WWW.DAGLIANO.UNIMI.IT

CENTRO STUDI LUCA D'AGLIANO
DEVELOPMENT STUDIES WORKING PAPERS

N. 212

May 2006

Foreign aid and fiscal policy

Riccardo Faini*

*Università di Roma Tor Vergata, Centro Studi Luca d'Agliano, IZA and
CEPR

Foreign aid and fiscal policy

by

Riccardo Faini

(Università di Roma Tor Vergata, Centro Studi Luca d'Agliano, IZA and CEPR)

Abstract

Foreign aid has been on a downward trend since at least the early eighties. Despite the commitments of donor governments, the GDP share of foreign aid for DAC countries has fallen to slightly more than 0,2% in the early part of this decade.

 The purpose of this paper is to explore the macro determinants of the amount of foreign aid. Surprisingly enough, not much attention has been devoted in the literature to this issue. Most of the research has focussed either on the effectiveness of aid ("does aid promote growth and help alleviating poverty"?) or to the cross country allocation of a given amount of foreign aid ("is foreign aid motivated by donor's political and commercial interests or by recipients' needs?"). In both cases, the total aid budget is taken as given and its determinants remain therefore unexplored.

Our main finding is that the size of the budget aid is a function of the donor country's fiscal situation, even after controlling for the government's political orientation, the cyclical position of the donor economy, and its income per capita level. In light of these results, we argue that advocates of foreign aid should strongly lobby in favour of fiscal discipline. The alternative strategy of pushing for a more lenient budgetary treatment of foreign aid may be loaded with risks, and even turn to be counterproductive, particularly if the list of "virtuous" exceptions becomes exceedingly long. This is exactly what seems to have happened with the revision of the Stability and Growth pact.

Contact information :   Riccardo Faini

Università di Roma Tor Vergata

Via Columbia 2

00133 Roma Italy

Tel. : + 39 06 72595909

Fax: + 39 06 2040219

e-mail : faini@economia.uniroma2.it

1. Introduction

Foreign aid has been on a downward trend since at least the early eighties. Despite the commitments of donor governments, the GDP share of foreign aid for DAC countries has fallen to slightly more than 0,2% in the early part of this decade. International institutions have been impotent witnesses of such development and have been forced to scale down their objectives for foreign assistance. In the early eighties the UN general Assembly unanimously set the target level of foreign aid at 1% of rich countries GDP; today, it contents itself with a more modest objective of 0.7%. Even this new target however may be hard to achieve. The European Council in 2002 set a far less ambitious objective, 0,39% of the EU GDP in 2006; three years later, it eventually committed to the UN target of 0,7%, albeit with a more relaxed deadline in 2015. Unfortunately, many EU member countries took exception to the Council declaration, citing their difficult budget situation and, in the end, casting a shadow on the EU ability to reach such a target.

The purpose of this paper is to explore the macro determinants of the amount of foreign aid. Surprisingly enough, not much attention has been devoted in the literature to this issue. Most of the research has focussed either on the effectiveness of aid ("does aid promote growth and help alleviating poverty"?) or to the cross country allocation of a given amount of foreign aid ("is foreign aid motivated by donor's political and commercial interests or by recipients' needs?"). In both cases, the total aid budget is taken as given and its determinants remain therefore unexplored, except perhaps for the implicit assumption that a more effective use of aid could be instrumental in overcoming political resistance to a more generous budgetary allocation.

In the policy debate, the decline in foreign aid is generally attributed to the increasingly restrictive orientation of fiscal policies in donor countries. Development aid is supposed to have suffered disproportionately from the fallouts of fiscal retrenchment, mainly because of the weakness of domestic political support. To remedy this trend, advocates of foreign aid in industrial countries have actively supported a more lenient, approach to the budgetary treatment of development assistance. In Europe, in particular, there have been repeated calls to exclude foreign aid from the application of the Growth and Stability pact. In 2004, the Ecofin council acceded to such requests and included foreign aid in a (fairly long) list of virtuous spending items that should be favourably considered by the Commission in assessing the budgetary situation of individual EU countries.

This strategy however may be loaded with risks. First and foremost, it is by no means granted that the substantive cuts in the foreign aid budget have been mainly due to the restrictive orientation of

fiscal policies. Causality may have gone the opposite way, with the continuing deterioration on the fiscal position in donor countries during the eighties forcing substantial cuts in the foreign aid budget. Interestingly enough, the downsizing of development assistance predates in most donor countries the adoption of more rigorous fiscal policies. Under this alternative view, advocates of foreign aid should then lobby for aggregate fiscal discipline, under the notion that fiscal health is associated with greater spending on aid. Second, even the call for a more lenient treatment of foreign aid may in the end turn to be counterproductive, if the list of exceptions happens to be exceedingly long. Revealingly, this is exactly what seems to have happened at the European level. The Ecofin virtuous list includes a very broad set of items (public investment, military and security spending, the costs of structural reforms, and so on). Aggregate spending on such a list would easily reach 4-5% of EU GDP. The exclusion of these items from the Maastricht definition of the budget would then lead to an exceedingly large deterioration in fiscal balances. Market constraints rather than peer pressures would then force policy makers in donor countries to resort again to fiscal stringency, with a negative impact on official development assistance. In the end, therefore, the aid budget may suffer more than it had gained initially from the more lenient treatment.

