

When Does Aid Conditionality Work?

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Abstract

Many scholars argue that conditionality—the setting of policy goals in exchange for access to aid—does not work. None, however, investigates whether aid’s effect on policy is mediated by recipient country characteristics. I argue that conditional aid’s efficacy depends on recipient countries’ level of democracy because the value of aid to governments depends on the degree to which it helps them maintain power, and recent work shows that the marginal impact of aid on political survival increases with level of democracy. I test this argument on data from 67 countries over the period from 1980 to 1999. I focus on aid’s impact on fiscal reform, one of the most commonly stipulated conditions in aid-for-policy arrangements. I show that aid promotes fiscal reform, but only in more democratic countries, and the positive impact of aid on reform increases with level of democracy. My work thus shows that conditionality is effective but only when applied on democratic governments.

When Does Aid Conditionality Work?

For over two decades, international financial institutions, such as the International Monetary Fund (IMF) and World Bank, as well as bilateral donors, have been tying disbursement of their aid to policy reform in recipient countries. The practice, referred to as conditionality, was initially used only by the IMF, which conditioned its loans on countries' reducing their fiscal and current account deficits. In the wake of the 1980s debt crisis, however, the IMF began to increase the number and scope of its policy conditions, tying its loans to market-oriented policies, such as price, trade, and capital account liberalization (Bird 1996), and other donors also began to condition their funds on policy reform. The World Bank began to tie disbursement of its funds to structural adjustment, which included measures similar to those required by the IMF as well as privatization and public sector reform (Koeberle 2003). Bilateral donors often made disbursement of their aid conditional on recipients being "on track" with IMF and/or World Bank programs (Dijkstra 2002).

Since its inception, conditionality has generated intense debate. For many years, proponents of conditionality argued that unless recipient countries adopted market-oriented policies, foreign aid designed to promote the welfare of a country's citizens would simply prop up inefficient governments (World Bank 2005). Conditioning aid on policy reform was thus intended to make development assistance more effective and increase living standards in recipient countries. Critics of conditionality argued, however, that the market-oriented policies tied to aid might promote development but only at the expense of the poor majority in aid recipient countries (e.g., (Fine, Lapavitsas, and Pincus 2001). Fiscal austerity measures would reduce the already low living standards of the poor. Trade liberalization would ruin domestic

industries and increase unemployment. Capital account liberalization would open up less developed countries to investments from multinational corporations (MNCs), but the benefits of these investments would accrue only to the MNCs and a small group of elites in aid recipient countries.

These arguments for and against conditionality assumed that the practice would be effective at promoting policy change, but as conditionality became more common, this assumption was increasingly called into question. Many countries that received aid conditional on policy change did not develop as expected. Early critics of conditionality maintained that this was due to the policies tied to aid. But proponents began to attribute aid recipients' lack of development to their failure to implement fully policy reforms (e.g., Kuczynski Godard and Williamson 2003). The problem, as they saw it, was not with the content of conditionality but with the failure of the practice to promote policy change.

Has aid conditionality failed to promote market-oriented policies? Studies that focus on implementation of IMF and World Bank programs paint a dismal picture. One study of IMF programs from 1974 to 1984 shows that out of 30 programs, only 14 were completed, and of those completed, less than half were implemented in their original form (Haggard 1985). A more recent study of IMF programs from 1992 to 1998 shows a completion rate of 56% (Ivanova, et.al. 2001). A similar study of World Bank structural adjustment programs from 1980 to 1995 shows that only two thirds of programs were completed (Dollar and Svensson 2000).

Research on the impact of aid from bilateral as well as multilateral donors is similarly mixed. Some studies show that aid reduces incentives for reform (Heckelman and Knack 2005; Remmer 2004). Others show that it has no significant impact on policy (Burnside and Dollar

2000; Easterly 2005). At best, some studies show that aid recipients have adopted market-oriented reforms but much more slowly than expected (Koeberle 2003; Morrissey 2004).

On the basis of this poor record, many scholars and policymakers are now calling for the abandonment of conditionality (Collier et al. 1997; Killick, Gunatilaka, and Marr 1998). I argue, however, that it is premature to abandon the practice altogether. Most work shows only that *on average*, aid does not promote policy change. Conditional assistance may yet be effective, if only under some circumstances.

