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Aid and Fiscal Behaviour in Indonesia: The Case of a lazy Government

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CIES DISCUSSION PAPER 0506

Aid and Fiscal Behaviour in Indonesia:

The case of a lazy government*

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Abstract

This paper aims to assess the effects of aid on fiscal behavior in Indonesia. There are four main findings. First, aid inflow is primarily driven by the need to fill the fiscal gap. That is, aid is demand driven. Second, although project aid is by definition intended for development expenditures, it results in an increase in routine expenditure as well. This suggests that project aid is fungible: it creates extra resources available to increase non-discretionary spending. Third, program aid tends to increase routine expenditure but not development expenditure; thus it mainly serves as budget support. Fourth, aid flows make the government fiscally "lazy". The availability of aid is a disincentive to mobilise domestic revenue through a more efficient and effective taxation system.

Key words: Foreign aid, economic growth, balance of payments, government fiscal behaviour.

JEL classifications: F35, F34, O53

I. Introduction

Foreign economic assistance is believed to have played a crucial role in Indonesia's phenomenal transformation since the early 1970s. Foreign aid to Indonesia rose steadily from about three per cent of GDP in 1971 and peaked at about six and a half per cent of GDP in 1988. Since then aid dependence declined, and the aid-GDP ratio stood at two per cent prior to the 1997 economic crisis. Foreign aid financed nearly 70 per cent of total development expenditure in 1971, dropping to about 22 per cent in 1974. It fluctuated between 20 and 30 per cent during the period 1975 – 1985. The contribution of foreign aid to development expenditure rose to about 78 per cent in 1988.

The issue of foreign aid effectiveness has become a concern in the wake of the economic crisis, which saw Indonesia's aid dependence rise again as the aid-GDP ratio rose to four and a half per cent in 1999. During 1998 and 2001, over 80 per cent of development expenditure was financed through foreign aid. Thus, Indonesia's present scale of aid-dependence resembles that of late 1969 at the start of the New Order regime.[1]

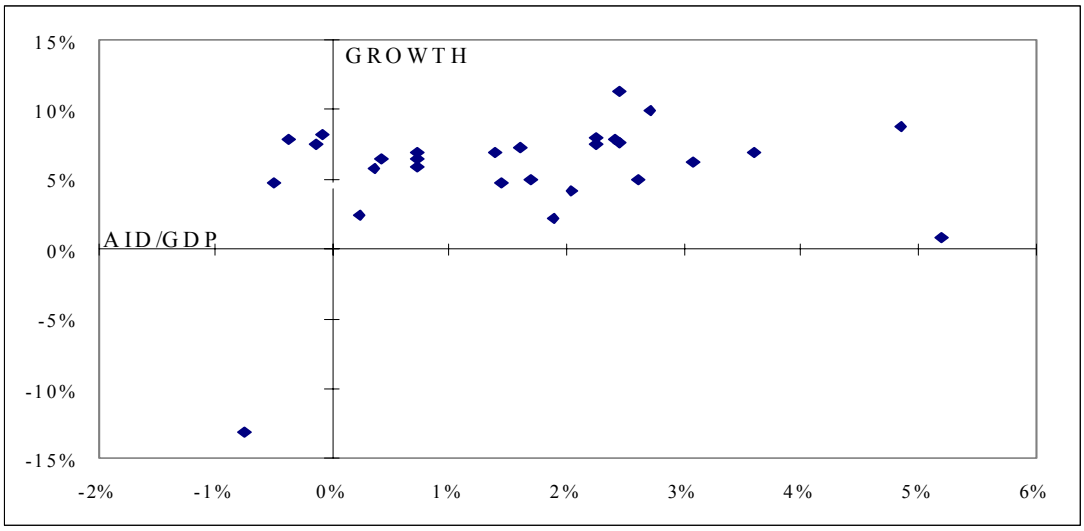
However, the discussions have remained focused mainly on microeconomic aspects of management such as coordination, fiduciary standards and absorptive capacity. Broader macroeconomic issues such as the relationship between aid and national efforts in mobilising domestic resources, in particular aid's impact on government revenue and expenditure, has not received much attention from both policy makers and academic researchers. Nor the discussion of aid-effectiveness has been helped by the lack of any serious academic research. In the words of Hill (1996, p. 81),

> It is surprising … that there has been no serious academic study of one of the world's largest and most successful aid programs over the past quarter-century, examining in detail the impact of the various aid programs and projects, and assessing the importance of expatriate economic policy advice from the World Bank, the Harvard group, and other organizations.

The discussion of aid effectiveness is further complicated by a lack of consensus in the wider literature. This paper, thus, seeks to fill the research gap in the Indonesian context and in the process will shed light on the debate.

This study focuses on the fiscal response of aid rather than aid-growth relationship for three reasons. First, at least for the Indonesian case, there seems to be no strong correlation between aid and growth (see Figure 1). Various regression models have been constructed to establish the relationship, but the results were very unsatisfactory. This rises a concern whether aid has been effective in stimulating growth.