The remainder of this paper is organized as follows. In the next section, we present a brief review of the relevant literature. We then a look at the main trends in the aid budget and its relations with the fiscal positions of donor countries. In section 4, we turn to the econometric analysis. Policy implications and conclusions are presented in the last section.

2. What the literature says.

Why give aid? This has been the key question for the aid literature in the last 50 years.

The question has many facets, however. First, it is concerned with the effectiveness of aid. If aid was ineffective in achieving its objectives, was mainly spent on white elephants projects and helped support corrupt dictatorships, it should either be discontinued or, whenever possible, radically overhauled. Similarly, its role should be reconsidered, if alternative more effective tools were available to reach its social and developmental objectives. An early contribution to the debate came from Weisskopf (1972) who argued that aid discourages domestic saving and, as a result, hinders the long run development prospects of the recipient countries. Papanek's (1972) rebuke showed that aid is often given in response to temporary income shortfalls and the latter are typically associated

with a (temporary) reduction in saving. Accordingly, the negative association between aid and saving found by Weisskpopf was likely to be spurious. Indeed, Papanek's own evidence showed that aid and saving were basically unrelated, provided one controlled for exogenous shocks.

One of the key merit of this early debate was to highlight the endogenous nature of aid. Abstracting from such a consideration would be equivalent to assess the health effect of a medical treatment without allowing for the fact that treatments are prescribed only in the presence of a health problem. This is indeed akin to the evaluation of the effectiveness of IMF programs. Countries that rely on IMF loans are not randomly selected. Moreover, the amount of the loan is not independent of the borrowing country's initial conditions. The neglect of such considerations is bound to bias the assessment of the effectiveness of IMF loans, typically in a downward direction.

What the early literature did not do was to allow for the fact that different (aid recipient) countries pursue different policies and that the quality of their policy and institutional environment is likely to affect the effectiveness of aid. A key contribution in this respect came from Burnside and Dollar (2000) who showed that the growth impact of aid was itself a function of the policy environment. The paper was the subject of much controversy, with Guillaumont and Chauvet (2004) arguing that what mattered most was the recipient's vulnerability to shocks (with aid being less effective in more vulnerable countries), Collier, Haufler and Soderbom (2004) emphasizing the role of civil wars (internal conflicts are typically associated with an increase in aid and a fall in growth), and Dalgaard, Hansen and Trap (2004) highlighting the impact of climatic conditions. By and large, however, the key finding by Burnside and Dollar that the effectiveness of aid is positively related to the quality of the domestic policy environment did survive to these more comprehensive analyses, even though its quantitative significance was found to be somewhat more limited. A much more cautionary note is struck by Rajan and Subramanian (2005a,b) who fail to find any significant impact of aid on growth even after carefully controlling for initial conditions and the policy stance.

The fact that aid effectiveness may be related to the domestic policy stance raises a different question, that has been central to much of the literature. How should a given volume of aid be allocated among recipient countries? Two strategies can be distinguished. First, the granting of aid could be made conditional to the recipient country implementing appropriate policies. This was the approach adopted by most donors and still prevalent in the granting of debt relief to the highly indebted poor countries. The problem with this approach is that conditionality has not proved to be terribly effective, with the same policy measures being bought repeatedly by bilateral donors and

multilateral agencies. An alternative strategy, advocated by Easterly (2001), is to adopt a greater selectivity, and grant assistance only to those countries that have already in place sound policies. This is, for instance, the underlying principle of Collier and Dollar (2004) in their aid allocation process aimed at maximizing the worldwide reduction in poverty.

The effectiveness of aid is also likely to depend on the ultimate motivations of donors. A number of contributions have tried to assess which motivation - donor's political and commercial interest or recipients' needs - dominates. The consensus view until recently was that motivations differed among countries and over time, More specifically, the Nordic countries, including the Netherlands, seemed to be more responsive to the poverty and developmental objectives, France to political and commercial objectives, while the US, the UK and to some extent also Germany pursuing both objectives (Grilli and Daveri, 1993) . The more recent contribution by Alesina and Dollar (2002) shows that political considerations, in particular the colonial past and the voting pattern in the UN, are paramount in affecting the distribution of aid among recipient countries.

Interestingly enough, all of the contribution surveyed so far take for given the total amount of aid and investigate either its impact or its determinants. This is most evident in the much cited contribution of Collier and Dollar (2004), whose focus is exclusively on how to maximize the poverty reduction effect of a given volume of aid.

