budget than state revenues. One of the factors that influences expenditure budget is real interest. In the previous year the government spent too much money on the real interest which impacted the government expenditure following with further problems such as greater government expenditure than tax revenue.

Therefore, it would be better if the government tried to consider international interest rates before taking the decision for making other external debt, in order to minimize the same problem. For instance, the past external debt ended as expenses for the current year. In addition, observing the rupiah exchange rate is also becoming a wise consideration for the government in making loans. This decision might be seen as consideration because when the rupiah exchange rate depreciates, the number of loans will be obtained more, but if the rupiah exchange rate appreciates, the amount of loans obtained will be minor.

Furthermore, the government expenditure, interest rates, exchange rates, and taxes surely impact the loans. The biggest state revenue is in the tax sector, the tax contribution to state revenue is very important for the State Budget (APBN) component. In the posture of the 2019 State Budget, tax revenue is recorded at 82.5 percent of total state revenue. Consequently, the government is very dependent on tax revenue since the government needed all of the funds of expenditure to run the wheels of government and provide access to basic services for the community (Pajak, 2019). Therefore, the state revenue and tax revenue are horizontally proportional. When the tax revenue is minor, the state revenue will also decrease. It is undeniable that if the amount of state revenue cannot cover existing expenses, the budget deficit occurs.

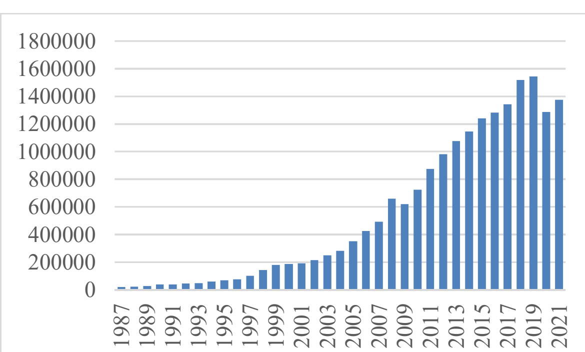

Fig. 2. Total Tax Revenue (billion Rupiah)
Source: Word Bank, 2022

External debt are also affected by tax revenue because 83.54% of the 2020 State Budget revenue comes from collected taxes (Kemenkeu, 2021). Taxes are the largest state revenue, but current tax revenues often fail to reach the targets set by the government. This issue is caused by the people who avoid paying taxes. According to scale 2, Indonesia's tax revenues have increased every year, in line with the fact that ever-increasing government expenditure has also encouraged the government to rely on external debt continuously. This is very detrimental to the state because it reduces the revenue for finance development programs. As an effort to collect the taxes that have not been paid, both from economic activities and from assets stored abroad, the government stipulates Law Number 11 of 2016 concerning Tax Amnesty.

The Tax Amnesty conducted in 2008 and 2016 successfully increased the tax revenue. It is shown from the tax revenue in 2008 which increased dramatically. However, this revenue has not been able to reduce the amount of government external debt, because it also continued to increase as in previous years. Based on Checherita-Westphal & Rother (2012), the government loans are known to have a non-linear impact on the level of economic growth. However, if government expenditure is financed by tax revenues, in the long run it will have a positive impact on economic growth (Nursini, 2017). This phenomenon stands by the reason that taxes used to finance government expenditure will return to tax revenues, and the government does not have the burden of repaying loans. Öhman&Yazdanfar (2017) also explain in their research that long-term loans are negatively related to taxes, if taxes increase, external debt decrease. This argument is in line with Mensah et al. (2017) which also believe that medium-term external debt are significantly negative to tax revenues. Accordingly, the author of this study wanted to examine more deeply the factors that influence government external debt by examining state revenues through taxes and the impact of the implementation of Tax Amnesty in Indonesia.

The factthatseveral previous Studies that relatedto this study show various results, the authorneedstoconduct a study on the influence of externaland internal factors that affect external debt. This study was generated with more tested variables to see the strongestin fluenceonexternal debt. The methodusedis ARDL by lookingat the Structural Break. Based on the identification stated above, the problems that will be discussed in this study are 1) What factors affect government external debt in the short and long term 2) Assess government revenues through Tax Amnesty on Indonesian external debt.