Figure 1: Scatter Plot: Aid and Growth (%)



Second, after more than 30 years of engagement with donors, Indonesia has not been able to reduce its dependence on foreign assistance. It is an irony that Indonesia with a domestic savings rate of about 27 to 30 per cent of GDP, remained one of the most indebted nations. In fact, the country had to ask rescheduling of its debt repayment through the Paris Club (PC) three times. The question is then: has Indonesia fallen in to a debt trap?

Third, in almost all difficult circumstances, Indonesia had to seek foreign assistance. For example, foreign assistance played a significant role in overcoming Indonesia's difficulties in the late 1960s and early 1970s when aid financed nearly 80 per cent of development expenditure. Foreign assistance also helped to ease the difficulties faced in the mid 1980s after the collapse of oil prices. Certainly, it also cushioned against the adverse economic situation during the late 1990s crisis. This leads us to a hypothesis that the nation has no internal mechanism to deal with adverse economic shocks. If this the case, the question is then: why?

One possible answer to the above questions is that the easy access to foreign assistance made the Seoharto regime lazy and it was lax in its revenue efforts. By treating aid as revenue in the government budget, the regime could hide the fiscal deficit and remain profligate. Thus, while the household sector was saving at a fantastic rate, the government was in fact dissaving under the disguise of fiticiously achieved balanced budgets, made possible by high inflows of aid treated as revenue.

In light of the above, it is imperative that the paper examines aid's impact on government expenditure and revenue. The paper is organised as follows: Section II provides a brief

review of literature as a background to this study; Section III describes the empirical model; Section IV reflects on the close association between budget deficits and aid flows; Section V analyses the effects of aid on public expenditures and non-oil revenues. The final section contains policy implications of the findings.

II. Aid-effectiveness: a brief review of literature

There have been extensive researches in this area for more than thirty years. Much of this research has been dominated by empirical test of whether aid contributed to economic growth using cross-country data.[2] The theoretical foundation for the empirics originated from the two-gap model of Chenery and Bruno (1962) and Chenery and Strout (1966): developing countries have deficient level of domestic saving to finance a level of investment necessary to achieve a desired rate of economic growth, and/or limited foreign exchange reserves to acquire imported capital goods. These savings and foreign exchange gaps constraint growth, and foreign aid can fill these gaps.

The empirics of aid-growth relationships have not achieved a solid consensus from the very beginning. The early studies of the relationship between aid and savings produced contradictory conclusions. For example, Rahman (1968), Griffin (1970) and Griffin and Enos (1970) found a negative relationship between aid and domestic savings, whereas Papanek (1972; 1973) and Kennedy and Thirlwall (1971) broadly supported the positive view of the Chenery-Bruno-Strout hypthesis. Among the more recent studies, the influential works by Mosley *et al* (1987; 1991) and Boone (1994; 1996) found insignificant effect of aid on growth.[3] On the other hand, based on a study of 31 Sub-Saharan African countries, Hadjimichael *et al* (1995) suggested that aid significantly

affect the growth rate, as do a number of policy variables (government investment, human capital, population growth, terms of trade, real effective exchange rate, and the budget deficit). Similarly, Durbarry *et al* (1998), drawing on a larger sample of 58 countries (1970-93), provided robust evidence that greater foreign aid inflows have a beneficial impact on growth, as again do several policy/economic variables (domestic saving, private net inflows, terms of trade, inflation and the budget deficit).

The much cited Burnside-Dollar study (1997) concluded that aid works only in countries with "right" policies in place.[4] Right policies are defined as low inflation, small budget deficits, openness to trade, strong rule of law and a competent bureaucracy. The Burnside-Dollar (BD) study generated much interests and influenced policy makers both at the multilateral and bilateral levels. However, the critics claim that the methodology of BD study is seriously flawed, and Easterly *et al* (2003) expressed alarms at the influence of the BD study at the policy level.

The main deficiency of aid-growth studies is that they ignores a simple fact that aid is primarily channeled through the budget of the recipient countries (McGillivray, 2000; 2002). Thus the ultimate impact of aid on the economy will by and large depend on how aid affects public expenditures and revenues. If aid is mostly directed to finance public investment rather than consumption and it does not substitute tax revenues, then aid-growth co-movement may be clearly observed. Some of recent works have focused on this strand of reasoning. Following the seminal work of Heller (1975), Mosley *et al* (1987), Gang and Khan (1991; 1999), and Franco-Rodriguez (2000) modelled the interaction between aid flows and various categories of public expenditures and revenues.[5] Others like Swaroop *et al* (2000) and Feyzioglu *et al* (1998) used the

framework of McGuire (1978), and focused on fungibility issue, that is whether aid is directed toward its intended purposes. These studies reveal that the impacts of aid on fiscal behaviour vary across countries. In some, aid did not lead to a reduction in revenue raising efforts and aid was not diverted to unproductive uses. However, studies also found that aid was diverted away from its intended purpose. Some studies found that aid had a positive impact on public investment but negative impact on tax efforts; others found very small impacts of aid on public sector fiscal behaviour.

