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## Government ideology in donor and recipient countries: Does political proximity matter for the effectiveness of aid?

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## **Working Papers**

Kiel Institute  
for the World Economy



### **Government Ideology in Donor and Recipient Countries: Does Political Proximity Matter for the Effectiveness of Aid?**

Axel Dreher  
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**No. 1870** | August 2013

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## **Government Ideology in Donor and Recipient Countries: Does Political Proximity Matter for the Effectiveness of Aid?\***

Axel Dreher, Anna Minasyan and Peter Nunnenkamp

### **Abstract:**

Political proximity between donor and recipient governments may impair the effectiveness of aid by encouraging favoritism. By contrast, political misalignment between donor and recipient governments may render aid less effective by adding to transaction costs and giving rise to incentive problems. We test these competing hypotheses empirically by considering the political ideology of both governments along the left-right spectrum in augmented models on the economic growth effects of aid. Following the estimation approach of Clemens et al. (2012), we find that aid tends to be less effective when political ideology differs between the donor and the recipient.

**Keywords:** aid effectiveness, economic growth, politics and aid, government ideology.

**JEL classification:** O19, O11, F35, F53

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## 1. Introduction

Political motivations of aid and the political ideology of donors have received considerable attention in several strands of the aid literature. Left-wing donor governments are often perceived to be more generous in terms of their overall aid effort, as well as more altruistic in allocating aid across recipient countries – even though the available evidence is rather ambiguous in both regards.<sup>1</sup> Political motivations tend to undermine the effectiveness of aid in promoting growth and alleviating poverty. According to Bobba and Powell (2007), aid granted to political allies is ineffective for growth when voting patterns in the United Nations General Assembly (UNGA) are used to differentiate between allies and non-allies. Likewise, Dreher et al. (2013b) show that aid received while the recipient serves as a temporary member of the United Nations Security Council (UNSC) is less effective in increasing economic growth compared to aid received at other times.<sup>2</sup>

While the effects of geo-strategic motives of aid have frequently been discussed,<sup>3</sup> scant attention has been paid to the political ideology of recipient governments and the political proximity between donors and recipients along the left-right spectrum. This applies especially to the aid effectiveness literature, which focuses on the recipient countries' quality of governance, institutions, and economic policies to explain differences in effectiveness across countries (e.g., Burnside and Dollar 2000; Rajan and Subramanian 2008). Smets et al. (2013) represent a notable exception by accounting for government ideology in recipient countries as a determinant of the success or failure of World Bank projects. They find that the quality of loans from the Bank is higher when the recipient country has a left-wing government and that left-wing governments comply more fully with World Bank conditions. As stressed by Smets et al. (2013: 21), “ideology of government parties may conceivably have a differing effect on design quality, when countries work with other agencies that are not so strongly identified as the World Bank is with ‘Washington Consensus’ or market-liberalizing policies.”

In this study, we consider political ideology on the part of both donor and recipient governments. In particular, we assess whether political proximity along the left-right

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<sup>1</sup> On the determinants of overall aid effort, see Fuchs et al. (2012) and the literature given there. The role of the political ideology of donor governments in the allocation of aid is analyzed, *inter alia*, in Fleck and Kilby (2006) and Dreher et al. (2013a).

<sup>2</sup> See also Headey (2008), Bearce and Tirone (2010), Minoiu and Reddy (2010) and Bermeo (2011, 2013). For a more general theory of the political economy of aid, see Bueno de Mesquita and Smith (2009).

<sup>3</sup> The role of geo-strategic motives in the allocation of aid is even larger. Alesina and Dollar (2000) provide the seminal paper; on the United States see Kuziemko and Werker (2006), on the so-called ‘new donors’ see Dreher et al. (2011), on multilateral organizations, see Dreher et al. (2009a, 2009b).

spectrum affects the effectiveness of aid in promoting economic growth. In Section 2, we argue that it is theoretically ambiguous whether political proximity helps or hinders aid effectiveness. In our empirical analysis, we augment the two prominent aid-growth studies of Burnside and Dollar (2000) and Rajan and Subramanian (2008) by interacting the aid variable with our indicators of political proximity between donor and recipient governments. As discussed in detail in Section 3, we follow the estimation approach of Clemens et al. (2012). We report our estimation results in Section 4, finding that aid tends to be less effective when the political ideology differs between the donor and the recipient. Section 5 concludes.

## **2. Political alignment and the effectiveness of aid**

Political proximity with regard to the ideology of the governments of donor and recipient countries can change the effectiveness of aid in opposing ways. On the one hand, we expect the effectiveness of aid to be reduced if granted by a donor government to a recipient government of a different political ideology; the political misalignment gives rise to higher transaction costs and incentive problems. The effectiveness of aid is likely to suffer if donors and recipients do not share a common view of which actions work to achieve effective outcomes. On the other hand, aid between aligned governments could be less effective because it is more likely to be granted for strategic and political reasons. This would weaken the incentives to monitor the use of aid; aid then tends to persist even if not effective in achieving economic objectives (Dreher et al. 2013b). We elaborate on these two propositions in what follows.

High transaction costs related to the delivery and management of aid are widely viewed “as detracting from aid’s value” (Knack and Rahman 2007: 178). As noted by Bigsten (2006), the view that the costs of transferring aid render it ineffective can be traced back to Bauer (1971: 99): “It is by no means unusual for projects to absorb domestic inputs of greater value than net output, especially when the cost of administering the projects ... is also considered.” More recently, Kanbur (2006: 1579) observed that the mechanisms adopted by donors to track and monitor aid flows “are very intensive in terms of recipient capacity.”

High transaction costs can be attributed to insufficient coordination on the part of donors (Acharya et al. 2006, Bigsten 2006, Knack and Rahman 2007). However, misaligned ideology between the donor and the recipient is equally likely to impair the effectiveness of aid by adding to transaction costs. Such misalignment could add to transaction costs

especially if the gap between the political ideologies of donor and recipient governments is large.

The so-called Paris Declaration of 2005 in which donors and recipients committed themselves to render aid more effective lists various aspects of misaligned donor-recipient relations giving rise to higher transaction costs.<sup>4</sup> For instance, the Paris Declaration suggests that donors have traditionally been reluctant to “respect partner country leadership” and “base their overall support on partner countries’ national development strategies, institutions and procedures” (paragraphs 15 and 16). It also appears that partner countries and donors have often failed to “work together to establish mutually agreed frameworks that provide reliable assessments of performance” (paragraph 19). The subsequent Accra Agenda for Action of 2008 reiterated previous commitments, including the call on donors to “work with developing countries to agree on a limited set of mutually agreed conditions based on national development strategies” (paragraph 25). The OECD’s own monitoring of the Paris Declaration indicates that progress in implementing the proposals for better donor-recipient alignment has remained modest and partial at best.<sup>5</sup> The OECD’s monitoring hardly addresses the reasons for the persistent implementation deficits, but it can reasonably be assumed that diverging political ideology contributes to misaligned donor-recipient relationships and the associated transaction costs of the delivery and management of aid.

Furthermore, we expect aid relations between politically distant donors and recipients to impair the effectiveness of aid by giving rise to incentive problems, or – as Acharya et al. (2006) put it – indirect transaction costs in terms of dysfunctional bureaucratic and political behavior (see also Bigsten 2006). If political distance involves a lack of trust, donors may prefer a hands-on approach and disburse aid “in the form of hundreds of separate donor-managed projects” (Knack and Rahman 2007: 177), rather than in the form of general budget support and program-based approaches. Aid divided into many packets involves intensive negotiation and distinct management and reporting requirements (Acharya et al. 2006: 6). It could also add to poaching, i.e., donors absorbing talented local staff to improve their own project-related management and control – even though this often comes at the expense of more productive local development activities (Knack and Rahman 2007).