II. LITERATUR REVIEW

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Most developing countries need substantial foreign assistance and external debt to achieve sustainable economic development. External debt are often taken by developing countries as well as developed countries. External debt have positive and negative impacts on debtor countries, especially Indonesia. As the positive impact of the government's external debt in the short term is that external debt are very helpful for the Indonesian government to cover the deficit in the state revenue and expenditure budget. Moreover, the negative impact of the government external debt is the emergence of an increasingly widespread and deepening economic crisis. Consequently, the government will be burdened with repaying the loan, which causes a limited portion of the state budget used for development. Interest installments from loans also burden the Indonesian economy because external debt always increase from year to year. In addition, the long term external debt could cause various kinds of economic problems, for instance, the fall of rupiah exchange rate (inflation) and which will certainly result in dependence on the recipient of assistance (debtor) on the assistance provider (creditor).

A study on the determinants of external debt was also carried out by Mohamed Omar dan Isse Ibrahim (2021) “Determinants Of External Debt: The Case Of Somalia” his study analyzed the determinants of Somalia's external debt from 1980 to 2018. Domestic investment has a significant and positive effect on the short term external debt , while gross domestic product or GDP (*PDB*) per capita and government expenditure have a significant negative effect on external debt, according to long-term results in the short term.

Another study directed by Dawood et al. (2021) investigated the main determinants of external debt in 32 selected developing countries and Asian transition economies from 1995 to 2019. Both short-term and long-term results show significant positive relationships between exchange, trade, government expenditure, and external debt; exchange rates, trade, and government expenditure increase external debt.

It was also revealed that the relationship between economic growth, inflation and external debt is negative and significant. Then, economic growth and inflation reduce external debt. Investment also revealed to have a negative effect on external debt, although not significant. Based on the instructions, it can be concluded that, the main determinants of external debt to developing countries and selected Asian transition economies are economic growth, exchange rates, trade, inflation, and government expenditure.

III. RESEARCH METHOD

This study uses a quantitative survey method to test the hypothesis. The variables that will be examined in this study are foreign debt, government expenditure, LIBOR, BI Rate, exchange rate, inflation, and taxes. The type of data used in this research is quantitative secondary data in the form of a time series with a time span from 1987 to 2021. Data sources in this study come from Bank Indonesia (BI), Word Bank, Central Bureau of Statistics (*BPS*), International Monetary Fund (IMF), and Investment.

The determination of factors affecting government external debt using ARDL. ARDL was chosen to see the effect of X on Y from time to time. This study uses the ARDL method to achieve the objectives of this paper to determine the effect of government expenditure, domestic interest rates, international interest rates, inflation, exchange rates, taxes, and government securities on government external debt. The variables used in this study consist of 8 variables with 1 dependent variable, namely government external debt (ED) and 7 independent variables to be tested: government expenditure (GE), domestic interest rates (BIRATE), international interest rates (LIBOR). , inflation (INF), exchange rate (ER), Government Securities (SBN), and taxes (TAX), Dummy Tax Amnesty (DTAX) with the general equation:

$$\begin{aligned} ln\mathrm{ED_t} = \beta_0 + \beta_1 \mathrm{ED_{t-i}} + \beta_2 \mathrm{GE}_{t-j} \\ + \beta_3 \mathrm{LIBOR}_{t-k} + \beta_4 \mathrm{IR}_{t-l} + \beta_5 \mathrm{ER}_{t-n} \\ + \beta_6 \mathrm{SBN}_{t-q} + \beta_7 \mathrm{TAX}_{t-s} + \beta_8 \mathrm{SBN}_{t-s} \\ + \beta_9 (\mathrm{DTA}_{t-u} \times \mathrm{TAX}_{t-u}) + \varepsilon_t \end{aligned} \quad \ldots (1)$$