The only academic study of the aid-fiscal behaviour relationship in Indonesia is by Pack and Pack (1990). This study used a McGuire type model of aid fungibility, and found that foreign aid between 1966 and 1986 did not displace development expenditure; instead aid stimulated total public expenditure. Pack and Pack further found that most categorical aid was spent on the purposes intended by donors. More importantly, their findings revealed that aid did not lead to a reduction in domestic revenue. Thus, this study provided an over all positive assessment of foreign aid. However, the findings are a bit odd given the continued rise in aid-GDP ratio during this period.

III. Empirical model

The empirical model of public sector fiscal response to aid used in the study follows the model advanced by Franco-Rodriguez *et al* (1998) and McGillivray (2002). The main difference is that the response is established within a vector autoregression (VAR) framework, enabling us to fully capture the dynamics of aid-fiscal inter-relationships. In a VAR representation, the interrelationships can be specified as follow:

$$\boldsymbol{Z}_t = \sum_{i=1}^{p} \Pi_i \boldsymbol{Z}_{t-i} + \varepsilon_t \qquad (1)$$

where $\boldsymbol{Z}_t$ is a vector of aid and fiscal variables and ε_t is a gaussian error term. Aid is disaggregated into two components; project and program aid. Fiscal variables include non-oil tax revenue, development and routine expenditures. Thus $\boldsymbol{Z}_t$ is a vector of five variables.

The above representation treats that aid and fiscal behaviour as interdependent. An adverse shock on fiscal side will have follow up impacts on aid. For example, a fall in domestic revenue may generate the need to increase aid inflows. In exchange, there should be feed back effects from aid - the availability of aid may reduce the need to adjust the budget both from revenue and expenditure sides. Thus, rather than a uni-directional relationship, aid and fiscal interact in a dynamic manner.

The above representation is slightly different from the original model of McGillivray (2002). In his model, the variables are separated into target (planed) and actual (realization), where in a reduced equation format it turns out that a particular realisation is a function of all target variables. This is problematic especially when target data are not available. McGillivray, in fact, estimates the target as a function of past realisation. In effect, current realisation is indirectly a function of past realisation. This is a relatively perfect case of vector autoregression (VAR) model. Thus rather than going into a cumbersome methodology (like McGillivray), it is more convenient to directly use VAR as an empirical model.

Moreover, with a VAR representation it becomes easy to assess the effect of a particular shock on all variables by using the so called impulse response analysis (IRA). It traces the effect on the system of an exogenous shock to one of the variables in the model. The effect of any unexpected shock to the system can be traced through deviations of the shocked time paths from the expected time path given by the model. This technique is quite useful in certain types of policy and sensitivity analyses. The procedure to obtain an impulse response function from a VAR can be outlined as follows.

Assumes that Π is not a full-rank matrix, the solution of (1) involves common stochastic trends, and is given by:

$$Z_t = Z_0 + C(1)S_t + C^*(L)(h_t - h_0) \qquad (2)$$

where $h_t = \psi w_t + u_t$

$$S_t = \sum_{i=1}^{t} u_i \,, \quad t=1,2,3,\ldots\ldots$$

$$C(L) = C(1) + (1-L)C^*(L)$$

$$C^*(L) = \sum_{i=0}^{\infty} C_i^* L^i$$

Note that L is the one period lag operator, and C_i^* matrices are obtained recursively from:

$$C_i^* = C_{i-1}^* \Phi_1 + \ldots\ldots + C_{i-p}^* \Phi_p \qquad (3)$$

for i=1,2,…., with $C_0^* = \mathrm{I} - C(1)$, and $C_i^* = 0$ for i<0. Matrix C(1) can be obtained directly such that:

$$C(1)\Pi = 0 = \Pi C(1) \qquad (4)$$

The matrices, Φ_i can be obtained from coefficient matrices such that:

$$\Phi_1 = \mathrm{I} - \Pi + \Gamma_1$$

$$\Phi_i = \Gamma_i - \Gamma_{i-1}, \qquad i = 1, 2, \ldots, p\text{-}1$$

$$\Phi_p = -\Gamma_{p-1}$$

Let $A_i = C(1) + C_i^*$, and A_i can be obtained recursively as:

$$A_i = A_{i-1}\Phi_i + \ldots\ldots\ldots + A_{i-p}\Phi_p, \qquad \text{for } i=1,2,\ldots.. \qquad (5)$$

where $A_0 = \mathrm{I}$, $\lim_{i\to\infty} A_i = C(1)$, and $A_i = 0$ for $i<0$.