A lack of trust and disparate views on how to use aid (and the course of economic policy in general) in politically misaligned donor-recipient relationships are also likely to

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<sup>4</sup> For details, see <http://www.oecd.org/dac/effectiveness/34428351.pdf> (accessed: June 2013).

<sup>5</sup> For details, see the 2008 Survey on Monitoring the Paris Declaration (<http://www.oecd.org/development/effectiveness/41202121.pdf>; accessed: June 2013).

give rise to incentive problems with regard to conditionality. Donors may feel compelled to impose detailed conditions to justify aid to their political constituency at home. The recipients may be particularly tempted under such conditions to evade conditionality by diverting aid (and local development) funds.<sup>6</sup> As a result, the effectiveness of aid is reduced by time-consuming and resources-absorbing negotiations over reform programs and control mechanisms to ensure better compliance.<sup>7</sup> More fundamentally, conditional aid is unlikely to achieve its intended objectives without the commitment of the recipient government, which is harder to achieve in politically misaligned donor-recipient relationships.<sup>8</sup>

The incentive problems noted so far apply to different manifestations of political misalignment between donor and recipient governments. They tend to impair the effectiveness of aid independently of which government is on the left or right of the political spectrum. Nevertheless, one might suspect that incentive problems are particularly pronounced when the donor is left-wing while the recipient is right-wing. Azam and Laffont (2003) model aid as a contract where the donor government transfers aid in return for poverty reduction by the recipient government. In contrast to the donor who is assumed to be purely altruistic, the recipient government also cares for the welfare of the ruling elite. Likewise, Torsvik (2005) assumes donors to be ‘poverty averse’ so that governments in the recipient country can strategically exploit the altruism of donors by diverting funds from poverty alleviation efforts to the local elite. Arguably, the likelihood that the effectiveness of aid suffers from such crowding-out is particularly high with principal-agent problems between a left-wing donor and a right-wing recipient.<sup>9</sup>

However, political proximity between donor and recipient governments does not necessarily improve the effectiveness of aid; rather, it may encourage favoritism. Dreher et al. (2012, 2013b) discuss a number of reasons why aid that favors political allies might be less effective than aid given mainly to promote economic development, independent of the

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<sup>6</sup> It should be recalled, however, that Smets et al. (2013) find that left-wing governments comply more fully with loan agreements concluded with the World Bank. See also Cukierman and Tommasi (1998) who argue that left-wing governments are more likely to implement ‘conservative’ reform agendas under certain conditions.

<sup>7</sup> Smets et al. (2013) present the case of World Bank negotiations with Zambia on reforming state-owned financial institutions in 2004. It took the World Bank considerable time and resources to achieve an agreement with the initially opposed Zambian authorities. Arguably, the intricate negotiations involved costs for Zambia that the country was even worse prepared to bear.

<sup>8</sup> See Dreher (2009) for a discussion with respect to conditions included in International Monetary Fund programs.

<sup>9</sup> Brech and Potrafke (2013) find that left-wing donor governments tend to prefer grants over other aid, compared to other types of government. As they argue (2013: abstract), these results “confirm partisan politics hypotheses because grants are closely analogous to domestic social welfare transfer payments, and poverty and inequality are of greatest concern for less developed recipient countries.” However, as we mention in the Introduction, it continues to be disputed whether left-wing donor governments are necessarily more altruistic than right-wing donor governments.

political orientation of the recipient government. First, when aid is given for political reasons, it loses its effectiveness in promoting economic development as funds are diverted from more deserving projects to politically favored ones. If donors systematically allocated more aid to recipients of the same political orientation, the effectiveness of aid would suffer from declining marginal returns, compared to a selection of aid projects that is not biased by political proximity and based on expected marginal returns exclusively. Close allies might receive projects that donors would refuse to support elsewhere.

Second, political motives tend to weaken the incentive of donors and recipients to monitor project outcomes. On the donor side, bureaucrats may not interfere with their political masters' preference for like-minded recipient governments, as that might threaten the advancement of their careers in the aid agencies. To the extent that favoritism dominates the politicians' utility function, less effort might be spent on the ground to promote developmental objectives. Favoritism might thus allow projects to be pursued where important preconditions are not met or might reduce time and resources devoted to the preparation of a project (Kilby 2011, 2013). From the recipients' perspective, aid inflows from like-minded donor governments could be anticipated to persist even if important policy reforms to promote economic growth were delayed. Focusing on the International Monetary Fund (IMF) and the World Bank, Stone (2008), Kilby (2009) and Nooruddin and Vreeland (2010) suggest that political favoritism undermines the credibility of conditionality, rendering it ineffective. Dreher and Jensen (2007) find that political allies of the IMF's most important shareholders receive loans with softer conditions. The results of Nielsen (2013) show that donors punish human rights violations by reducing aid, but only in the case of non-allies. Taken together, these findings imply that political proximity may impair the effectiveness of aid as donors become less inclined to discontinue aid and recipients have the chance to postpone necessary but unpopular adjustments (Dreher et al. 2012).

Faye and Niehaus (2012) discuss a third channel through which political proximity between the donor and the recipient could reduce the effectiveness of aid. They show that aid from donors to politically close recipients might fuel political business cycles, as allies receive more aid prior to an election. Aid thus allows incumbent governments to distort the economy, which might reduce growth rates in the medium and longer run (after the immediate stimulating effect of expansionary electoral policies evaporates). At the same time, aid granted by politically close donors could render it more difficult for voters in the recipient country to select the "best" politicians, as voters receive distorted signals of competence. What is more, aid from such donors can be a valuable prize to get. This may



increase the number of political actors in the recipient country who try to get access to the fungible part of aid by entering the political stage, or it may even lead to coup d'états (Werker 2012). This will on average lead to less competent politicians and might thus reduce growth rates.

In summary, it is theoretically ambiguous whether political distance between the donor and recipient government impairs the effectiveness of aid, compared to aid from politically close donors. We therefore turn to the empirics to address this question.

### 3. Data and method

A substantial amount of literature investigates the question of whether and to what extent aid affects growth. Many of the contributors to this literature are divided into different camps, with groups of supporters finding that aid is effective and skeptics pointing to the lack of robustness of these results to the choice of control variables, samples, and methods of estimation (Doucouliagos and Paldam 2009). Rather than propagating our own model, therefore, we closely follow the approach in Clemens et al. (2012) and add our variables of interest to some of their models. Clemens et al. show that the most prominent previous attempts to control for the potential endogeneity of aid rely on invalid instruments.<sup>10</sup> Instead of suggesting more valid ones, Clemens et al. address the potential endogeneity of aid by differencing the regression equation, using aid that is more likely to affect growth in the short run, and lagging aid so that it can reasonably be expected to cause growth rather than being its effect. As in Dreher et al. (2013b), we base our analysis on their permutations of Burnside and Dollar (2000) and Rajan and Subramanian (2008) – the two studies that arguably gained the most attention in the recent literature on aid and growth. We follow these prominent previous analyses, and add our measures for political proximity (and their interaction with aid) to their main equations.<sup>11</sup>

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<sup>10</sup> As Bazzi and Clemens (2009) show in more detail, previous papers in the aid effectiveness literature rely on weak instruments – especially, but not exclusively, those relying on internal instruments using “black box” GMM estimations. Dreher et al. (2013b) show that instruments based on political alliances – which are more likely to satisfy the exclusion restriction than instruments based, e.g., on the widely-used population variable – do not satisfy the homogeneity assumption. In other words, the resulting coefficients measure the local average treatment effect of politically motivated aid, which is shown to be less effective than average aid.