Based on equation (1) the ARDL equation model can be described:

$$\begin{aligned} \Delta ln\mathrm{ED_t} = a_0 + \textstyle\sum_{i=1}^{p} a_1 \Delta \mathrm{ED_{t-i}} + \sum_{j=1}^{q} a_2 \Delta \mathrm{GE}_{t-j} + \\ \textstyle\sum_{k=1}^{q} a_3 \Delta \mathrm{LIBOR}_{t-k} + \sum_{l=1}^{q} a_4 \Delta \mathrm{IR}_{t-l} + \\ \textstyle\sum_{n=1}^{q} a_5 \Delta \mathrm{ER}_{t-n} + \sum_{r=1}^{q} a_6 \Delta \mathrm{SBN}_{t-q} + \\ \textstyle\sum_{s=1}^{q} a_7 \Delta \mathrm{TAX}_{t-s} + \sum_{s=1}^{n} a_8 \Delta \mathrm{SBN}_{t-s} + \\ \textstyle\sum_{u=1}^{n} a_9 \Delta (\mathrm{DTA}_{t-u} \times \mathrm{TAX}_{t-u}) + \beta_1 \mathrm{ED_{t-i}} + \\ \beta_2 \mathrm{GE}_{t-j} + \beta_3 \mathrm{LIBOR}_{t-k} + \beta_4 \mathrm{IR}_{t-l} + \beta_5 \mathrm{ER}_{t-n} + \\ \beta_6 \mathrm{SBN}_{t-q} + \beta_7 \mathrm{TAX}_{t-s} + \beta_8 \mathrm{SBN}_{t-s} + \\ \beta_9 (\mathrm{DTA}_{t-u} \times \mathrm{TAX}_{t-u}) + \varepsilon_t \end{aligned} \quad \ldots (2)$$

where Δ denotes the first difference. The coefficients (β1–β9) show the long-term relationship while the coefficients (α1–α9) represent the dynamics of the short-term model. Based on equation (2), the error correction of the ARDL model can be arranged as follows

$$\Delta ln\mathrm{ED_t} = a_0 + \sum_{i=1}^{p} a_1 \Delta\mathrm{ED_{t-i}} + \sum_{j=1}^{q} a_2 \Delta\mathrm{GE}_{t-j} + \sum_{k=1}^{q} a_3 \Delta\mathrm{LIBOR}_{t-k} + \sum_{l=1}^{q} a_4 \Delta\mathrm{IR}_{t-l} + \sum_{n=1}^{q} a_5 \Delta\mathrm{ER}_{t-n} + \sum_{r=1}^{q} a_6 \Delta\mathrm{SBN}_{t-q} + \sum_{s=1}^{q} a_7 \Delta\mathrm{TAX}_{t-s} + \sum_{s=1}^{n} a_8 \Delta\mathrm{SBN}_{t-s} + \sum_{u=1}^{n} a_9 \Delta\begin{pmatrix}\mathrm{DTA}_{t-u} \\ \times \mathrm{TAX}_{t-u}\end{pmatrix} + \vartheta ECT_{t-1} + \varepsilon_t \quad \ldots(3)$$

The symbol ϑ is the speed adjustment parameter and ECT is the residual obtained from the estimation of the cointegration model of equation (2). All of the coefficients in the short-term equation above are coefficients that relate the dynamic model in the short term to converge to equilibrium and ϑ represents the speed of adjustment from the short term to long term equilibrium. This shows how the imbalance due to the shock in the previous year is adjusted to the long-term balance in this year.

IV. RESULT AND DISCUSSION

1. Development of Government External debt and Selected Economic Variables

The growth of variables related to this kind of study is important to be observed considering the conditions of each variable differ from year to year following the economic conditions at that time and the policies implemented by the government. The analysis can be seen from the case of the first economic crisis in Indonesia that occurred in 1997-1998 which was triggered by a change from a fixed exchange rate to a floating exchange rate which caused a balance of payments crisis due to an exchange rate crisis.At that time, in 1998, the rupiah exchange rate against the dollar depreciated by up to 70% and made imported staple goods very expensive and the inflation at that time was in the range of 8.1%.