Let Σ be the covariance matrix of the innovation, ε_t, and σ_{ij} be the component of the matrix. For a shock in variable *i*, it is necessary to define the size of the shock and an 1X*m* matrix, $e_i = (0,\ldots,1\ldots,0)$ where the *i*-th component of the matrix is set to 1, while other components are set to zero. The size of the shock is usually set such that $\delta_i = \sqrt{\sigma_{ii}}$. The corresponding generalised impulse responses at time T+N are given by:

$$GI_i(\beta_j' Z_t, N) = \frac{\beta_j' A_N \Sigma e_i}{\sqrt{\sigma_{ii}}} \qquad (6)$$

where *i*=1,2,..*m*; *j*=1,2, ..,*r* and N=1,2,…. .

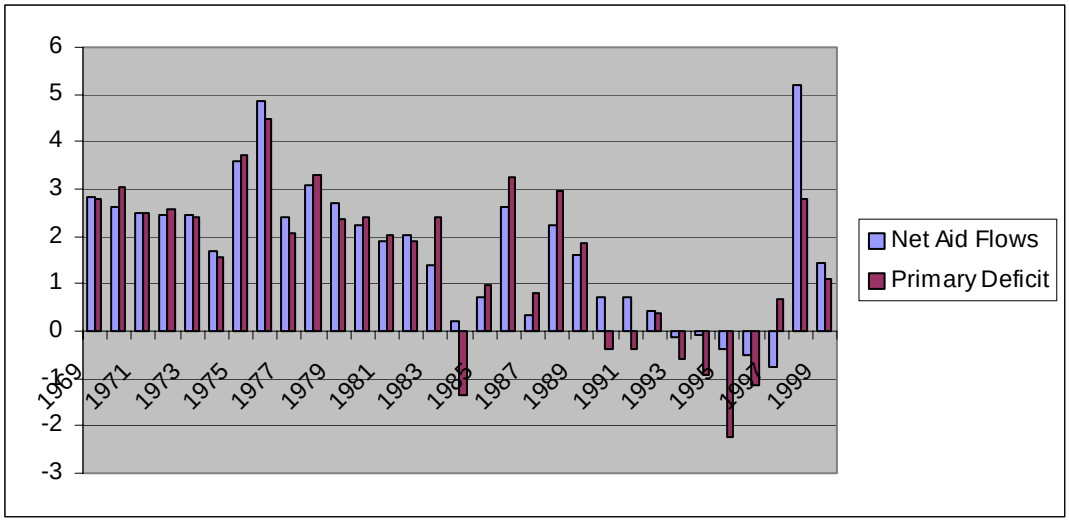
The above impulse response function will be used to assess fiscal effects of aid. Note that, in McGillivray's model fiscal responses is captured by analysing the coefficients of

aid variables in the fiscal equations. This technique, does not allow for inter-temporal dynamic effects. In contrast, IRA stresses on the dynamics.

IV. Aid and budget deficits

Perhaps, the very reason for obtaining foreign loans is to fill the fiscal gap. As can be seen from Figure 2, aid flows almost mirror the size of government budget deficits. The fact that there is a strong correlation between aid flows and budget deficits opens up two possibilities.

Figure 2: Net Aid Flows and Primary Budget Deficits (% of GDP)



Note: Deficit (+); Surplus (-)

First, aid may be demand driven. That is, the government intentionally creates a deficit due to various reasons and then seeks to fill the deficit by aid. Second, aid can be supply driven and therefore induce a deficit. The latter case represents donors' interests more than the debtor interests.[6]

In order to assess whether net aid inflow to Indonesia was driven by the necessity to fill the fiscal gap, the "Granger causality test" is employed. The test suggests that

budget deficits cause net aid flows which indicates that the size of the deficits determine the size of net aid inflows (see Table 1). In other words, the government planned the deficit in the first place, and then negotiated with creditors to fill the intended deficit.

Table 1: The Results of Causality Test

Causality		Test Statistics	Prob (df=5, sl=0.05)
From	To		
Net Aid Flows	Budget Deficit	5.441	0.367
Budget Deficit	Net Aid Flows	11.735	0.047

We also use the causality test to assess whether there was a reverse causality between fiscal deficits and aid flows. The test shows that net aid flows did not cause fiscal deficits, and therefore there was no strong evidence that aid was supply driven. But this does not mean that creditors has no interest in directing aid to certain activities that meet their objectives in providing loans. Rather, it says that aid is made available upon demand (request) by the government of Indonesia.

These findings suggest that it is up to the government of Indonesia to create or close the fiscal gap. Over the period of analysis, fiscal policy stance of the government was mainly expansionary and only in a few occasions during the first half of the 1990s the government created fiscal surpluses. The creation of deficit was probably motivated by the need to stimulate the economy by means of increasing public expenditure. The increase in public expenditure was very difficult to be match by tax revenue in a situation where the domestic taxation regime was very rudimentary. There was no serious attempt

to overhaul the complicated tax administrative structures, some inherited from the Dutch colonial era, and to ensure tax compliance. The collection process was inefficient and corrupt. It was only after a significant decline in oil revenue that provided the initial stimulus for tax reforms in 1984 and a decade of continuing low oil prices ensured that these reforms were actually implemented seriously.[7] A series of tax reforms, first implemented in 1984-1985, attempted to produce a more efficient and buoyant tax system. The results of these reforms were impressive. In 1984, non oil development revenue contributed to about 30 per cent of total government revenue. In 1996, just before the crisis, the share increased to 68 per cent.