In particular, I argue that the efficacy of conditional assistance depends on recipient countries' level of democracy because the value of aid to governments varies across regime type. If governments seek primarily to maintain power, they should value aid to the degree that it helps them survive in office. Recent work shows that the marginal impact of aid on political survival is greater for democrats than autocrats. More specifically, Bueno de Mesquita, et.al. (2003) and Kono and Montinola (2007) argue that political competition compels democratic leaders who want to maintain power to spend almost all aid as they receive it, while autocrats are able to stockpile much of the aid they receive for future use and still maintain power. Since democrats are unable to stockpile as much aid as autocrats, current aid disbursements have a greater impact on their survival prospects. Because aid disbursements are more valuable to democrats than autocrats, donors should have more leverage over the former. Consequently, aid conditionality is more likely to be effective in democracies than autocracies.

I test this argument on data from 67 countries over the period from 1980 to 1999. I focus on aid's impact on fiscal reform because fiscal adjustment is one of the most common conditions in aid-for-policy arrangements. I show that aid promotes fiscal reform, but only in more

democratic countries. Moreover, the positive impact of aid increases with level of democracy. My work suggests that policy-based conditionality is effective, but only when applied on democratic governments.

Determining when aid conditionality works is of practical as well as theoretical interest. At a summit in 2005, the Group of Eight (G8) industrialized nations committed to increase aid to Africa by 2010, from \$25 billion to \$50 billion a year (Stevenson 2005). This commitment cannot be taken for granted. For years before the summit, foreign aid was in decline, and aid groups were concerned with “donor fatigue.” Disappointment with the performance of aid is one often stated reason for this donor fatigue (Hopkins 2000). Identifying ways to improve the performance of aid is thus one step toward ensuring donors’ sustained commitment to aid. My work suggests that if donors want to improve the efficacy of their conditional aid, one way would be to provide aid only to democracies.

Aid Conditionality and Policy Reform

For over two decades, donors have been using aid to induce recipient governments to adopt market-oriented policies. While consensus on the desirability of these policies is not complete, several studies show that market-oriented policies promote economic development (e.g., Easterly and Levine 2001; Edwards 1998; Fischer 1993). Thus, at first glance, donors’ behavior seems paradoxical. Why would governments need incentives to adopt policies that would presumably benefit a majority of their citizens?

Models of conditionality (Mosley 1992; Mayer and Mourmouras 2004; Bird 2007) show why adopting market-oriented policies may be difficult and how aid might promote reform in this

direction.¹ These models generally assume that the proximate goal of governments is to maintain power. Governments survive in power by providing policy benefits in exchange for support. The policies that they adopt tend to favor special interest groups rather than the country as a whole. Special interest groups secure their preferred policies even if they represent only a small fraction of the population because they are well-organized and able to provide governments with monetary contributions that help the latter survive in office. In this context, aid can promote policy change by helping governments weather the “adjustment” costs of adopting market-oriented policies that would reduce benefits to special interest groups. This suggests that governments’ compliance with donors’ policy conditions would depend on the amount of assistance offered relative to the expected costs of moving policy away from those preferred by special interest groups. These models of conditionality thus imply that, all else equal, higher levels of aid will lead to more policy reform as governments will be better able to compensate losers from reform while maintaining power.

Theory notwithstanding, as mentioned above, research on aid’s impact on policy is inconclusive.² I argue that this is in part because previous studies have not considered the conditional effects of aid. They assume that aid’s impact on policy is constant across different types of governments. In contrast, I argue that aid’s impact varies across aid recipients’ regime type. In particular, I argue that recipient governments’ willingness to comply with policy

¹ These models differ in many respects. I discuss only their common characteristics, which are sufficient to explain why governments adopt policies that are not first-best from the perspective of the country as a whole.

² For comprehensive reviews of the literature on aid and policy, see Morrissey (2004) and Moss, Petterson and Van de Walle (2006). For reviews that focus on the impact of IMF and World Bank conditionality, see Bird (2001) and World Bank (2005) respectively.

conditions depends on the degree to which aid promotes their political survival, and that the impact of aid on government survival increases with recipient country's level of democracy. Because my argument is based on Bueno de Mesquita, et.al.'s (2003) model of political survival and its extension by Kono and Montinola (2007), I briefly summarize these works below.