Examining how the aggregate aid budget is determined is not however an ancillary or subordinate question. This is the issue to which we turn in the next two sections of the paper.

3. Fiscal policy and foreign aid

Government must choose among competing allocations of limited resources. Most if not all of government spending is to some extent subject to the vagaries of the budgetary process. This is particularly true of discretionary items, such as official development assistance. There are good reasons to believe that, faced with budgetary difficulties, policy makers will first cut discretionary spending, with the least priority items taking the biggest toll.

For the sake of exposition we develop a simple model, where policy makers face a standard budget constraint:

$$B_{t+1} = (1+r)B_t - PS_t + A_t \tag{1}$$

where B_t indicates the stock of public debt at time t, r is the interest rate, A_t denotes a discretionary spending item (say, foreign aid) and PS_t is the primary surplus (excluding A_t). Suppose that policy makers seek to minimize the gap between A_t and its target level A*. They also dislike higher future debt (B_{t+1}), to the extent that it may constrain their future choices or put an undue burden on future generations. Formally, the policy maker minimizes the following intertemporal loss function:

$$\sum_{t=0}^{\infty} \left(\frac{1}{(1+r)} \right)^t \left(\frac{\alpha}{2}(A_t - A^*)^2 + \frac{1}{2}B_{t+1}^2 \right) \tag{2}$$

where α is the weight on A_t in the policy-maker's preferences. Maximizing the objective function subject to the budget constraint yields[1]:

$$A_t = \frac{1}{1+\alpha}\left(PS_t - (1+r)B_t\right) + \frac{\alpha}{1+\alpha}A^* \tag{3}$$

Equation (3) is consistent with the notion that discretionary spending is largely a function of the country's budgetary position. Either an increase in the primary surplus, PS_t, or a fall in the outstanding public debt stock will lead to an increase in the level of discretionary spending, A_t. In short, a strong fiscal position will be associated with higher discretionary spending, including on official development assistance. In addition, a larger value of α, i.e. a larger weight of A in the policy maker's utility function, should be associated with a greater rigidity of A and, as a result, a more limited responsiveness to changes in the budgetary conditions.

The model can easily generalized to the case where two forms of discretionary spending compete for the policy maker's attention. It can be shown once more that a stronger fiscal position will lead to higher spending on both items, with the allocation of spending being a function of their relative weights in the policy maker's preferences.

---

[1] See Gali and Perotti (2003) for a careful analysis of a fiscal reaction function.

So far for theory. What about the empirical evidence? Consider fig 1, showing the scatter plot for net official development assistance and public sector debt, both as a percentage of GDP, for a sample of 15 donor countries between 1980 and 2004. The schedules slopes downward, suggesting that in increase in the debt to GDP ratio is associated with a fall in the share of GDP devoted to foreign aid.

Figure 1

Official development assistance and public sector debt
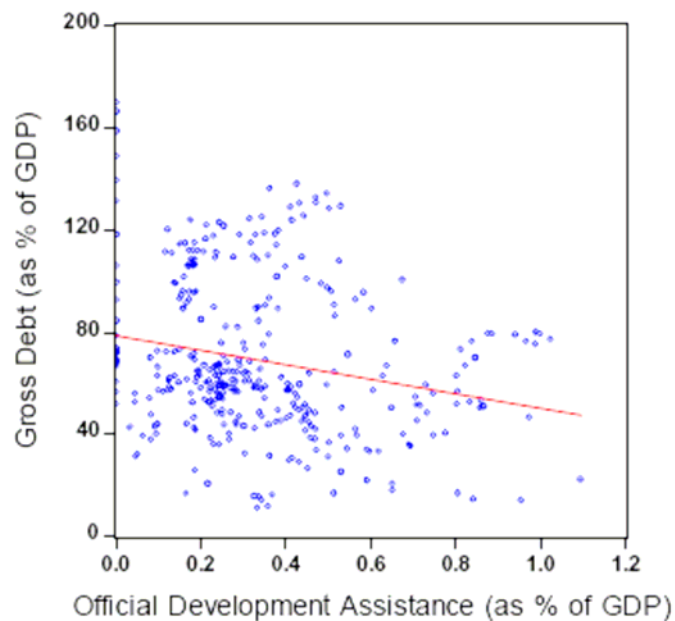
We also look at total official flows, i.e. the sum of official development assistance and other non concessional official flows, in fig. 2 and at net aid transfers, i.e. the carefully defined measure of foreign aid by Roodman (2004)[2] in fig. 3. In both cases, we find again a negative correlation between aid and domestic debt.

---

[2] Roodman's aid data are based on a net transfer rather than a net flow concept. See below for a fuller description.