With this improvement, why did the government continuously rely on aid? More puzzling is, with a relatively high domestic saving, why was foreign financing found to be more attractive than domestic borrowings?

There are five reasons for this. First, financing the deficit through commercial domestic market may be difficult when the market is underdeveloped. Before the crisis, the size of the market was only about IDR 6 trillion.[8] Second, obtaining concessionary loans from bilateral and multilateral donors can reduce financial cost. Government projects are typically less commercially oriented than that of private, and therefore it is more reasonable to seek funds with the actual cost below the market rate. Besides, the financial terms from non commercial sources is generally favourable; lower interest rate and longer repayment period. For instance, in 1999, the average interest rate of official creditors was only about 3.8 per cent per annum, with average maturity about 16.7 years, grace period of about 5.2 years, and the grant element of the total aid was about 38.1 per cent (see Table 2).[9]

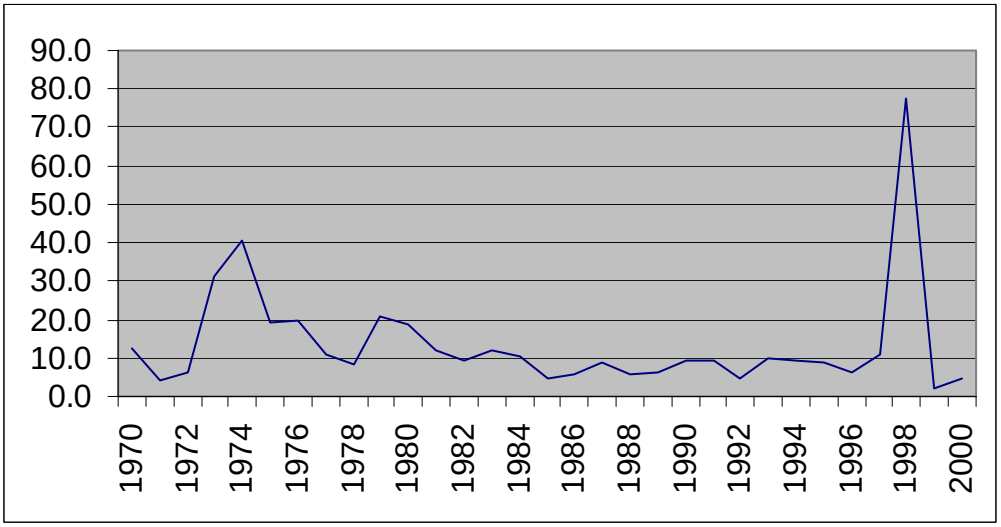
Table 2: Average Terms of Aid

	1970	1980	1990	1995	1997	1999
Interest (%)	2.4	5.4	5.6	5.1	6.3	3.8
Maturity (years)	35.9	25.5	23.1	21.3	19.5	16.7
Grace period (years)	9.5	7.3	6.6	5.8	4.9	5.1
Grant element (%)	62.9	36.2	32.8	33.3	22.7	38.1

Third, even if domestic bond market is relatively sizeable, aid financing is still more attractive when the government wants to avoid crowding out effects of budget deficit. The deficit can directly reduce private investment through the increase in domestic interest rate. However, the adverse impact of aid financing on the private sector may not be fully contained when it leads to a real exchange rate appreciation.[10]

Fourth, aid can also avoid inflationary financing of budget deficits by means of printing money. This was indeed the main success story of aid and technical assistance to Indonesia in the late 1960s and 1970s. The run away inflation during 1973-1974 and again during the crisis of 1998 was successfully scraped in just a few years (Figure 3).[11]

Figure 3: Inflation in Indonesia



Fifth, in a crisis situation, aid could play a more significant role in preserving fiscal sustainability and sustaining growth. With the economy entering the down turn, tax revenue falls. In such circumstances, the need to stimulate growth can be facilitated by creating an aid financed fiscal deficit. By doing so, the cut in public expenditure which tend to propagate the crisis can be avoided.

Because the aid was by and large found to be demand driven, there is a need to assess whether it was used effectively, or whether it was directed towards productive activities that can stimulate growth and increase the capacity to repay the debt at the same time. The following section discusses the fiscal response to aid.

V. Fiscal Response

Effects on government spending

In order to assess the impacts of net aid flows on government spending, an impulse response function (IRF) analysis is employed. Aid is classified into two categories, project and program aid, and each category should have different impacts on different types of government expenditure. Project aid is usually directed to finance development expenditure; and therefore it can be expected that an increase in the disbursement of project aid will tend to induce a higher level of development expenditure. The impact of project aid on routine expenditure will depend on whether it is fungible or not. If it is not fungible, routine expenditure should not increase. On the other hand, it is natural to expect that program aid is fungible. Program aid is typically used in a hard time, mainly to maintain the essential social and routine expenditure. In other words, program aid comes as budget supports.