<sup>11</sup> A skeptical reader might argue that the setup of Clemens et al. (2012) suffers from endogeneity. For example, donors might grant more aid to a newly elected reform-oriented government. Higher growth resulting from these reforms could then spuriously be attributed to the increase in aid. On the other hand, donors might give more aid to countries where they anticipate shocks that will reduce future growth rates. However, even if the direct estimate of aid is biased, we have no reason to expect a systematic bias for our variable of interest, the interaction of aid with political alignment for any given level of aid. As shown in Nizalova and Murtazashvili (2012: 2), “If all the regressors but the exogenous regressor and the interaction term between this exogenous regressor and an endogenous covariate are jointly independent of the exogenous regressor of interest, the OLS

In terms of timing, we focus on political color at the time the aid is disbursed.<sup>12</sup> We assume that disbursed aid takes one five-year period to become effective, in either increasing or decreasing economic growth, following Clemens et al. (2012).<sup>13</sup> As in Clemens et al. (2012) our reduced-form empirical model is at the country-period level:

$$\Delta Growth_{i,t} = \alpha + \beta \Delta Aid_{i,t-1} + \gamma \Delta (Aid_{i,t-1}^2) + \delta COLOR_{i,t-1} + \zeta \Delta Aid_{i,t-1} * COLOR_{i,t-1} + \eta \Delta X_{i,t} + \varepsilon_{i,t} \quad (1)$$

where  $Growth_{i,t}$  is a recipient country  $i$ 's average yearly growth of GDP per capita over period  $t$ . We denote the amount of aid (in percent of GDP) disbursed in the previous period as  $Aid_{i,t-1}$ .  $COLOR_{i,t-1}$  is defined as political proximity to the average donor weighted by the amount of aid a country receives from that particular donor. Specifically, we calculate it as:

$$COLOR_{i,t-1} = \sum_{j=1}^n s_{ij,t-1} * d_{ij,t-1},$$

where  $s_{ij,t-1}$  is the aid share of donor  $j$  in recipient country  $i$ 's total bilateral aid from members of the Development Assistance Committee (DAC) in period  $t - 1$ ;  $d_{ij,t-1}$  is political proximity between recipient country  $i$  and donor  $j$  at the time the aid is disbursed, measured as the absolute distance in political ideology between the recipient and the donor. We assign right-wing governments the value of one, center governments the value of 2, and left-wing governments the value of 3, based on the classification of Beck et al. (2001). Beck et al. code party orientation with respect to economic policies in these three categories.<sup>14</sup>

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estimate of interaction term's coefficient is consistent." In the words of Nunn and Qian (2012), "interacting an arguably exogenous term [political distance between donors and recipients] with one that is potentially endogenous [foreign aid], can be interpreted as exogenous since we directly control for the main effect of the endogenous variable." Nunn and Qian refer to section 2.3.4 of Angrist and Krueger (1999) for a technical discussion.

<sup>12</sup> This is contrary to Dreher et al. (2013b) who focus on the consequences of disbursements that have been committed due to geo-strategic importance. It can reasonably be assumed that most of the transaction costs and incentive problems discussed in Section 2 arise after aid is actually disbursed by a donor government to a recipient government with different political ideology. For instance, intrusive monitoring by the donor and evasion of conditionality by the recipient are more closely related to disbursements of aid than to commitments. However, some of the channels we identify in Section 2 could be prevalent already at the time the aid is committed. When we lag political color by two periods, instead of one, the results are very similar in the Rajan-Subramanian model but not significant at conventional levels in the Burnside-Dollar model.

<sup>13</sup> As summarized in Headey (2008), aid affects growth most substantially 5-9 years after it has been disbursed, on average. If aid is disbursed evenly over time, the average positive distance between a dollar being disbursed and growth in the contemporaneous four-year period is 16 months (Roodmann 2004, Headey 2008). Headey thus lags aid by one four-year period, so that the average positive distance between disbursements and their potential effects is 5 years and 4 months.

<sup>14</sup> According to Keefer (2012), right-wing parties are defined as "conservative, Christian democratic, or right-wing," left-wing parties are "communist, socialist, social democratic, or left-wing" and center refers to parties that are "centrist or when party position can best be described as centrist (e.g. party advocates strengthening private enterprise in a social-liberal context)."

They assign a fourth category, “not applicable,” when a party has no ideology with respect to economic policy.<sup>15</sup> We assign these non-partisan governments the value of 2, together with centrist governments. This is reasonable as governments in this category fall in between left-wing and right-wing ideologies (see also Aleman 2009). However, we test for the robustness of our results to excluding non-partisan governments instead.

We calculate distance as the absolute difference between the value for the donor government and the value for the recipient government. The resulting measure thus ranges from a distance of zero when the donor and recipient governments are of the same political color to a distance of 2 indicating the maximum possible value of political misalignment. Multiplying distance with a donor’s aid share results in the overall measure of aid-weighted distance for each year, which is then averaged over the respective period of time. All regressions include the control variables used in the original studies, denoted  $X$ , which we include contemporaneously.<sup>16</sup> In some specifications we include aid squared to test for decreasing returns to aid, again following Clemens et al. (2012). Finally,  $\varepsilon$  is an error term.

According to Clemens et al. (2012), the appropriate method to test for the effect of aid on economic growth has to account for the non-linear effect of aid, has to remove country fixed-effects through first-differencing, and has to lag aid by one period. As they argue, this specification minimizes potential misspecification due to reversed causality between aid and growth, and omitted variables bias.<sup>17</sup> This is our preferred estimation strategy. We report the results in the next section.

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<sup>15</sup> Specifically, “not applicable” is assigned when the party does not focus on economics, or there are competing ideological wings, or information about the party’s program is not available. In almost half of these observations, the chief executive is either independent, the monarch, from the military, or parties do not exist at all. In our sample, this coding is applied to 116 countries in at least one period (36 percent of all observations).

<sup>16</sup> The regressions of Rajan and Subramanian include: (log) initial GDP/capita, initial (Sachs-Warner) trade policy index, (log) initial life expectancy, (log) inflation, initial M2/GDP, budget Balance/GDP, revolutions, and period dummies. Burnside and Dollar control for (log) initial GDP/capita, assassinations, ethnic fractionalization\*assassinations, initial M2/GDP, an index for economic policy, and period dummies. The original studies also include time-invariant variables that are removed here through taking differences. Appendix A reports the sources and definitions of all variables, while we show descriptive statistics in Appendix B.

<sup>17</sup> In addition, Clemens et al. seem to prefer a measure of early-impact aid over total aid. We do not use this measure here, given that we are not primarily interested in the effects of a certain type of aid itself, but in the difference in effectiveness in politically aligned and misaligned aid relationships. We prefer our results to be comparable with the broader literature on aid effectiveness, and therefore focus on overall aid. To the extent that parts of aid are not systematically related to growth, the larger noise reduces the probability that we find a significant effect. As outlined above, we lag disbursements by one period to account for timing.