Figure 2

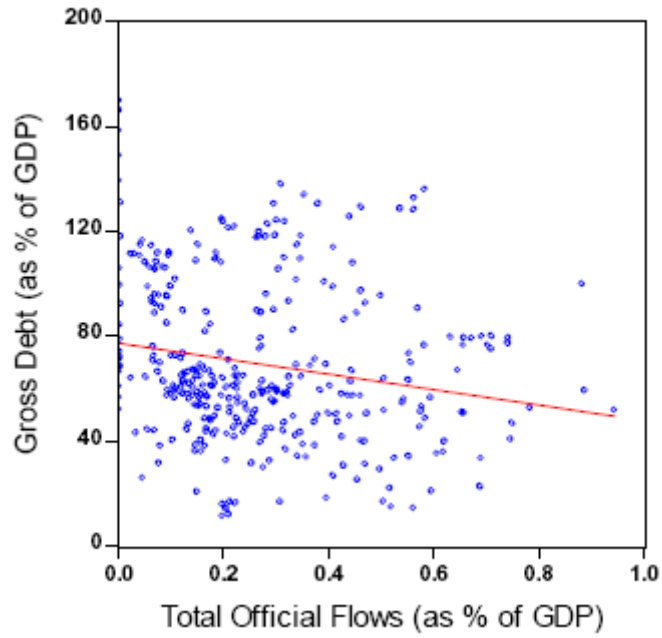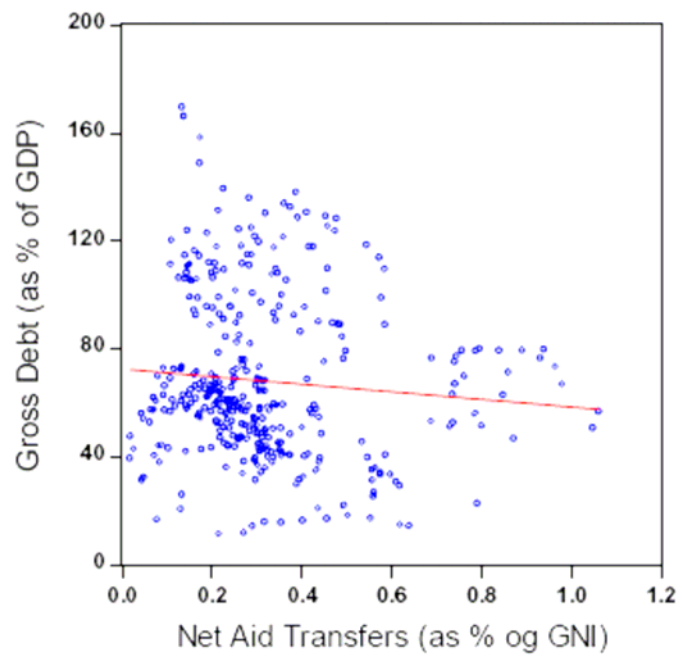Total official flows and public sector debt

Figure 3

Net aid transfers and public sector debt

In fig 4, we take one step further and relates net aid transfers with net government lending, i.e. the public sector budgetary balance. The correlation is positive as expected – a stronger budgetary position is associated with a larger flow of foreign aid – but not particularly strong.

Figure 4

Net aid transfers and government net lending
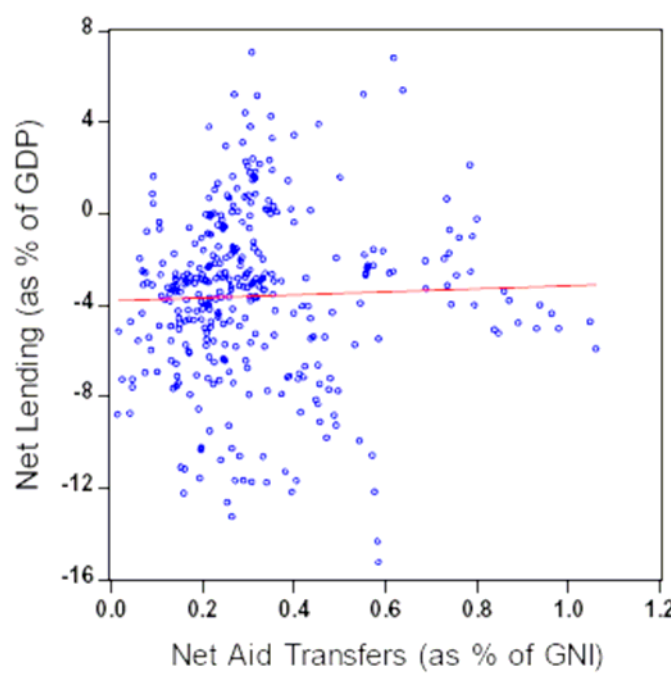
While the evidence so far, in particular the negative correlation between foreign aid and public sector debt, is consistent with the simple model outlined above, not much should be read in this relationship, however, since it aggregates countries with different propensities for official development assistance and includes periods with fairly different economic conditions. Only careful econometric analysis can detect whether the pattern of figure 1 is supported by existing evidence. We address this issue in the next section.