The results of impulse response analysis (IRA) are displayed in Figures 4 and 5. Two shocks are exercised; one standard deviation shocks on project and program aid. The figures display the response of fiscal variables to the shocks. The responses are measured in terms of deviations from the expected time paths. A positive value indicates that the variable in question will increase due to a given shock. The effect can be either transitory or permanent. The effect will be transitory if the response, which can be initially either positive or negative, stabilises at zero in the latter periods. The effect is said to be permanent if it stabilises at a value below or above zero.

Figure 4 indicates that a one standard deviation shock on project aid will lead to increases in both development and routine expenditure, permanently. However, it has

stronger effect on routine expenditure compared to the other. This means that the availability of project aid provides free resources to increase routine spending. In other words, project aid is fungible. This finding is contrary to Pack and Pack (1990).

Figure 4: Effects of one standard deviation shock of project aid on development and expenditures and non-oil revenue.

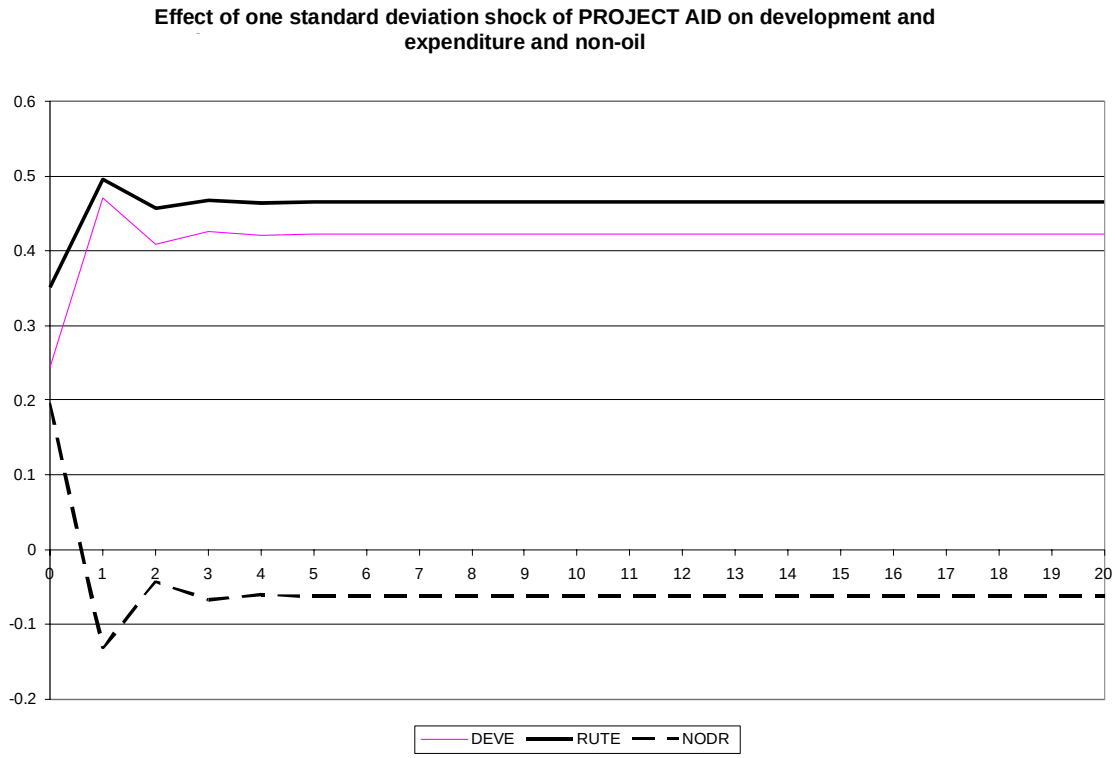
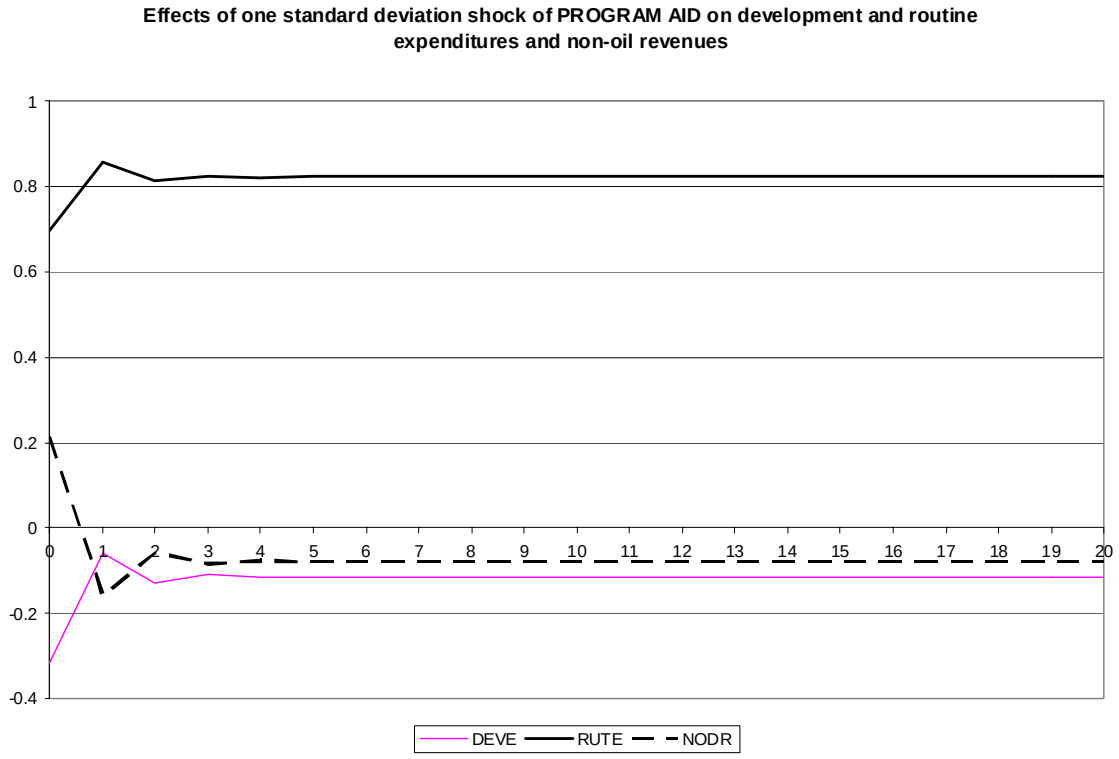