Then, the second crisis occurred in 2008, this crisis triggered by the global crisis from the global company Lenham Brothers which caused the Indonesian rupiah exchange rate to fall.This crisis is also known as “the mother of all crises” or it can be said to be the worst crisis in history. The inflation reached 11% which was triggered by commodity prices which made government expenditure increase. But at the same time, in 2008 the government carried out a Tax Amnesty policy, which helped our tax revenue to increase compared to the previous year. Even though government expenditure increased, Indonesia was able to reduce its external debt since government revenue from the tax sector also increased. Furthermore, in 2016-2017, the Tax Amnesty Policy Volume 1. appears. This policy was motivated by the large number of assets of Indonesian citizens that had not been reported in the Annual Tax Return (*SPT*).

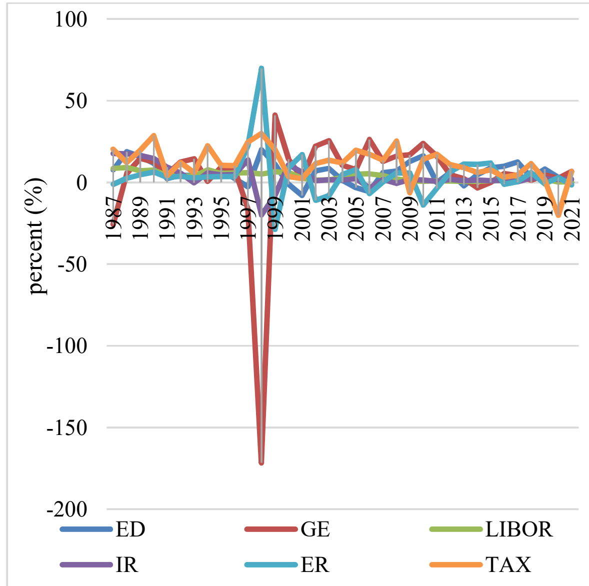

Fig. 3. Growth of Government External debt, Government Expenditure, LIBOR, Real Interest, Exchange Rates, and Taxes
Source: Indonesian Bank, Word Bank, Investing 2022 (processed data)

2. Implementation of Tax Amnesty Policy in Indonesia Table Captions

The Tax Amnesty policy in Indonesia was first carried out in 1964 and the second was carried out in 1984. However, the implementation failed to be carried out that year due to the government's lack of outreach to the community, and only a small number of people participated. In addition, the administrative records at that time were not well organized and the existing system was inadequate. Then, the policy was implemented again in 2008 which succeeded in increasing tax revenues and suppressing the growth of government external debt. The next Tax Amnesty policy was carried out in 2016-2017 and in 2022. Nevertheless, the Tax Amnesty carried out in that year did not reach the target that had been set.

3. Short-Term Results

The estimation results of the ECM ARDL model with dummy variables in this study show the variables that significantly influence government external debt are government spending at lag 1, BI rate, exchange rate, lag 1 exchange rate, inflation, taxes, lag 1 tax, government securities, and lag 1 government securities. This can be seen from the p-value (Pr(>|t|)) which is less than 0.05.

Table1 Short-Term Estimation Results

Variabel	Estim ate	Std. Error	t value	Pr(>|t|)
d(L(ED, 1))	0.0030	0.0541	0.057	0.9551
d(DGE)	-0.0073	0.0096	-0.766	0.4529
d(L(DGE, 1))	-0.0518	0.0095	-5.409	3.21e-05***
d(LIBOR)	0.0020	0.0094	0.212	0.8341
d(BIRATE)	0.0428	0.0158	2.711	0.0139*
d(ER)	-0.2733	0.0367	-7.437	4.87e-07***
d(L(ER, 1))	-0.3355	0.0427	-7.853	2.21e-07***
d(INF)	0.1068	0.0087	12.152	2.09e-10***
d(TAX)	-0.6701	0.0557	-12.020	2.52e-10***
d(L(TAX, 1))	-1.220.6	0.0867	-14.066	1.70e-11***
d(DSBN)	-0.2449	0.0144	-16.918	6.51e-13***
d(L(DSBN, 1))	-0.0713	0.0098	-7.248	7.04e-07***
d(DTax)	0.0343	0.0140	2.435	0.02490*
ect	-0.3864	0.0182	-21.120	1.18e-14**