In Bueno de Mesquita, et.al.'s (2003) model, leaders survive in office by providing supporters with a mix of private and public goods. How much of each good a leader must provide depends on the size of the winning coalition (W), i.e., the set of individuals whose support is needed to gain and maintain power. The size of W determines the relative cost of the two types of goods: as W increases, private goods become more expensive because they must be given to more individuals while public goods become relatively cheaper because, being non-excludable, they can be provided to many people at fixed cost. Leaders thus spend more on private goods when W is small but more on public goods when W is large. Because private goods are enjoyed only by members of W , whereas public goods are enjoyed by everyone, the cost of exclusion from W falls as W increases in size.

Because membership in W confers access to valuable private goods, members of W are reluctant to defect to challengers even when the latter offer them more goods than the incumbent does. After taking office, the challenger will form a new winning coalition that may or may not include the defector. The risk of being excluded from the challenger's coalition thus creates a "loyalty norm" (Bueno de Mesquita, et.al. 2003:65) that allows incumbents to offer less than they could in the absence of this risk. Because loyalty strengthens as W falls, incumbents spend less overall on their supporters and keep more for themselves as W becomes smaller.

Because loyalty allows leaders to maintain support with fewer resources, it also allows them to accumulate “slack resources”--the difference between available and expended resources. These resources can be used to keep supporters loyal in the event of future recessions or other negative shocks to the system. Slack resources thus help leaders survive. Because loyalty increases as W falls, leaders in small- W systems can accumulate more slack resources than leaders in large- W systems. Leaders in small- W systems are thus more likely to survive.

Since foreign aid is a resource that, once disbursed by donors, is generally at the disposal of recipient country leaders, Bueno de Mesquita, et.al.'s (2003) model implies that aid's impact on political survival could vary depending on the size of W . In small- W systems, leaders that receive aid can stockpile much of it for future use against negative shocks, thus improving their survival prospects. In large- W systems, leaders must expend most foreign aid as it becomes available and may lack resources when negative shocks arise. Thus, foreign aid should help leaders in small- W systems more than those in large- W systems, at least in the long-run.

Kono and Montinola (2007) extend Bueno de Mesquita, et.al.'s (2003) model, explicitly incorporating aid's impact on political survival. In addition to modeling aid's impact across systems of different coalition size, they distinguish between the short-run effects of current aid disbursements and the long-run effects of cumulative aid on leaders' survival. Their model confirms the implication of Bueno de Mesquita, et.al.'s (2003) work regarding the long-run effect of aid on survival: if leaders in small- W systems can stockpile aid as slack resources, while leaders in large- W systems must expend all aid as they receive it, aid accumulated over time helps the former survive in office longer than the latter. Kono and Montinola (2007) also show, however, that since larger aid stocks lower the marginal impact of additional resources, current

aid disbursements have the opposite effect: current aid helps leaders in large-W systems more than those in small-W systems.

Consistent with their theory, Kono and Montinola (2007) show empirically that, while *cumulative* aid increases the survival prospects of leaders in small-W systems, it has no significant effect on those in large-W systems. Conversely, *current* aid disbursements promote the survival of leaders in large-W systems but do little for those in small-W systems. In effect, below a threshold size of W, *current* aid has no effect on leaders' survival; but above this threshold, larger aid disbursements increase the probability of leaders' survival.

The work of Kono and Montinola (2007) has implications for the efficacy of conditional aid. If, as argued above, the value of aid to recipients depends on the degree to which aid promotes political survival, then their work suggests that conditional aid should give donors substantial influence over leaders in large-W systems. This is because aid disbursements always help the latter survive in office. Moreover, donors' influence should not decline over time, even as the former's cumulative aid tally mounts because leaders in large-W systems cannot stockpile aid from previous years. Any delays in aid disbursement, or reductions in aid from previous years, increase the probability that leaders in large-W systems will lose power. Thus, leaders of large-W systems will always value aid highly, and donors will have a consistent source of influence over them.