4. The econometric analysis of total aid flows

We first discuss the estimating equation. We then review the data to be used in the econometric analysis and finally present our results

a) the econometric equation

The estimating equation is basically inspired by the model outlined in the previous section. Accordingly, total aid flows (A_t) are assumed to be a function of the fiscal policy stance, as measured by the aggregate fiscal deficit[3] ($D_t = rB_t - PS_t$) and the stock of debt (B_t). All variables are normalized by GDP. Additional controls include the lagged level of aid flows (to allow for gradual adjustment to the target $A*$) and the output gap (to capture the impact of unexpected output shock). Formally:

$$A_t/GDP_t = \alpha + \beta_1(D_t/GDP_t) + \beta_2(B_t/GDP_t) + \beta_3((Y - Y*)/Y*) + \beta_4(A_{t-1}/GDP_{t-1})\ (4)$$

where Y is output, $Y*$ denotes potential output, and $(Y-Y*)/Y*$ is the output gap. We expect $\beta_1 < 0$ (a larger deficit indicates a weaker fiscal position and hence will depress spending on aid), $\beta_2 < 0$ (a larger stock of debt will force policy makers to cut discretionary spending), $\beta_4 > 0$ (reflecting persistence in budgetary allocation) and β_3 having either sign (since a positive output shock may not necessarily lead to higher spending). Equation 3 predicts that the coefficients on debt *(B/GDP)* and on deficit *(D/GDP)* should be equal, i.e. that $\beta_1 = \beta_2$, an easily testable implication.
.

We also know from eq. 3 that the level of foreign aid will be a function of its desired level (A*). In turn, the choice of A* may be a function of both income per capita in the donor country and the government's political orientation. Accordingly, we will investigate whether the actual disbursement of aid is a function of income per capita at home and the government's political orientation. Finally, as shown again by equation 3, the actual level of aid is a function of its weight in the policy maker's preference. Indeed, different governments may weigh differently foreign aid. Hence, the government's political orientation could affect the level of aid through two channels at least, namely through its impact either on $A*$ (a level effect) or on the policy maker's preference parameter α (a slope effect) or through both effects. To assess whether the slope effect is at work,

---

[3] Alternatively, we could include among the regressors the primary surplus, PS_t. In this case, however, the coefficient on gross debt (β_2) would no longer be constant but would depend on the level of the interest rate (see eq. 3). We prefer therefore to rely on the specification with the budgetary balance, D_t, where β_2 is not a function of r_t.

we will estimate an equation where the responsiveness of aid to budgetary conditions is a function of the government's political orientation. Putting all together, we will also rely on the following relatively more general specification:

$$A_t/GDP_t = \alpha + \alpha_1 PO_t + \alpha_2 Y_t + (\beta_1 + \beta_{12} PO_t)(D_t/GDP_t) + (\beta_2 + \beta_{22} PO_t)(B_t/GDP_t) +$$
$$\beta_3\left((Y - Y*)/Y*\right) + \beta_4\left(A_{t-1}/GDP_{t-1}\right)$$

(5)

where PO_t is the political orientation of the government at time t. In eq. 5, the parameters α_1 and α_2 are meant to capture the impact of income per capita and the government's political orientation on the desired level of aid, $A*$, while β_{12} and β_{22} reflect the influence of PO on the policy maker's preference parameter for foreign aid. Again, we will test, and eventually impose, the restrictions that $\beta_1 = \beta_2$ and $\beta_{12} = \beta_{22}$.

b) the data

Foreign aid flows data come from the Development Assistance Committee of the OECD. We control for loans repayments and rely accordingly on net flow data. We consider two alternative measures of official flows: net official development assistance (*ODA*), that comprises grants and loans with a least a grant element of 25%, and total official flows (*TOF*), that also includes all other transaction whose main objective is other than development or whose grant element is less than 25%. In addition, we rely on Roodman net aid transfer (*NAT*) data that are based on a net transfer rather than a net flow concept and, accordingly, net out interest payments.

Fiscal data, primary surplus and gross debt stock, also come from the OECD. We rely on gross debt rather than on net debt, as most public sector assets have no clear valuation and, accordingly, both markets participants and policy makers tend to base their assessment on gross rather than net debt. We do not adjust the level of the primary surplus for cyclical conditions, given that we have separately included the output gap in the list of regressors.

Finally, data on government's political orientation come from work at the Fondazione Enrico Mattei (FEEM, 2005). The index ranges from 1 to 10, with a larger value being associated with a more conservative government. On the (perhaps debatable) assumption that conservative governments

place less value on foreign aid and international solidarity, we expect a negative impact of PO_t on the level of our dependent variable.

c) the results

We first assess the stationarity properties of our series. We rely throughout on the Im-Pesaran-Shin test for panel data. All regressors are found to be stationary with comfortable significance levels (see table A in the appendix). For the dependent variable the pictures is mixed, however. While total official flows are stationary, the hypothesis of a unit root cannot be rejected for the official development assistance and the net aid transfer variables. In the end , we stick to our priori belief that aid variables as a percentage of GDP are stationary and report results for all the three dependent variables.