Notes: *,**,*** Significant at 0.05, 0.01, 0.001
Source: Processed data

Government expenditure in lag 1 shows the increase of government expenditure in the previous period reduces the value of government external debt in the current period by 0.052080. This result is in line with the research of Mohamed Omar and Isse Ibrahim (2021a), they stated that the relationship between government expenditure and external debt is significantly negative. Government expenditure is usually used to support economic activities, especially productive activities that promote economic growth. The growth created by government expenditure ultimately stimulates the creation of new jobs that automatically reduces unemployment and poverty. At this time the growing economy makes public consumption increase and tax revenues increase. In the end it can reduce the government's external debt. Therefore government expenditure in the previous period negatively affected government external debt. Different perspective is stated by LotfiDemikha et al. 2021 which believe that government expenditure is significantly positive on government external debt. Seeing that the loans were not managed optimally, were not absorbed properly and did not have an impact on growth.

The BI Rate variable in the short term gives positive and significant results to the government's external debt. Each increase in the BI Rate by 1 unit increases the value of government external debt by 0.042206. The BI Rate has a role in controlling inflation and maintaining the stability of the country's economy. The increase in BI interest rates is usually influenced by foreign interest rates or the Fed's interest rate. This activity is carried out by the government to anticipate the occurrence of capital outflows, this is what makes the government's external debt increase. This finding is consistent with the result of Perveen, Asma and Munir 2017 research, they stated that domestic interest rates are significantly positive on external debt and government domestic loans in the short term.

The rupiah exchange rate variable and the rupiah exchange rate at lag 1, indicate every increase in the rupiah/USD exchange rate in the current period and in the previous period will affect government external debt. The results of the estimation of the rupiah/USD exchange rate are significantly negative to external debt of 0.275225 and 0.336492. The exchange rate and external debt have a significant negative relationship. When the rupiah exchange rate strengthens or appreciates, it will reduce the amount of government external debt because the rupiah value becomes greater than the dollar value, and vice versa. When the rupiah exchange rate weakens or depreciates against the dollar, the amount of government external debt increases because we have to pay more for the value of the dollar which appreciates against the rupiah.

These results are in accordance with the initial hypothesis and in line with the research conducted by Abdullahi et al. (2015), they stated that the exchange rate has a negative relationship with external debt in the countries studied.Meanwhile, the study directed by Awan et al. (2011) deliver the result that the exchange rate does not affect external debt in the short term. This difference can be influenced by policy that applied and also the state economic conditions. Every change in the exchange rate causes different changes in the domestic and external economic sectors that affect the country's economic performance in general. Exchange rate volatility plays a role in exports and imports, production, and the general price level. Thus, given the influence on a country's economic performance, the determination of exchange rate policy becomes important, especially in external debt(Zareei et al., 2021).

The inflation variable has the same results as the initial hypothesis, which is a significant positive effect on government external debt. Inflation in the current period will increase the value of government external debt by 0.107688. Inflation is a continuous rise in prices, if there is an increase in inflation, the price of goods in the country will increase. The economic actions taken by the government is to import, this action will stabilize the price of the goods. Imports carried out by the government involve foreign exchange reserves, but if foreign exchange reserves are not sufficient to pay for imported goods, the government incurs debts to the destination country.

According to the statement above, inflation has a positive relationship to government external debt. This result differs from the findings by Mohamed Omar dan Isse Ibrahim 2021a dan Dawood et al. (2021) in their research inflation has a significant negative relationship to government external debt.