In contrast, efforts to use foreign aid to influence leaders in small-W systems are ultimately self-defeating. Because the risk of exclusion from the winning coalition is higher in small-W systems, members of the current winning coalition in small-W systems are more likely than those in large-W systems to temper their demands. This allows leaders in small-W systems

to keep much of the aid that they receive as slack resources, which they can use to purchase support in case of future negative shocks to the system. Thus, each aid disbursement to leaders in small-W systems contributes to their slack resources and reduces the marginal value of additional current and future aid. In the extreme case, leaders in small-W systems may be able to stockpile sufficient slack resources from previous aid disbursements such that additional aid would no longer have an impact on their survival prospects and will thus be of little value to them. Hence, the more aid donors give to leaders in small-W systems, the less influence they will have over them.

This is not to say that leaders in small-W systems are not interested in receiving aid. In the long-run, the more aid leaders in small-W systems accumulate the greater is their probability of survival (Kono and Montinola 2007). I argue only that leaders in these systems will be less sensitive than leaders in large-W systems to complying with aid conditionality because the marginal benefit from aid in any given year is lower for the former than the latter. In sum, conditional aid can work, but its efficacy depends not only on the amount of aid offered but also on winning coalition size.

Note that winning coalition size is conceptually related to regime type. A larger W implies representation for a larger proportion of the population, which is a defining feature of democracy. Thus, the models discussed above imply that the efficacy of conditional aid depends on regime type. More specifically, they imply that autocrats--incumbents in small-W systems--are better able to stockpile resources than democrats--incumbents in large-W systems, so that the marginal value of each additional dollar of aid is smaller for autocrats than democrats. Autocrats should therefore be less sensitive to conditionality and more likely to delay reforms stipulated in

aid-for-policy arrangements. I thus propose to test the following hypothesis: The impact of conditional aid on policy reform will increase with recipient governments' level of democracy.

Analysis

I test my hypothesis on the effects of conditional aid by focusing on fiscal policy. Fiscal policy discipline often ranks first on the typical reform package promoted by Washington-based institutions such as the International Monetary Fund, the World Bank and the US Treasury (Williamson 2004). As mentioned earlier, other donors often condition their aid on similar reforms, or on a country being 'on track' with IMF or World Bank programs, a practice referred to as cross-conditionality (Dijkstra 2002). While the number of conditions that aid recipients must agree to has increased through time, fiscal reform continues to be a main target of donors. Thus, I investigate whether the impact of conditional aid on fiscal performance increases with level of democracy.

I define fiscal performance in terms of the budget balance—the difference between country i 's government revenues and government expenditures at time t as a percentage of gross national income, i.e. $(\text{revenues}_{it} - \text{expenditures}_{it})/\text{GNI}_{it} * 100$. The measure of revenues excludes grants from foreign governments and international organizations to ensure that improvements in a country's budget balance are not simply due to the transfer of resources from donors to recipients. Positive values on Budget_{it} thus indicate fiscal surpluses; negative values indicate deficits. In the subsequent analyses, the dependent variable is the change in the budget balance from time $t-1$ to t . Positive values on ΔBudget_{it} thus indicate improvements in the fiscal balance,

i.e., larger surpluses or smaller deficits as a proportion of gross national income. Data used to calculate $Budget_{it}$ are from the Global Development Network Growth Database (Easterly 2001).

As a measure of conditional aid, I use the amount of official development assistance (ODA) that governments receive from all OECD member states and multilateral organizations. ODA is defined as official grants and loans at concessional rates offered for the purpose of promoting economic development. I express the aid measure as a percentage of gross national income because the degree to which leaders comply with aid conditionality should depend on the value that they place on aid disbursements, and the value of aid to leaders depends on the number of citizens whose support must be purchased as well as their income level. For a given number of citizens, aid will go further if citizens are poorer. For a given income level, aid will go further in countries with fewer citizens. Since GNI is the product of population and per capita income, it controls for both. Aid_{it} is thus the amount of ODA disbursed to country i at time t as a percentage of country i 's gross national income, i.e., $(ODA_{it}/GNI_{it})*100$.