Figure 5 suggests that a one standard deviation shock on program aid will lead to increases in routine expenditure and decreases in development expenditure. In a difficult time, it is understandable that the objective of obtaining program aid is to preserve routine expenditure, the bulk of which is unavoidable like salary and wages. However, the interpretation of the responses of development expenditure needs caution. The

decline in development expenditure may not be due to the availability of program aid. Rather it is a necessary adjustment in a crisis situation when the program aid comes. Hence, there is a negative correlation between program aid and development expenditure.

Figure 5: Effect of one standard deviation shock of program aid on development and expenditures and non-oil revenue.



In sum, it is found that aid is mainly used to preserve an intended level of routine expenditure, rather than development expenditure. In addition, aid is fungible: aid provides additional resources to be used for consumptive purpose. Thus, it is not so surprising that a strong correlation between aid flows and growth does not exist. To the

extent that aid is not directed to increase spending on productive purposes or to support productive activities, on which government revenue largely depends, debt repayment may become a serious problem. The increase in debt burden needs to be matched with increasing tax efforts. Thus, we investigate the impact of aid on government's revenue raising efforts.

Effects of aid on non-oil domestic revenue (NODR)

In this section, we are going to assess the impact of the availability of project and program loans on government's tax efforts. The analysis is facilitated by impulse response functions presented in Figures 4 and 5. Note that the capacity of the government to raise fund domestically is represented by non-oil development revenues (NODR). Oil revenue is excluded because the production level of oil is determined through quota of the OPEC. Hence the revenue from oil production sharing is not related to government "effort" to raise tax.

As can be seen from Figures 4 and 5, both program and project aid has a small adverse impact on NODR over the long run. Thus, it can be said that aid acquisition is not followed by improvement in the government revenue. This is a relatively a surprising result, given that program aid generally imposes structural reforms including improvement in the taxation system. One possible explanation for this unexpected result is that tax reform was never been part of conditionality of any structural adjustment loans (SALs) from the World Bank and the IMF. In fact, the 1987 World Bank's Adjustment Loan was approved entirely on the basis of reforms already done.[12] This favourable

treatment might have adversely impacted on fiscal behaviour. That is, the government did not have any incentive to further reform the taxation system. From 1990 to 1996, indeed, the tax - non-oil GDP ratio remained stagnant at about 10.4 per cent, indicating that there was no substantial attempt to improve tax efforts. Hill (1996, p.47) noted, '… notwithstanding the gradual decline in the importance of aid after 1988, Indonesia has not yet achieved one of its major fiscal objectives, that of reduced dependence on foreign aid'. Hill (1996) concluded, oil revenues and steady flows of aid have made the Indonesian government lazy to collect tax from non-oil sectors. Every time the government ran into a budget deficit, the donors filled the financing gap. Thus the government had little incentive to increase its capacity to raise fund from domestic sources.[13]

VI. Conclusion and policy implications

This paper aims to assess the effects of aid on fiscal behavior. There are four main findings worth to be highlighted. First, the aid flow is generally demand driven in the sense that it is a result of a continuous lax fiscal regime. It is created by the desire to fill the fiscal gap. However, this does not suggest that aid agencies play a passive role. The fact that the government can always obtain aid - with size almost equal to the deficit - suggest that the supply of aid is always made available upon request. Moreover, the agencies can also have interest in directing aid allocation for specific purposes that meet the donor interest.