Tax revenues in period t and tax revenues in the previous year (lag 1) have a relatively high value in the estimation results, for 0.670141 and 1,220,637 in lag 1, these results are in accordance with the initial hypothesis, which has a significant negative relationship. Tax is one of the largest state revenues that contributes to state revenue. Accordingly, when tax revenue increases state revenue also increases which automatically reduce government loans including external debt. Tax revenue tends to increase every year because of the new taxpayers then the tax revenue will increase in the following year. This result is the same as Karia (2021) findings that taxes have a significantly negative relationship with external debt. This research supports the dynamic political economy theory of public spending, taxation, and debt as put forward byBattaglini dan Coate (2008) who examines tax revenues and government expenditure on external debt. Additional tax revenue will reduce foreign debt. The best option for reducing foreign debt is to reduce government expenditure.

In addition to government external debt, state revenue to cover the state budget deficit also comes from government securities (SBN). The estimation results in this study of government securities and government securities lag 1 are significantly negative in influencing external debt. If the government increases its expenditure by borrowing from government securities, the action taken by BI is to increase interest rates so as to increase capital inflow. This increase made the rupiah exchange rate strengthen against the dollar and reduced the government's external debt. According to Setyawati, 2017 the existence of SUN as one of the government securities instruments has an impact on the economy by providing fresh funds for the government. Therefore, the funds are available to invest in productive economic activities to support the economic recovery process which can reduce the amount of external debt.

This study also examines the Tax Amnesty variable to see the effect of this policy on government external debt. The estimation result is a significant positive of 0.034307 which is different from the initial hypothesis where the Tax Amnesty has a negative relationship to the government's external debt. This can be different because government expenditure always increases every year. When there is additional income through the Tax Amnesty, government loans continue to increase to cover other needs such as loan interest. Various attempts were made by the government to increase the amount of taxes. Tax Amnesty aims to repatriate assets stored abroad and generate additional income. In a comparative perspective, Indonesia's tax amnesty is relatively successful in increasing short-term income compared to other country that applied tax amnesty (Hamilton-Hart dan Schulze, 2016)

Equations should be numbered consecutively throughout the paper. The equation number is enclosed in parentheses and placed flush right, as in (1). Your equation should be typed using the Times New Roman font (please no other font). To create multileveled equations, it may be necessary to treat the equation as a graphic and insert it into the text after your paper is styled

3. Long-Term Results

The impact of selected economic variables on government external debt is estimated using the ARDL model. To find out the magnitude of the coefficient of long-term estimation, a long-run coefficient and a bound test are carried out to see the relationship between the variables studied in the long term. The ARDL estimation results obtained in this study, in the long run indicate that inflation and taxes have a significant positive effect on government external debt. This estimation model has a p-value below 0.05 and this means that variations between the variables on government external debt jointly affect external debt. While the rest is influenced by other variables outside the research model.

Table 2 : Long-Term Estimation Results

Variabel	estimate	std.error	t.statistic	p.value
(Intercept)	0.80131	0.15518	51.636	0.00042
DGE	0.01811	0.05334	0.3395	0.74120
LIBOR	-0.02749	0.05955	-0.4616	0.65417
BIRATE	0.09899	0.09075	10.908	0.30092
ER	0.03450	0.07993	0.4317	0.67511
INF	0.48957	0.08426	58.096	0.00017***
TAX	196.517	0.36780	53.429	0.00032***
DSBN	-0.68095	0.29177	-23.338	0.04177**
DTax	0.28857	0.15138	19.063	0.08572

Notes: *,**,*** Significant at 0.05, 0.01, 0.001
Source: Processed data

Based on the results of the long-term analysis, it shows only the variables of inflation, taxes, and government securities (SBN) that significantly affect the government's external debt, without the other variations. It can be seen from the p-value which is smaller than the significant value at the 1 percent and 5 percent significance level. The inflation variable has a significant positive effect on government external debt where the p-value is smaller than the 1 percent real level, namely 0.0003717719 < 0.01. Inflation has a significant positive relationship with government external debt in accordance with the initial hypothesis. The increase in inflation affects the amount of government external debt. When a country's inflation continues to rise, the prices of goods circulating in society increase. This made the government increase its external debt to stabilize the price of domestic goods. The estimation results show that in the long term, every 1 unit increase in inflation will increase the value of the government's external debt by 0.49036298.