### 3. Results

Table 1 shows the results for the Rajan and Subramanian (RS) regressions using the extended data of Clemens et al. (2012) which cover the 1975-2005 period.<sup>18</sup> All data are averaged over five years. The dependent variable is the (change in the) average annual growth rate of real GDP per capita; we measure aid as (the change in) gross bilateral Official Development Assistance (ODA) as a percentage of GDP.<sup>19</sup>

Column 1 of Table 1 does not include our political alignment measure. As can be seen, average bilateral aid does not affect economic growth at conventional levels of significance.<sup>20</sup> In column 2 we include political color (“aid-weighted distance”) and its interaction with aid. The results show a significant and negative interaction, at the one percent level. We are interested in the marginal effect of aid, which now depends on the value of political distance. In terms of the notation in equation (1), the marginal effect of  $\Delta Aid$  amounts to  $\beta + \zeta COLOR_{i,t-1}$ . We calculate it over the range of political distance in our sample, from zero to two, and show the result in Figure 1, together with the 90 percent confidence interval.

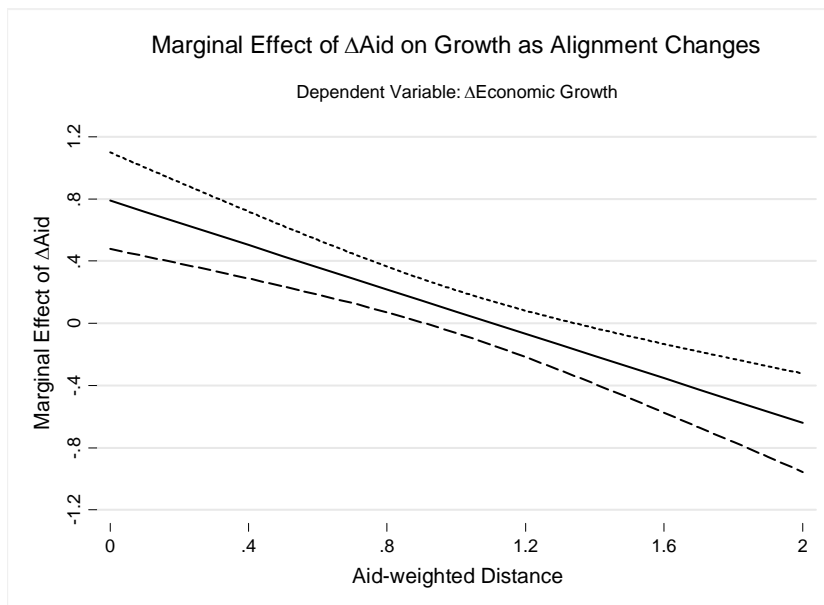


Figure 1: The effect of aid on growth, Rajan and Subramanian specification

<sup>18</sup> The sample is limited by the availability of political ideology in Beck et al. (2001), which is not available prior to 1975.

<sup>19</sup> The data for per capita GDP growth are calculated based on the Penn World Table, updated for the year 2005 using the World Development Indicators, as described in the technical appendix to Clemens et al. (2012).

<sup>20</sup> Note that this result does not arise from the omission of squared aid. If we include it, the squared term is negative, but not significant at conventional levels. This is different from Clemens et al. who use net disbursements from all DAC donors (thus including the European Union), rather than gross disbursements from bilateral donors, as we do.

As is obvious from the negative coefficient of the interaction term ( $\zeta$ ), Figure 1 shows the marginal effect of changes in aid to decrease with political distance. Calculated at average distance (which is 0.93), the marginal effect implies that an increase of aid by one percentage point increases growth by 0.12 percentage points. However, the marginal effect of aid on growth at the average political distance just fails to be significant at conventional levels. At the lowest political distance of zero, a one percentage point increase of bilateral aid increases GDP per capita growth by 0.79 percentage points (which is statistically significant at the one percent level). By contrast, at the highest political distance of two, a one percentage point increase in aid decreases growth by 0.64 percentage points (which is again significant at the one percent level). For illustration, consider the example of Gambia. Gambia's aid-weighted distance was 0.37 in the 1976-80 period. Gambia's aid in percent of GDP increased from 9 percent in 1976-80 to 14 percent in 1981-85. The corresponding change in aid of five percentage points would have increased per capita GDP growth by 2.6 percentage points, according to our estimates. Gambia's aid further increased to 23 percent in the 1986-90 period, while its distance increased to 1.5. The corresponding increase in aid of 9 percentage points would lead to a decrease of 2.5 percentage points in growth, according to our estimates.

To put these results in perspective, consider the marginal effects of the control variables. The statistically significant variables include (log) initial GDP per capita, (log) inflation, the budget balance, and revolutions. According to column 2, the coefficient on initial GDP per capita implies that growth decreases by 0.76 percentage points when initial GDP per capita increases by ten percent. Our model also shows that each additional revolution decreases GDP per capita growth by 0.73 percentage points. When inflation increases by ten percent, GDP per capita growth decreases by 0.13 percentage points and an increase in the budget balance by one percentage point increases growth by 0.29 percentage points. Overall, the effect of political distance on the marginal effect of aid on growth is clearly not negligible, compared to the other variables in the model.

In column 3 we add aid squared and its interaction with *Color*. The results show that these additional variables are not significant at conventional levels. Decreasing returns to aid do not seem to play a role here, and neither does the impact of political distance depend on the amount of aid in a non-linear way.

Column 4 replaces total bilateral aid, aid-weighted political distance, and their interaction by two separate aid variables indicating the amount of aid received by aligned and non-aligned donors, respectively. Specifically, bilateral aid from aligned donors is the sum of

aid disbursements to GDP in each year from donors with zero political distance to the particular recipient, averaged over the respective period of time. Bilateral aid from non-aligned donors is calculated in analogy for aid relationships in which the donor is left-wing and the recipient is right-wing, or vice versa.<sup>21</sup> In line with the results so far, aid from politically aligned donors is not significant at conventional levels, while growth decreases with aid received from misaligned donors, at the five percent level of significance. According to the coefficient, an increase in aid from non-aligned donors by one percentage point reduces growth by 0.26 percentage points.

Columns 5 and 6 include aid squared to test for potentially decreasing returns to aid. Again, aid squared is not significant at conventional levels, as shown in column 5. When we include two separate squared terms for the two types of aid (in column 6), there do not seem to be decreasing (or increasing) returns to scale from aid donated by politically aligned donors. At the same time, it appears that aid from donors of opposite color decreases growth, statistically significant at the five percent level, once it exceeds 0.04 percent of GDP. Overall, we conclude that aid from politically aligned donors does not affect growth, while aid from politically misaligned donors reduces growth when given in large amounts.

Table 2 replicates the analysis focusing on the regressions of Burnside and Dollar (BS), again using the extended dataset of Clemens et al. (2012). These data are averages over four rather than five years and again cover the 1975-2005 period before differencing and lagging.

As can be seen, the results are weaker overall but confirm the pattern observed above. In column 2, the interaction between aid and *Color* is marginally insignificant.<sup>22</sup> However, Figure 2 shows that the effect of aid again turns negative (at the ten percent level) when distance becomes large (i.e., larger than 1.3).

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<sup>21</sup> In other words, we contrast aid relations at the opposite ends of the range of political distance. For this exercise, we omit aid relations with a political distance of “one,” i.e., where either the donor or the recipient is in the political center.