Some readers may be concerned that only aid from multilateral institutions is conditioned on policy reform. Research on the allocation of bilateral aid suggests that donors provide aid for many other reasons (Alesina and Dollar 2000; Schraeder, Hook, and Taylor 1998). As mentioned above, however, many donors condition their aid on recipients' compliance with the programs of multilateral institutions. Thus, it is not surprising that bilateral aid from OECD countries is highly correlated with aid from multilateral institutions (Pearson's $r = .75$). Nevertheless, to ensure that any relationship between aid and fiscal reform is not driven simply by aid from multilateral institutions, as a robustness check, I disaggregate the aid measure, and in

separate regressions, I estimate the impact of multilateral and bilateral aid on fiscal policy. The data on aid are from the OECD's Development Assistance Committee Online Databases.

I include in the analysis a variable $Democracy_{it}$ --country i 's level of democracy at time t . For robustness, I measure it in two ways. First, I use Bueno de Mesquita et.al.'s (2000) measure of the winning coalition (W). The measure is based on the openness and competitiveness of executive recruitment and ranges from 0 to 1 with 1 indicating the most competitive systems. Second, I use the 21-point Polity IV index, which ranges from -10 for the least competitive systems to +10 for the most competitive. For ease of presentation, I recode the Polity index so that it ranges from 0 to 1 with 1 representing the most competitive systems.

To determine whether conditional aid's impact on fiscal reform depends on recipient countries' level of democracy, I include an interaction term-- $Aid*Democracy$ --the product of Aid_{it} and $Democracy_{it}$. A positive coefficient on $Aid*Democracy$ would support my hypothesis. It would indicate that the effect of aid on a country's fiscal balance increases with level of democracy. In other words, an increase in aid should have a larger positive impact on the budget balances of democracies than on those of autocracies.

I also control for characteristics of the economy that have been posited to influence fiscal performance. First, deteriorating terms of trade could adversely affect a country's fiscal balance directly through reduced export revenues or indirectly through lower income tax receipts from exports (Alesina et al. 1999; Combes and Saadi-Sedik 2006). Conversely, positive terms of trade shocks should boost revenues and promote fiscal surpluses. Thus, I include a variable $Terms\ of\ Trade_{it}$ --the ratio of country i 's export price index to its import price index at time t --and expect its coefficient to be positive.

Second, exposure to international trade can influence a country's fiscal balance through different channels (Edwards and Tabellini 1991; Rodrik 1998). Trade liberalization may cause fiscal deficits, at least in the short-run, if governments are highly dependent on trade taxes. In the long-run, higher trade volume due to more liberal policies should boost revenues. Furthermore, trade openness reinforces the effects of fluctuations in terms of trade. Since the hypothesized effects of trade openness on fiscal policy through these different channels are somewhat contradictory, which effect will dominate is an empirical question. I thus include a measure of *Trade Openness_{it}*—the sum of country *i*'s exports and imports as a percentage of its gross domestic product at time *t*.

Third, less developed countries have relatively inefficient fiscal systems and may therefore be more prone to budget deficits (Roubini 1991; Woo 2003). Thus, I include a measure of economic development—*Per Capita Gross National Income (GNI)* and expect it to have a positive relationship with fiscal performance. I also control for changes in the state of the economy as measured by annual changes in per capita GNI. Changes in per capita GNI are also expected to have a positive relationship with fiscal performance. During recessions, fiscal balances are likely to deteriorate due to reduced tax receipts as well as increased spending due to governments' countercyclical policy. During economic boom times, fiscal balances are likely to improve. Finally, I control for country fixed effects to partial out the effects of unobservable characteristics that may affect both fiscal policy and regime type.³

³ The data for terms of trade and trade openness are from the Global Development Network Growth Database compiled by Easterly (2001). Data for per capita gross national income is from the World Bank's World Development Indicators (WDI).

I analyze all available data for developing and transition countries⁴ from 1980-1999. I employ an error correction model of the following form:

$$\Delta\text{Budget}_{it} = \beta_0 + \beta_1\text{Budget}_{i,t-1} + \gamma\Delta X_t + \lambda X_{t-1} + \varepsilon_{it}$$

where ΔBudget_{it} is the annual change in the budget balance as a proportion of GNI, $\text{Budget}_{i,t-1}$ is the one-year lag of the budget balance as a proportion of GNI, ΔX_t is a vector of annual changes in all right-hand side variables, X_{t-1} is a vector of one-year lags in all right-hand side variables, and γ and λ are vectors of coefficients for the first-differenced and lagged variables respectively.