Second, although project aid is by definition intended to finance development expenditures, it results in an increase in routine expenditure as well. This suggests that project aid is fungible: it creates extra resources available to increase non-discretionary spending. Thus, the effectiveness of project aid in stimulating growth through an increase in public investment is jeopardised.

Third, program aid tends to increase routine expenditure but not development expenditure. Thus, this aid only serves as a buffer to maintain a certain level of routine expenditure. In times of economic hardship, fiscal revenue usually declines and thus the dependence on aid revenue increases. This also suggests that the economy has no internal mechanism on the fiscal side to deal with economic downturns. Persistent budget deficits over a long period before a crisis, makes no fiscal resources available to exercise a "fine tune" policy mix.

Fourth, aid flows make the government is fiscally "lazy". The availability of aid is a disincentive to expand domestic revenue through a more efficient and effective taxation system. In five years leading to the Asian crisis, the tax ratio remained constant at about 10.4 per cent despite the fact that that period is characterized by economic boom, which is favourable for increasing tax effort.

Our findings suggest that the government has to reduce its dependence on aid. In the longer term, the objective of the government should not be just filling the fiscal gap, but actually to create a fiscal discipline. Closing the fiscal gap can be attained by increasing government revenues and improving expenditure management. However, the dilemma is that the arithmetic of closing the fiscal gap: increasing tax and lowering

expenditures, is not very simple. Public investment may be very crucial for sustaining growth, and increasing tax may not be an easy task. Thus, where public expenditure cannot be cut, taxation cannot be simply increased, as it requires an overhaul of the taxation system. Such an overhaul may take time to be fully effective. At the same time, both widening of tax base and cutting of public expenditure face strong political resistance. Therefore, over the short run, the government may still have to rely on aid inflows to finance public investment and on rescheduling and debt forgiveness to lower the debt burden. Hence, the donors and the government will have to cooperate in a constructive manner in the foreseeable future.

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[1] Nearly 80% of development budget of 1969/70 fiscal year was financed through foreign aid. See Hill (1996, Figure 4.3, p. 46).

[2] See Tarp (ed.) (2000) for a comprehensive survey of aid-effectiveness literature. White (1992) is a useful critical survey of macroeconomic impact of aid. Also see Symposia in *Annual World Bank Conference on Development Economics 2003, Economic Journal*, vol. 114 (June, 2004), and *International Review of Economics & Finance*, vol. 13 (2004) for most recent and comprehensive discussions of issues pertaining to aid effectiveness and aid allocations.

[3] Boone's results are described as "surprising" by Tsikata (1998) and his approach is criticised by Hansen and Tarp (2000).

[4] Both Boone and Burnside-Dollar studies were reviewed in *The Economist.* Boone's findings were summarised in one short sentence – aid is '*Down the Rathole'* (*The Economist,* Dec. 10, 1994). Findings of Burnside-Dollar were reviewed under the title, "Making Aid Work" (*The Economist,* Nov. 14, 1998). Aid will only work if it is spent on right countries with low inflation, small budget deficits, openness to trade, strong rule of law and a competent bureaucracy. The Burnside-Dollar (BD) study generated much interests and influenced policy makers both at the multilateral and bilateral levels. However, the critics claim that the methodology of BD study is seriously flawed, and Easterly *et al* (2003) expressed alarms at the influence of the BD study at the policy level. Easterly (2003) expressed doubt about the soundness of policy contingent lending.

[5] See also Khan and Hoshino (1992), McGillivray and Morrissey (2000; 2001) and White (1994).

[6] Easterly (2003) has argued that donors are judged by the amount money spent and hence are driven by the desire to "move money". According to him, Judith Tendler's observation as far back in 1975 that "A donor organization's sense of mission … relates not necessarily to economic development but to the commitment of resources, the moving of money…" remains valid even today.

[7] Hill (1996) and Gillis (1985)

[8] After the crisis, although the government has issued bonds amounted to IDR 660 trillion as a result of bank bailout, only IDR 35 trillion is actively traded in the market. Hence, it would be difficult for the government to "recycle" the bonds. Thus, developing domestic bond market remains the biggest challenge in the near future in order to warrant fiscal sustainability.

[9] However, this favourable financial terms has to be compensated by non-financial conditionality such as donor determined procurement, earmarking, and policy reform. Thus, effectively the government may lose its policy independence.

[10] Gray and Woo (2000)

[11] The same was the case with the hyperinflation of the mid 1960s.

[12] Mosley *et al* (1991)

[13] It took a crisis to change this. After a slight fall in 1998-2000, the tax ratio increased to 12.6 per cent in 2001. By the end of 2004, the ratio is expected to become just about 15 per cent.

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