<sup>22</sup> Note that the insignificance is driven by one country, the Democratic Republic of Congo. Once we exclude the Democratic Republic of Congo the coefficient is significant at the ten percent level.

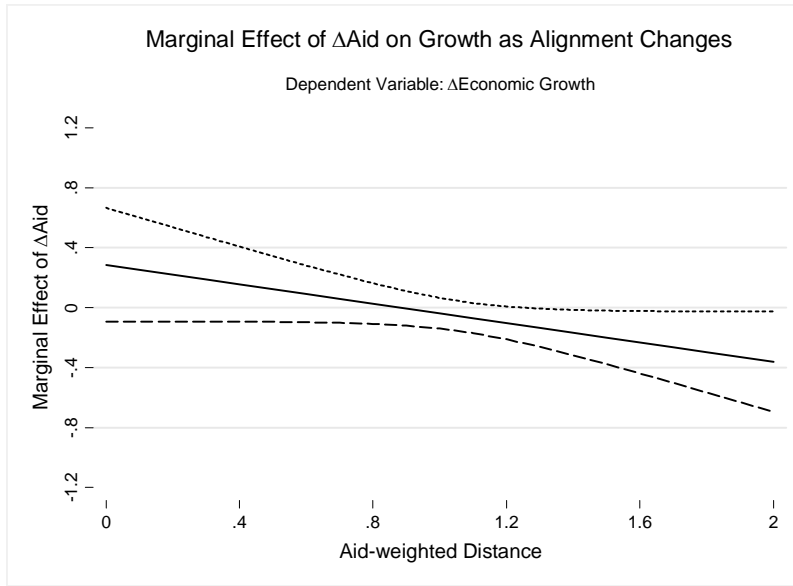


Figure 2: The effect of aid on growth, Burnside and Dollar specification

Again, aid squared and its interaction with *Color* are not significant at conventional levels (column 3).<sup>23</sup> When we separate aid from politically aligned and misaligned donors, we again find that aid in misaligned aid relationships hurts growth, while aid in politically aligned relationships does not affect growth at conventional levels of significance (column 4). Total aid squared is not significant at conventional levels (column 5), and neither are the interaction terms in column 6, contrary to the results obtained above. Overall, the results for the Burnside and Dollar specifications show that politically misaligned donor-recipient relations impair the effectiveness of aid in a linear way.

We next test for the robustness of our results to a different definition of “center” as political color. In the previous regressions, this category included observations coded as non-partisan in the Database of Political Institutions. To test for robustness, we here exclude those observations that are not explicitly coded as “center” in Beck et al. (2001), consequently reducing the number of observations in the sample.

Table 3 shows the results for the specifications of columns 2 and 3 of Tables 1 and 2 (we do not show the results for the control variables to reduce clutter). As can be seen in columns 1 and 2 of Table 3, our results are fully robust to this change in the Rajan and Subramanian specification. When we focus on the Burnside and Dollar specification (in columns 3 and 4), the coefficients are not significant at conventional levels, the exception

<sup>23</sup> Note that the insignificant coefficients on aid and its interaction with political color are now conditional on aid squared and its interaction with *Color*. Hence, it cannot be concluded that aid does not depend on political color. Given the insignificance of the additional variables we did not calculate the marginal effect of aid for this (inefficient) specification.

being aid squared, which is significant at the ten percent level with a negative coefficient. Note however that these results refer to regressions including 36 countries only.<sup>24</sup> Columns 5-10 replicate the regressions separating aid from aligned and non-aligned donors from Tables 1 and 2 using the alternative definition of *Color*. Here, the main results are unchanged.<sup>25</sup>

As a next step, it is interesting to see whether all types of differences in the political orientation between the donor and recipient change the effectiveness of aid in the same way. Recall that we hypothesized incentive problems to loom particularly large when the donor is altruistic and poverty-averse, while the recipient government cares more for the welfare of the ruling elite and exploits the altruism of donors. This would imply that misalignment between a left-wing donor and a right-wing recipient would be more harmful for the effectiveness of aid than misalignment between a right-wing donor and a left-wing recipient.

We test this hypothesis in Table 4. We introduce interactions between aligned and non-aligned donor-recipient pairs with dummies indicating that the recipient government was either left-wing or center (and right-wing recipients thus being the omitted category).<sup>26</sup> Again, we do not report the results for the control variables in the table. Column 1 applies the specification following Rajan and Subramanian, column 2 applies the specification of Burnside and Dollar. As can be seen, the Rajan and Subramanian specification indicates that aid in misaligned relationships is significantly negative when given by a right-wing donor to a left-wing recipient, in particular. The coefficient shows that the marginal effect of aid on growth is reduced by 0.65 percentage points when the donor is right-wing and the recipient is left-wing, compared to when the donor is left-wing and the recipient right-wing. By contrast, aid from non-aligned donors proves to be harmful, independent of whether the recipient is left- or right-wing when applying the Burnside and Dollar specification in column 2.<sup>27</sup> We do neither find statistically significant differences between the two types of political alignment, i.e., donor-recipient pairs that are aligned on the left or on the right of the political spectrum, nor for donor-recipient pairs with center recipients.

Taken together the evidence is inconclusive, though clearly in conflict with the hypothesis derived from the models of Azam and Laffont (2003) and Torsvik (2005). One

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<sup>24</sup> When we run regressions using the same observations but using our original definition of *Color*, the coefficients of interest are equally insignificant. This suggests that it is due to the reduced sample that the coefficients are no longer significant in Table 3. Importantly, this does not imply that *Color* would remain significant if the different definition of “center” were available for the full sample underlying Table 2.

<sup>25</sup> Again, the significance of the marginal effect of aid in column 9 depends on the significance of aid squared; it can thus not be concluded from this specification that aid from non-aligned donors is insignificant.

<sup>26</sup> The regression specifications are those of column 4 in Tables 1 and 2.

<sup>27</sup> When we again add squared aid terms to the regression all of them are insignificant at conventional levels.



may suspect that right-wing donor governments are more likely to use aid as a means of buying political support – not necessarily from traditional allies but also from left-wing recipient governments. Another possible explanation could be that right-wing donor governments are particularly intrusive in conditioning aid in their relations with left-wing recipients, thereby increasing transaction costs.

## **5. Conclusions**

Previous studies on the economic growth effects of foreign aid have focused on factors such as the quality of governance, institutions and economic policies in recipient countries to explain differences in the effectiveness of aid. By contrast, the political ideology of governments and the political proximity between donors and recipients along the left-right spectrum have received scant attention. Theoretically, political proximity has ambiguous effects: On the one hand, political proximity may reduce the growth effects of aid by encouraging favoritism. On the other hand, political misalignment between the governments of donor and recipient countries may render aid less effective by adding to transaction costs and giving rise to incentive problems.

We test these competing hypotheses empirically by considering the political ideology of both governments along the left-right spectrum. We account for political proximity by augmenting the two prominent aid-growth studies of Rajan and Subramanian (2008) and Burnside and Dollar (2000). Specifically, we interact the aid variable with our indicators of political proximity. We follow the approach of Clemens et al. (2012) and mitigate potential endogeneity problems by estimating the augmented models in first differences.