I use an error correction model because it imposes fewer assumptions than other time-series estimators regarding the timing of effects of right-hand side variables (De Boef and Keele 2006). Since aid is generally disbursed in exchange for policy commitments, the impact of aid on fiscal outcomes is unlikely to be immediate. Even if policy reforms are enacted shortly after aid disbursement, there may still be a lag before the effects of reforms are reflected in fiscal outcomes. Moreover, if policy reforms are adopted sequentially, the effect of aid on reform may be distributed over many years. Error-correction models are useful because they allow us to estimate right-hand side variables' immediate effects as well as their effects distributed over future periods. The immediate effects of right-hand side variables are given by γ , their effects after one year are given by λ , and their total effects or long-run multipliers (LRMs), which includes both immediate effects and those that occur over future time periods, is calculated by dividing the coefficients of the right-hand side variables by the coefficient on the lagged dependent variable. To correct for serial correlation, I use robust standard errors clustered by country.

⁴ As defined by the OECD's Development Assistance Committee.

Table 1 presents the results of my analyses. The top halves of columns 1 and 3 present coefficients for the first-differenced variables, which indicate the immediate effects of these variables. The bottom halves of columns 1 and 3 present coefficients for the lagged variables, indicating the variables' one-year lagged effects. The bottom halves of columns 2 and 4 present the long-run multipliers (LRMs), i.e., the total impact of aid which includes aid's immediate effects plus all lagged effects. Columns 1 and 2 present results using the winning coalition measure (W) of regime type while columns 3 and 4 present results using the Polity measure.

[Table 1 about here]

As shown in Table 1, the results for the controls are generally as expected. In the short-run, favorable terms of trade and a growing economy improve fiscal balances, although the effect of the former is not statistically significant. Trade liberalization does not worsen fiscal deficits in the short-run—it simply has no immediate effect on fiscal deficits—however as expected, trade openness reduces deficits in the long-run. Finally, less developed countries are more prone to deterioration in fiscal balances.

Turning to the variables of interest, my results indicate that foreign aid has no significant immediate impact on fiscal outcomes. None of the coefficients for the first-differenced *Aid* and *Aid*Democracy* variables are statistically significant. The results indicate, however, that aid has significant conditional lagged effects. The coefficients for lagged *Aid* are negative and at least marginally significant. The p-value for the coefficient in the Polity analysis is less than .05; the corresponding p-value in the analysis with W is .055. This indicates that aid disbursed in a given year causes fiscal balances to deteriorate the following year in countries ranked as most autocratic. Furthermore, the coefficients for the lagged interaction term *Aid*Democracy* are

positive and highly significant in both models, indicating that aid's impact on the budget balance becomes more positive with increases in a country's level of democracy. Because the effects of aid are conditional, a full understanding of these effects requires that we calculate conditional aid coefficients and their corresponding standard errors (Kam and Franzese 2007). I do this below, following a discussion of aid's total long-run effects.

The lagged coefficients presented in Table 1, columns 1 and 3 indicate the impact of aid and other variables of interest at time $t-1$ on the budget balance at time t . But the total impact of aid, which we are ultimately interested in, may be realized over a number of years. As mentioned above, this total impact, also known as the long-run multiplier (LRM), can be calculated by dividing the coefficients on the variables of interest by the coefficient on the lagged dependent variable. This procedure does not, however, generate standard errors for the LRMs. I thus employ the Bewley (1979) transformation suggested by DeBoef and Keele (2006) to generate these standard errors. The LRMs and standard errors for all variables are presented in Table 1, columns 2 and 4. Note that the LRMs are slightly larger than the coefficients of the lagged variables. This is because they incorporate immediate and all lagged effects for each variable.

The results presented in Table 1 columns 2 and 4 emphasize the conditional nature of the total impact of aid. The LRMs for *Aid*Democracy* are highly significant and almost twice as large as those for lagged *Aid*Democracy*. To assess this conditional effect more fully, I calculate the total impact of aid on fiscal policy, and its associated confidence interval, at different levels of democracy. Figure 1(a) plots the conditional aid coefficients on the y-axis against different values of regime type on the x-axis using W as the measure of regime type while figure 1(b) presents results using the Polity measure. The solid line represents the conditional aid

coefficients while the dashed lines represent the 95% confidence intervals. The coefficients show the total effect of a one-unit change in aid at different values of regime type.