For the government security (SBN) variable, the result is the same as the estimate in the short term, which is a significant negative of 0.68095511. Meanwhile, the tax variable is not in line with the initial hypothesis, in which taxes have a significant negative relationship to external debt. In addition, long-term estimation results are also different from short-term estimation results. In the long-term estimation results, each tax increase of one unit will increase the value of the government's external debt by 1.96351958.

4. Implications of Tax Amnesty Policy on Government External debt

According to the long-term and short-term ARDL estimation results, the Tax Amnesty policy only affects external debt in the short term, while in the long term it has no effect at all. This can be seen from the existing data in Fig. 3. which shows the Tax Amnesty policy only has an effect for the following year but has no impact in subsequent years. Thereupon, if the government wants to reduce external debt through income, the government must maximize the existing tax potential and regulate expenditure in such a way as to maximize the existing benefits. Accordingly, if the government wants to reduce external debt through income, the government must maximize the existing tax potential and regulate expenditure in such a way as to maximize the existing benefits. This means that in this case the public funds collected by the government cannot meet current expenditures. Consequently, the government cannot rely solely on taxes as revenue, there must be other sources.

As concern on the data from the Ministry of Finance (Kemenkeu), the implementation of Tax in 2008 Amnesty policy achieved the government target. While the implementation in 2016-2017 did not reach the targeted amount. The amount of tax amnesty collected in 2016 was only realized at Rp. 1,283 trillion or 83.4% of the target of Rp. 1,539 trillion. In 2017, only IDR 1,147 trillion or 89.4% of the IDR 1,283 trillion target was realized. Whereas in 2022 the total net assets reported until the end amounted to IDR 594.82 trillion from 247,918 taxpayers. As seen from the comparison, this value is very far from the results obtained in 2016-2017.

V. CONCLUSION AND SUGGESTION

Based on the results of research that has been conducted regarding the impact of government external debt in 1987-2021, this research also concerns the impact of the Tax Amnesty policy as an effort by the government to increase revenue and the number of taxpayers. The results of research that applying the ARDL model obtained several conclusions, where the estimation results of the ECM ARDL model with Dummy Variables of the ED variables are DGE lag 1, BIRATE, ER, ER lag 1, INF, TAX and TAX lag1, DSBN, DSBN lag 1 , and Dummy Tax Amnesty. While the other variables have no significant effect on government external debt. In the long run only inflation, taxes and government security (SBN) variables have an effect. Inflation and taxes have a positive effect on government external debt. Meanwhile, government security has a significant negative effect on government external debt.

The effect of the Tax Amnesty policy as revenue and increasing the number of taxpayers only has a short-term effect. The amount of taxes collected in the implementation year can only reduce external debt in the following period, but it does not have an effect in the long term because the amount of government expenditure always increases every year. Therefore it does not have an impact for the long term.

It is better if the Tax Amnesty policy is not carried out continuously, especially over a short period of time. It can affect people's obedience in paying taxes because some communities will be less disciplined for paying taxes and tends to delay it since there will be another Tax Amnesty. Then, this policy triggered an unfair treatment to the obedient and honest community in reporting their taxes compared to people who get tax amnesty. The Tax Amnesty implementation system needs to be improved, by tracking the money, assets and citizens' property abroad in order to achieve the target.

Besides focusing on revenue, the government must also regulate expenditure. The budget deficit financed by external debt must be carried out very carefully, fully calculated, efficiently and effectively because it involves macroeconomic variables. External debt for the development of the Indonesian economy must be focused on creating productive programs for long-term development investments that encourage progress in the real sector, not just consumptive activities. Inasmuch as it can encourage domestic economic activity towards social welfare with a fast rate of return.

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AUTHOR PROFILE

ShofiyahSalsabila
Economics Study Program from IPB University Bogor, Indonesia.
Email :shofiyah.salsabila@apps.ipb.ac.id
HermantoSiregar
Lecturer at the Department of Economics Faculty of Economics and Management, IPB University Bogor, Indonesia
Dedi Budiman Hakim
Lecturer at the Department of Economics Faculty of Economics and Management, IPB University Bogor, Indonesia