We find that aid tends to be less effective when political ideology differs between the donor and the recipient. The interaction between aid and political proximity is significantly negative in the augmented model of Rajan and Subramanian (2008). At the lowest political distance, a one percentage point increase of bilateral aid increases GDP per capita growth by 0.79 percentage points, while it decreases growth by 0.64 percentage points at its highest level. The evidence is similar, though weaker, in the augmented model of Burnside and Dollar (2000). Furthermore, the growth-impairing effect of political distance between the governments of donor and recipient countries is corroborated when replacing the interaction terms by two separate aid variables, indicating the amount of aid received by politically aligned and non-aligned donors, respectively. In contrast to aid from politically closer donors, aid from politically misaligned donors tends to be associated with significantly lower growth.

We do not find evidence, however, that political political misalignment is more harmful for growth if left-wing donors grant aid to right-wing recipients.

Further research could help disentangle the specific mechanisms underlying our major finding that political misalignment between donors and recipients impairs the effectiveness of aid. Detailed country studies may reveal distinct characteristics of politically misaligned aid relationships, including growth-impairing intrusiveness on the part of donors and/or evasion of conditionality and monitoring on the part of recipients. A related question that could be analyzed in greater detail is whether politically misaligned donor-recipient relations give rise to higher transaction costs by being associated with mission creep, fine-tuned aid and donor-managed projects.

In any case, our findings suggest that negative growth effects of aid were easier to avoid if donors focused on recipients with similar political ideology. This invites a new dimension of aid selectivity, in addition to targeting aid according to recipient need and merit. It also invites a new dimension of coordination among donors. It appears that it would be easier for donors to “respect partner country leadership,” as the Paris Declaration has put it, and to reduce transaction costs if donors specialized not only according to comparative advantages they might have in certain countries or sectors, but also left politically misaligned recipients to donors with a closer political fit.

## References

- Acharya, Arnab, Ana Teresa Fuzzo de Lima and Mick Moore, 2006, Proliferation and Fragmentation: Transaction Costs and the Value of Aid, *Journal of Development Studies* 42, 1: 1-21.
- Alesina, Alberto and David Dollar, 2000, Who Gives Aid to Whom and Why? *Journal of Economic Growth* 5, 1: 33-63.
- Aleman, Jose, 2009, The Politics of Tripartite Cooperation in New Democracies: A Multi-level Analysis, *International Political Science Review* 30, 2: 141-162.
- Angrist, Joshua and Alan Krueger, 1999, Empirical Strategies in Labor Economics, in: Orley Ashenfelter and David Card (eds.), *Handbook of Labor Economics*, Elsevier: 1277-1366.
- Azam, Jean-Paul and Jean-Jacques Laffont, 2003, Contracting for Aid, *Journal of Development Economics* 70, 1: 25-58.
- Banks, Arthur S. and Kenneth A. Wilson, 2007, 2012, Cross-National Time-Series Data Archive, Databanks International, Jerusalem, Israel; <http://www.databanksinternational.com>.
- Bauer, Peter T., 1971, *Dissent on Development: Studies and Debates in Development Economics*, London (Weidenfeld and Nicholson).
- Bazzi, Samuel and Michael A. Clemens, 2009, Blunt Instruments: A Cautionary Note on Establishing the Causes of Economic Growth, Center for Global Development Working Paper 171.
- Bearce, David H. and Daniel C. Tirone, 2010, Foreign aid effectiveness and the strategic goals of donor governments, *Journal of Politics* 72, 3: 837-851.
- Beck, Thorsten, George Clarke, Alberto Groof, Philip Keefer and Philip Walsh, 2001, New tools in comparative political economy: The Database of Political Institutions, *World Bank Economic Review* 15:1, 165-176.
- Bermeo, Sarah B., 2011, Foreign Aid and Regime Change: A Role for Donor Intent, *World Development* 39, 11: 2021-2031.
- Bermeo, Sarah B., 2013, Aid is Not Oil: Donor Preferences, Heterogeneous Aid, and the Aid-Democratization Relationship, draft.
- Bigsten, Arne, 2006, Donor coordination and the uses of aid. Göteborg University <http://gupea.ub.gu.se/dspace/bitstream/2077/2723/1/gunwpe0196.pdf> (accessed: June 2013); French version: *Revue d'économie du développement* 14 (2/3): 77-103

- Bobba, Matteo and Andrew Powell, 2007, Aid effectiveness: politics matters, Inter-American Development Bank Research Department Working Paper 601.
- Brech, Viktor and Niklas Potrafke, 2013, Donor ideology and types of foreign aid, *Journal of Comparative Economics*, forthcoming.
- Bueno de Mesquita, Bruce and Alastair Smith, 2009, A Political Economy of Aid, *International Organization* 63, 2: 309-340.
- Burnside, Craig and David Dollar, 2000, Aid, Policies and Growth, *American Economic Review* 90, 4: 847-868.
- Clemens, Michael A., Steven Radelet, Rikhil R. Bhavnani and Samuel Bazzi, 2012, Counting chickens when they hatch: Timing and the effects of aid on growth, *Economic Journal* 122: 590-617.
- Cukierman, Alex and Mariano Tommasi, 1998, When Does It Take a Nixon to Go to China. *American Economic Review* 88, 1: 180-197.
- Doucouliafos, Hristos and Martin Paldam, 2009, The aid effectiveness literature: The sad results of 40 years of research, *Journal of Economic Surveys* 23, 3: 433-461.
- Dreher, Axel, 2009, IMF Conditionality: Theory and Evidence, *Public Choice* 141, 1-2: 233-267.
- Dreher, Axel, Vera Eichenauer and Kai Gehring, 2013b, Geopolitics, Aid and Growth, University of Heidelberg, draft.
- Dreher, Axel and Nathan M. Jensen, 2007, Independent Actor or Agent? An Empirical Analysis of the Impact of US Interests on IMF Conditions, *Journal of Law and Economics* 50, 1: 105-124.
- Dreher, Axel, Stephan Klasen, James Raymond Vreeland and Eric Werker, 2012, The costs of favoritism: Is politically-driven aid less effective? *Economic Development and Cultural Change*, forthcoming.
- Dreher, Axel, Peter Nunnenkamp and Rainer Thiele, 2011, Are 'New' Donors Different? Comparing the Allocation of Bilateral Aid Between NonDAC and DAC Donor Countries? *World Development* 39, 11: 1950-1968.
- Dreher, Axel, Maya Schmaljohann and Peter Nunnenkamp, 2013a, The Allocation of German Aid: Self-interest and Government Ideology, Kiel Working Paper 1817, January 2013.
- Dreher, Axel, Jan-Egbert Sturm and James Raymond Vreeland, 2009a, Development Aid and International Politics: Does membership on the UN Security Council influence World Bank decisions? *Journal of Development Economics* 88, 1: 1-18.