We first estimate eq. 4 on a sample of 15 donors countries between 1980 and 2004. We are perfectly aware that the pooling of 15 donor countries is a fairly strong assumption. Different countries may have different preferences with respect to foreign aid. These differences will be partly captured by the use of a fixed effect framework that allow for different intercepts among countries. However, as noted above, countries may differ also in the responsiveness of aid to budgetary conditions. We try to control for this possibility by introducing the policy maker's political orientation among the explanatory variables and, in addition, check whether interaction effects with fiscal indicators are significant. Finally, in a further attempt to reduce heterogeneity, we also consider separately European countries, with a view also to identifying the impact of the Stability and Growth pact.

Econometric results for the full sample are reported in table 1. We control for both time and country fixed effects. The latter are designed to capture differences in cross country preferences for foreign aid. We present our findings for total official flows (*TOF*) in column 1, for official development assistance (*ODA*) in column 2, and for net aid transfers (*NAT*) in column 3. Three main facts stand out. First, gross debt is a significant determinant of aid flows. The effect is not negligible. A ten percent increase in the ratio of public sector debt to GDP is associated with a fall of 0.012% in the GDP share of foreign aid in the short run and of 0.023% in the long run. Secondly, the impact of the budget is not well defined, being positive for *ODA* and *NAT*, as expected, but negative for *TOF*. In all three cases, though, the effect is not statistically different from zero. Moreover, when we impose the constraint that the coefficients on gross debt and net lending are equal ($\beta_1 = \beta_2$), the restriction is

never rejected by the data at very comfortable significance levels. In columns 4-6 we present the constrained estimates[4].

In table 2, we focus on EU countries only. We test and impose the restriction that $\beta_1 = \beta_2$. We also assess whether the link between fiscal policy and foreign aid has changed during the nineties. For this purpose, we introduce among the regressors a dummy variable *D92* (that takes a value of 1 after 1992 and zero otherwise) and interact it with the other explanatory variables. The main results can be summarized as follows. First, as for the full sample, a large deficit and high stock of public debt have a depressing effect on foreign aid. The effect is however found to be substantially larger than for the full sample, reflecting a greater sensitivity of foreign aid to fiscal conditions in the EU compared to other OECD countries. Second, the impact of the fiscal stance is not significantly stronger in the nineties, as shown by the insignificant coefficient on the interaction term between the fiscal policy situation and *D92*.

We can now turn to the more general specification of eq. 5. Standard specification tests (not reported here, for the sake of brevity) show that the level of GDP per capita plays no significant role in determining the aggregate level of foreign aid. This is not particularly surprising, given that our specification already includes both time and country fixed effects that, taken together, will typically pick up the impact of cross country differences in income level and their (gradual) evolution over time.

The results of estimating eq. 5 are reported in table 3. Again we test and then impose the restriction that the coefficients on debt *(B/GDP)* and on deficit *(D/GDP)* should be equal, i.e. that $\beta_1 = \beta_2$. To save on space, we focus on the standard and more widely used definition of foreign aid (*ODA*), which is more likely to capture the attention of (politically motivated) decision makers. In column 1, we present the results for the full sample. Two facts stand out (column 1). First, the fiscal policy stance maintains its role as a key determinant of spending on foreign aid. Second, as expected, a more conservative political orientation is associated with a lower volume of foreign aid, but this effect is not significant at conventional statistical levels. Even when we interact the fiscal policy stance with the political orientation variable, the latter is not statistically significant (column 2). Matters are virtually unchanged when we focus on the EU countries. In the specification where both the fiscal policy stance and the political orientation enter separately, only the former is statistically

---

[4] The restriction $\beta_1 = \beta_2$ is never rejected in any specifications. In the remainder of this paper therefore we only present the constrained estimates.

significant (column 3). When interacted, all lose statistical significance (column 4). Taken together, these findings seem to suggest that the impact of political variables is at best muted.

6. Conclusion and policy implications

Advocates of greater spending on foreign aid face a difficult dilemma. They can lobby for a special and differential budgetary treatment for official development assistance. They may even succeed in this endeavour. However, this strategy is loaded with risks. Suppose that, as it seems to be the case in the EU, additional lobbies also succeed in pushing for a more favourable treatment of other government programs (public investment, research and development, domestic security, defence, the transitional cost of structural reforms). Two things can happen, then. First, the list of exceptional items is sufficiently long that in the end none of them gets a favoured treatment. Second, policy makers bow to pressures and, as result, the size of the budget deficit deteriorates markedly. What would be the ultimate effect on foreign aid under this scenario? For the sake of illustration effect let assume (quite optimistically, given the exceedingly long list of exceptions and their sheer size in the budget) that the budget deterioration is equal to 1% of GDP. There will then be two negative repercussions on foreign aid. First, the direct effect of a larger budget deficit means that foreign aid will be curtailed. We have seen however that this direct effect, while potentially relevant, is harder to identify econometrically. Second, a permanently larger budget deficit will fuel the growth in the stock of public debt. With a nominal growth in GDP equal to 4% - a reasonable value for the EU as a whole – the steady state stock of public sector debt would increase by 25% of GDP. Our estimates suggest that by itself this would lead to a fall of 0.1% of the GDP share of foreign aid. This is a fairly large value that is equivalent to a third of the EU total development assistance and would virtually wipe out the Italian budget for foreign aid.