- Dreher, Axel, Jan-Egbert Sturm and James Raymond Vreeland, 2009b, Global Horse Trading: IMF loans for votes in the United Nations Security Council, *European Economic Review* 53: 742-757.
- Easterly, William and Ross Levine, 1997, Africa's Growth Tragedy: Policies and Ethnic Division, *Quarterly Journal of Economics* 112, 4: 1203-1250.
- Faye, Michael and Paul Niehaus, 2012, Political Aid Cycles, *American Economic Review* 102, 7: 3516-3530.
- Fleck, Robert K. and Christopher Kilby, 2006, How Do Political Changes Influence US Bilateral Aid Allocations? Evidence from Panel Data, *Review of Development Economics* 10, 2: 210-223.
- Fuchs, Andreas, Axel Dreher and Peter Nunnenkamp, 2012, Determinants of Donor Generosity: A Survey of the Aid Budget Literature, Courant Research Centre: Poverty, Equity and Growth Discussion Paper 121.
- Headey, Derek, 2008, Geopolitics and the effect of foreign aid on economic growth: 1970-2001, *Journal of International Development* 20, 161-180.
- International Monetary Fund, 2005, International Financial Statistics, Washington, D.C.
- Kanbur, Ravi, 2006, The Economics of International Aid. In: Serge-Christophe Kolm and Jean Mercier Ythier (eds.), *Handbook of the Economics of Giving, Altruism, and Reciprocity. Volume 2: Applications* (pp. 1559-1588). Amsterdam (North-Holland).
- Keefer, Philip, 2012, DPI2012. Database of Political Institutions: Changes and Variable Definitions. Development Research Group, World Bank.
- Kilby, Christopher, 2009, The political economy of conditionality: An empirical analysis of World Bank loan disbursements, *Journal of Development Economics* 89, 1: 51-61.
- Kilby, Christopher, 2011, Assessing the contribution of donor agencies to aid effectiveness: The impact of World Bank preparation on project outcomes, mimeo.
- Kilby, Christopher, 2013, The political economy of project preparation: an empirical analysis of World Bank projects, *Journal of Development Economics*, forthcoming.
- Knack, Stephen and Aminur Rahman, 2007, Donor Fragmentation and Bureaucratic Quality in Aid Recipients, *Journal of Development Economics* 83, 1: 176-197.
- Kuziemko, Ilyana and Eric Werker, 2006, How much is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations, *Journal of Political Economy* 114, 5: 905-930.
- Minoiu, Camelia and Sanjay G. Reddy, 2010, Development aid and economic growth, *Quarterly Review of Economics and Finance* 50, 1: 27-39.

- Nielsen, Richard A., 2013, Rewarding Human Rights? Selective Aid Sanctions against Repressive States, *International Studies Quarterly*, forthcoming.
- Nizalova, Olena and Irina Murtazashvili, 2012, Exogenous Treatment and Endogenous Factors: Vanishing of Omitted Variable Bias on the Interaction Term, IZA DP No. 6282.
- Nooruddin, Irfan and James Raymond Vreeland, 2010, The Effect of IMF Programs on Public Wages and Salaries, in Rorden Wilkinson and Jennifer Clapp (eds.), *Global Governance, Poverty, and Inequality*, London: Routledge.
- Nunn, Nathan and Nancy Qian, 2012, Aiding Conflict: The Impact of U.S. Food Aid on Civil War, NBER Working Paper No. 17794.
- Rajan, Raghuram G. and Arvind Subramanian, 2008, Aid and growth, *Review of Economics and Statistics* 90, 4: 643-665.
- Roeder, Philip G., 2001, Ethnolinguistic Fractionalization (ELF) Indices, 1961 and 1985. <http://weber.ucsd.edu/~proeder/elf.htm>.
- Roodman, David, 2004, The Anarchy of Numbers: Aid, Development, and Cross-country Empirics, Center for Global Development Working Paper 32.
- Smets, Lodewijk, Stephen Knack and Nadia Molenaers, 2013, Political ideology, quality at entry and the success of economic reform programs, *Review of International Organizations*, forthcoming.
- Stone, Randall, 2008, The Scope of IMF Conditionality, *International Organization* 62, 4: 589-620.
- Torsvik, Gaute, 2005, Foreign Economic Aid: Should Donors Cooperate? *Journal of Development Economics* 77, 2: 503-515.
- Wacziarg, Romain T. and Karen Horn Welch, 2008, Trade Liberalization and Growth: New Evidence, *World Bank Economic Review* 22, 2: 187-231.
- Werker, Eric, 2012, The Political Economy of Bilateral Foreign Aid, in G. Caprio (ed.), *Handbook of Safeguarding Global Financial Stability: Political, Social, Cultural, and Economic Theories and Models*, 47-58. U.K.: Academic Press.
- World Bank, 2005, 2007, 2013, *World Development Indicators*, Washington, D.C.

Table 1: Political alignment and growth, 1975-2005, OLS, RS

	(1)	(2)	(3)	(4)	(5)	(6)
Aid/GDP	0.083 [0.096]	0.789*** [0.189]	0.923** [0.358]			
Color		-0.535 [0.547]	-0.473 [0.561]			
Aid/GDP*Color		-0.714*** [0.172]	-0.955** [0.398]			
Aid/GDP squared			-0.005 [0.014]			
Aid/GDP squared*Color			0.009 [0.014]			
Aid aligned				0.118 [0.184]	0.090 [0.177]	-0.195 [0.248]
Aid not aligned				-0.264** [0.117]	-0.273** [0.126]	0.002 [0.199]
Total aid squared					0.003 [0.003]	
Aid squared aligned						0.037 [0.024]
Aid squared not aligned						-0.026** [0.011]
Initial GDP p.c. (log)	-8.019*** [1.324]	-7.989*** [1.319]	-8.066*** [1.304]	-8.427*** [1.330]	-8.347*** [1.336]	-8.294*** [1.337]
Initial life expectancy (log)	-0.038 [0.073]	-0.060 [0.067]	-0.064 [0.066]	-0.036 [0.070]	-0.035 [0.070]	-0.035 [0.068]
Openness	0.542 [0.452]	0.443 [0.462]	0.472 [0.462]	0.551 [0.453]	0.558 [0.453]	0.544 [0.449]
Inflation (log)	-1.342*** [0.482]	-1.377*** [0.497]	-1.345*** [0.501]	-1.327*** [0.489]	-1.300*** [0.497]	-1.326*** [0.487]
Initial M2/GDP	0.002 [0.026]	0.005 [0.026]	0.004 [0.027]	0.005 [0.026]	0.004 [0.026]	0.002 [0.027]
Budget Balance/GDP	0.261** [0.121]	0.268** [0.122]	0.303** [0.133]	0.287** [0.129]	0.286** [0.129]	0.305** [0.129]
Revolutions	-0.681** [0.346]	-0.732** [0.343]	-0.747** [0.345]	-0.727** [0.352]	-0.709** [0.356]	-0.740** [0.345]
Adj. R-Squared	0.310	0.342	0.339	0.317	0.317	0.327
Number of Countries	67	67	67	67	67	67
Number of Observations	278	278	278	278	278	278

Notes: \*\*\* (\*\*, \*) significant at the one (five, ten) percent level of significance.

Table 2: Political alignment and growth, 1975-2005, OLS, BD

	(1)	(2)	(3)	(4)	(5)	(6)
Aid/GDP	-0.046 [0.061]	0.286 [0.231]	0.395 [0.363]			
Color		-0.16 [0.507]	-0.241 [0.515]			
Aid/GDP*Color		-0.323 [0.209]	-0.268 [0.381]			
Aid/GDP squared			-0.008 [0.019]			
Aid/GDP squared*Color			0.002 [0.018]			
Aid aligned				-0.057 [0.132]	-0.050 [0.133]	0.093 [0.275]
Aid not aligned				-0.292*** [0.098]	-0.278** [0.108]	-0.166 [0.188]
Total aid squared					-0.001 [0.001]	
Aid squared aligned						-0.020 [0.031]
Aid squared not aligned						-0.009 [0.011]
Initial GDP p.c. (log)	-7.170*** [1.643]	-7.286*** [1.667]	-7.144*** [1.680]	-7.420*** [1.597]	-7.445*** [1.596]	-7.416*** [1.598]
Policy index	0.850*** [0.236]	0.851*** [0.238]	0.866*** [0.238]	0.855*** [0.228]	0.865*** [0.235]	0.854*** [0.229]
Assassinations	-0.083 [0.222]	-0.098 [0.230]	-0.106 [0.234]	-0.110 [0.231]	-0.105 [0.231]	-0.102 [0.230]
Ethnic fractionalization * assassinations	0.341 [0.452]	0.338 [0.468]	0.342 [0.476]	0.357 [0.468]	0.350 [0.469]	0.342 [0.471]
Initial M2/GDP	3.478 [4.349]	3.191 [4.342]	3.228 [4.368]	3.084 [4.318]	3.038 [4.328]	2.986 [4.333]
Adj. R-Squared	0.238	0.238	0.236	0.250	0.248	0.246
Number of Countries	53	53	53	53	53	53
Number of Observations	269	269	269	269	269	269

Notes: \*\*\* (\*\*, \*) significant at the one (five, ten) percent level of significance.



Table 3: Political alignment and growth, 1975-2005, OLS, non-partisan governments excluded

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	RS	RS	BD	BD	RS	RS	RS	BD	BD	BD
Aid/GDP	0.904***	-0.556	-0.155	0.483						
	[0.340]	[0.425]	[0.246]	[0.462]						
Color	-0.456	-0.413	-0.465	-0.564						
	[0.610]	[0.613]	[0.489]	[0.505]						
Aid/GDP*Color	-0.829***	0.069	0.068	-0.184						
	[0.231]	[0.434]	[0.179]	[0.399]						
Aid/GDP squared		0.112***		-0.037*						
		[0.030]		[0.022]						
Aid squared/GDP*Color		-0.075***		0.021						
		[0.022]		[0.016]						
Aid aligned					-0.065	-0.254	0.007	0.076	0.116	0.432
					[0.199]	[0.217]	[0.462]	[0.140]	[0.161]	[0.311]
Aid not aligned					-0.392***	-0.651**	-0.046	-0.120*	-0.069	-0.130
					[0.125]	[0.252]	[0.253]	[0.063]	[0.141]	[0.164]
Total aid squared						0.013			-0.002	
						[0.012]			[0.004]	
Aid squared aligned							0.003			-0.047
							[0.066]			[0.030]
Aid squared not aligned							-0.029**			0.001
							[0.014]			[0.007]
Adj. R-Squared	0.314	0.348	0.214	0.222	0.301	0.315	0.301	0.225	0.220	0.219
Number of Countries	45	45	36	36	45	45	45	36	36	36
Number of Observations	159	159	156	156	159	159	159	156	156	156

Notes: \*\*\* (\*\*, \*) significant at the one (five, ten) percent level of significance.

Table 4: Political alignment and growth, 1975-2005, OLS

	(1)	(2)
	RS	BD
Aid aligned	0.044 [0.225]	-0.029 [0.171]
Aid not aligned	0.184 [0.280]	-0.425** [0.173]
Left	-0.024 [0.439]	0.636 [0.475]
Center	-0.534 [0.465]	0.468 [0.513]
Aid aligned*Left	0.042 [0.360]	-0.062 [0.263]
Aid not aligned*Left	-0.651** [0.317]	0.097 [0.207]
Aid aligned*Center	0.269 [0.402]	-0.024 [0.476]
Aid not aligned*Center	-0.637 [0.419]	0.410 [0.370]
Adj. R-Squared	0.322	0.239
Number of Countries	67	53
Number of Observations	278	269

Notes: \*\*\* (\*\*, \*) significant at the one (five, ten) percent level of significance.

## Appendix A: Definitions and sources

Variable	Definition	Original Source
Aid/GDP	Gross bilateral aid disbursements in percent of GDP.	DAC (2012), Table DAC2a
Color	Party orientation of the chief executive weighed by the share of bilateral aid.	Database of Political Institutions, DPI, 2012, Variable: EXECRLC
Rajan and Subramanian Specification GDP p.c. growth	Average annual growth rate of real GDP p.c. in constant international dollars.	Penn World Tables 6.2 and World Bank (2007) for the year 2005*
Initial GDP p.c. (log)	Logarithm of initial GDP p.c. in international prices.	Penn World Tables 6.2*
Initial life expectancy (log)	Natural logarithm of first non-missing value in each period of total life expectancy.	WDI (2007)*
Openness	Wacziarg-Welch (2008) extension of the initial Sachs and Warner (1995) openness index.	Wacziarg and Welch (2008), updated by Clemens et al. (2012)*
Inflation (log)	Natural log of (1+consumer price) inflation.	WDI 2005, 2007, IFS 2005, Clemens (2012)*
Initial M2/GDP	Money and quasi-money (M2) to GDP.	WDI (2007)*
Budget Balance/GDP	Overall budget balance, including grants. Measured as cash surplus/deficit to GDP.	WDI (2005, 2007), IFS (2005), Clemens (2012)*
Revolutions	Average number of revolutions per period.	Cross-National Time Series database, Banks (2007)*
Burnside and Dollar Specification GDP p.c. growth	Average over annual growth rates of real GDP p. c. based on constant local currency.	WDI (2007)*
Initial GDP p.c. (log)	Logarithm of initial GDP p.c. in International prices.	Penn World Tables 6.2*
Initial M2/GDP	Money and quasi-money (M2) to GDP	WDI (2007)*
Assassinations	Average number of assassinations in a given phase.	Cross-National Time Series database, Banks (2012, 2007)*
Ethnolinguistic fractionalization	Ethnolinguistic Fractionalization in a country in a given period.	Easterly and Levine (1997), Roeder (2001)*
Assassinations x Ethnolinguistic Fractionalization	Interaction between Assassinations and Ethnolinguistic Fractionalization.	Banks (2012, 2007), Easterly and Levine (1997), Roeder (2001)*
Policy index	Good policy index based on budget balance/GDP, inflation and trade openness (cf. Burnside and Dollar 2000).	Clemens et al. (2012)

Notes: \* Our source is Clemens et al. (2012), <http://www.cgdev.org/doc/Working%20Papers/CRBB-Replication-Files.zip>, accessed 06.06.2012.

## Appendix B: Descriptive Statistics

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
Rajan and Subramanian Specification, Table 1 Column 2					
GDP p.c. growth	278	1.311	3.076	-12.300	10.120
Aid/GDP	278	3.231	4.014	0.007	26.360
Color	278	0.933	0.313	0.045	1.890
Initial GDP p.c. (log)	278	8.180	0.865	6.078	10.210
Initial life expectancy (log)	278	62.890	10.260	36.550	79.410
Openness	278	0.540	0.499	0.000	1.000
Inflation (log)	278	0.240	0.534	-0.005	4.192
Initial M2/GDP	278	4.034	9.128	0.002	60.760
Budget Balance/GDP	278	-0.108	0.587	-5.509	2.352
Revolutions	278	0.262	0.438	0.000	2.600
Burnside and Dollar Specification, Table 2 Column 2					
GDP p.c. growth	269	1.066	3.142	-12.960	9.883
Aid/GDP	269	3.434	4.355	0.023	34.180
Color	269	0.922	0.343	0.025	1.903
Initial GDP p.c. (log)	269	8.037	0.810	6.140	9.567
Initial M2/GDP	269	0.301	0.154	0.022	1.025
Assassinations	269	0.436	1.156	0.000	11.500
Ethnolinguistic fractionalization	269	0.468	0.302	0.000	0.930
Policy index	269	1.212	1.455	-5.523	3.021