These estimates must be taken with considerable caution. They assume for instance the effects of fiscal policy to be linear and, even more crucially, to be the same among countries. Still, they provide a useful benchmark to assess the effectiveness of alternative strategies to boost the amount of public spending on foreign aid. What our results show is that even if we neglect the direct effect of a budgetary deterioration on the policy makers' propensity to commit resources to foreign aid the indirect effect working through the stock of debt can be quite large and easily more than wipe out the initial gains stemming from a more favourable fiscal treatment of foreign aid. In short, advocates of foreign aid hold a strong interest in a rigorous approach to fiscal policy.

References

Alesina A. and D. Dollar (2000), "Who gives foreign aid to whom and why?", Journal of Economic Growth, 5, 1, 33-63.

Burnside G. and D. Dollar (2000), "Aid, policies, and growth", American Economic Review, 90, 4, 847-868.

Burnside G. and D. Dollar (2004), "Aid, policies, and growth. Revisiting the evidence", Policy Research Working Paper n. 3251, the World Bank, Washington.

Chauvet L. and P. Guillaumont (2004), "Aid and growth revisited: policy, economic vulnerability, and political instability", in B. Tungodedn, N. Stern, and I. Kolstad (eds.), Toward pro poor policies – Aid, Institutions, and Globalization, World Bank / Oxford University Press.

Collier P. and D. Dollar (2002), "Aid, allocation, and poverty reduction", European Economic Review, 46, 1475-1500.

Collier P., Hoeffler and M. Soderbom (2004), "On the duration of civil war, Journal of Peace Research.

Dalgaard C., J. Hansen, and F. Tarp (2004), "On the empirics of foreign aid and growth, Economic Journal, 114, 191-216.

Easterly W. (2001), The elusive quest for growth, the MIT Press, Cambridge.

FEEM (2005), Political Database, Fondazione Eni Enrico Mattei

Gali J. and R. Perotti (2003), "Fiscal policy and monetary integration in Europe", Economic Policy, 37, 533-572.

Grilli E. and F. Daveri (1993), "Modelli di distribuzione geografica degli aiuti pubblici allo sviluppo. L'Italia e la comunità europea", in C. Santoro (ed.), I problemi della cooperazione allo sviluppo negli anni '90, il Mulino, Bologna.

Papanek (1972), "The effect of aid and other resource transfers on saving and growth in less developed countries", Economic Journal, 82, 934-950.

Rajan R. and A. Subramanian (2005a), "Aid And Growth: What Does The Cross-Country Evidence Really Show?", NBER Working Paper 11513, NBER, Cambridge, Mass.

Rajan R. and A. Subramanian (2005b), "What Undermines Aid's Impact On Growth?", NBER Working Paper 11657, NBER, Cambridge, Mass.

Roodman D. (2004), "An index of donor performance", Centre for Global Development, Working Paper n. 67.

Weisskopf J. (1972), "The impact of foreign capital flows on domestic saving on underdeveloped countries", Journal of International Economics, 2, 1, 25-38

Table 1

Foreign aid and fiscal policy

(Full sample)

dep var:							
	TOF (% of GDP)	**ODA** (% of GDP)	**NAT** (% of GDP)	**TOF** (% of GDP)	**ODA** (% of GDP)	**NAT** (% of GDP)
Constant	0.2132***	0.1233***	0.1141***	0.2121***	0.1256***	0.1163***
	0.0291	*0.0237*	*0.0255*	*0.0298*	*0.0229*	*0.0243*
Dep Var (t-1)	0.4680***	0.7790***	0.7696***	0.4706***	0.7743***	0.7648***
	0.0849	*0.0505*	*0.0599*	*0.0856*	*0.0488*	*0.0569*
Output Gap	-0.0006	0.0037	0.0044	-0.0009	0.0041	0.0047
	0.0029	*0.0031*	*0.0033*	*0.0027*	*0.0030*	*0.0031*
Net Lending(t-1)	-0.0021	0.0006	0.0006	-	-	-
	0.0021	*0.0015*	*0.0015*			
Gross Debt (t-1)	-0.0012***	-0.0006**	-0.0005**	-	-	-
	0.0003	*0.0003*	*0.0003*			
Net Lending(t-1) + **Gross Debt (t-1)**	-	-	-	-0.0012***	-0.0007***	-0.0006***
				0.0003	*0.0003*	*0.0003*
Sample	1981-2004	1981-2004	198-2004	1981-2004	1981-2004	198-2004
n° obs.	325	333	333	325	333	333
n° cross-section	15	15	15	15	15	15
Time specific effects	Yes	Yes	Yes	Yes	Yes	Yes
Country specific effects	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	*0.78*	*0.92*	*0.93*	*0.78*	*0.92*	*0.93*

Note: robust standard errors in parenthesis;
*** statistically significant at the 1% level
** statistically significant at the 5% level
* statistically significant at the 10% level

Table 2

Foreign aid and fiscal policy

(EU countries)

dep var:						
	TOF (% of GDP)	**ODA** (% of GDP)	**NAT** (% of GDP)	**TOF** (% of GDP)	**ODA** (% of GDP)	**NAT** (% of GDP)
Constant	0.3094***	0.1648***	0.1590***	0.3122***	0.1595***	0.1536***
	0.0508	*0.0342*	*0.0353*	*0.0510*	*0.0356*	*0.0376*
Dep Var (t-1)	0.4160***	0.7525***	0.7442***	0.4104***	0.7615***	0.7535***
	0.0958	*0.0519*	*0.0586*	*0.0966*	*0.0552*	*0.0619*
Output Gap	0.0004	0.0057*	0.0064*	0.0008	0.0053	0.0060*
	0.0031	*0.0033*	*0.0034*	*0.0035*	*0.0033*	*0.0034*
Fiscal Policy(t-1)	-0.0022***	-0.0010***	-0.0010***	-0.0020***	-0.0013***	-0.0012***
	0.0005	*0.0004*	*0.0004*	*0.0007*	*0.0005*	*0.0004*
D92 × Fiscal Policy(t-1)	-	-	-	-0.0003	0.0005	0.0005
				0.0005	*0.0004*	*0.0004*
Sample	1981-2004	1981-2004	1981-2004	1981-2004	1981-2004	1981-2004
n° obs.	254	261	261	254	261	261
n° cross-section	12	12	12	12	12	12
Time specific effects	Yes	Yes	Yes	Yes	Yes	Yes
Country specific effects	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	*0.75*	*0.90*	*0.92*	*0.75*	*0.90*	*0.92*

Note: see table 1.
Legend: Fiscal policy= net lending + gross debt, D92: dummy varaibel (=1 if year >1991)

Table 3

Foreign aid, fiscal policy, and political orientation

dep var:	All countries		EU countries	
	ODA (% of GDP)	ODA (% of GDP)	ODA (% of GDP)	ODA (% of GDP)
Constant	0.1476***	0.1805***	0.1845***	0.1548***
	0.0297	*0.0499*	*0.0419*	*0.055128*
Dep Var (t-1)	0.7757***	0.7712***	0.7558***	0.7577***
	0.0495	*0.0505*	*0.0514*	*0.051271*
Output Gap	0.0037	0.0037	0.0053	0.0055*
	0.0031	*0.0030*	*0.0034*	*0.003283*
Fiscal Policy (t-1)	-0.0007***	-0.0013*	-0.0010***	-0.0005
	0.0003	*0.0007*	*0.0004*	*0.000970*
Political Orientation (t-1)	-0.0037	-0.0084	-0.0039	0.0010
	0.0027	*0.0063*	*0.0041*	*0.008604*
(Political Orientation × Fiscal Policy)(t-1)	-	0.0001	-	-0.0001
		0.0001		*0.000168*
Sample	1981-2004	1981-2004	1981-2004	1981-2004
n° obs.	330	330	259	259
n° cross-section	15	15	12	12
Time specific effects	Yes	Yes	Yes	Yes
Country specific effects	Yes	Yes	Yes	Yes
Adj. R²	*0.92*	*0.92*	*0.90*	*0.90*

Note: see table 1.
Legend: Fiscal policy= net lending + gross debt

Appendix

Table A – IPS test for panel Unit Roots

	Output Gap (%)	Net Lending (%)	Gross Debt (%)	Net ODA (% GDP)	Net TOF (% GDP)	NAT (% of GDP)
	Level	Level	Level	Diff(1)	Level	Diff(1)
t-bar	-5.35745	-2.68016	-1.73776	-6.98663	-8.26780	-7.88695
Prob (Ψ)*	0.00000	0.00370	0.04110	0.00000	0.00000	0.00000
Lags	1 to 4	0 to 4	0 to 3	0 to 4	0 to 4	0 to 4
Trend	yes	yes	yes	yes	Yes	yes
Country fixed effects	yes	yes	yes	yes	yes	yes
Cross-Sections	15	15	15	15	15	15
Sample	1980-2004	1980-2004	1980-2004	1980-2004	1980-2004	1980-2004
Obs	322	328	340	307	295	307

* Probabilities are computed assuming asymptotic normality