[Figure 1 about here]

The results of the two models are very similar. First, when regime type equals zero, the aid coefficients are negative and statistically significant. In particular, the total impact of aid on fiscal reform is $-.34$ in the analysis with W and $-.30$ for the Polity analysis, and both coefficients are statistically significant at the 95% confidence level. This indicates that aid to countries rated as most autocratic actually worsens fiscal balances. For example, a one standard deviation increase in aid/GNI causes a 2.4 percentage point deterioration in a country's fiscal balance/GNI in the analysis with W. The analogous deterioration based on the analysis with the Polity score is 2.1 percentage points. Since fiscal balance is measured net of grants, this outcome is likely due to a substitution effect. It suggests that the most autocratic leaders are either (1) reducing their tax effort and substituting aid for foregone tax revenues, or (2) using aid rather than tax revenues to finance increasing expenditures. In either case, aid appears to have reduced incentives to engage in fiscal reform.

Second, as level of democracy increases, the conditional aid coefficients increase. They are not, however, significantly different from zero for values up to approximately $.5$ on W and the transformed Polity scale. The 95% confidence intervals encompass 0 when W and the Polity score are greater than 0 but less than $.6$. This indicates that aid has no significant impact on fiscal reform in countries with low to intermediate levels of democracy. In my sample, this represents a substantial number of cases—34% in the analysis with W and 45% in the Polity analysis.

Finally, once past .5 on W and the transformed Polity score, the conditional aid coefficients become positive and significant, and they increase with level of democracy. More specifically, for countries that rank .75 on W and the transformed Polity scale, a one standard deviation increase in aid/GNI causes a 1.75 percentage point improvement in a country's fiscal balance/GNI. A similar increase in aid in full democracies ($W=1$ and $Polity=1$) causes an improvement in fiscal balance/GNI of 3.1 percentage points. These results indicate that aid promotes fiscal reform in more democratic countries, and the deficit-reducing impact of aid increases with level of democracy. In particular, the efficacy of aid almost doubles when allocated to full democracies as opposed to partial democracies ($W = .75$ and $Polity = .75$).

It may be argued that only aid from multilateral institutions is conditioned on fiscal reform and that the relationship between aid and fiscal reform shown above is driven mainly by aid from multilateral institutions. To address this concern, I analyze the impact of aid from multilateral and bilateral sources separately. The results of these analyses are shown in Table 2. For ease of presentation, I report only the total effects of the specified variables on fiscal reform—i.e., the long-run multipliers (LRMs). Models 1 and 3 use W as the measure of democracy, while models 2 and 4 use the Polity score.

As shown in Table 2, multilateral and bilateral aid have similar effects on fiscal policy. The signs of the LRMs across all four regressions are similar. The LRMs on the *Aid* variable across all four models are negative indicating that both multilateral and bilateral aid are negatively associated with fiscal reform in the most autocratic countries. The positive LRMs on the *Aid*Democracy* variable indicate that the impact of aid on fiscal reform increases with level of democracy. In general, the size of the *Aid* and *Aid*Democracy* LRMs in models 3 and 4 are

slightly smaller than those in models 1 and 2, suggesting that cross-conditionality is not perfect, and bilateral aid is less likely than multilateral aid to be conditioned on fiscal reform. However, the statistically significant positive LRMs on the *Aid*Democracy* variable in the regressions with bilateral aid indicates that bilateral aid, like multilateral aid, has conditional effects on fiscal reform, i.e., the impact of both types of aid increases with recipient governments' level of democracy.

In sum, the above analyses support my conditional theory of aid. Because the marginal impact of aid disbursements on autocrats' political survival is small, aid conditionality has little force on them. Autocrats are thus more likely than democrats to delay or forego reforms. Conversely, because aid disbursements always improve democratic leaders' survival prospects, the latter are more sensitive to aid conditionality. They are thus more likely than autocrats to adopt reforms required as conditions for future disbursements.

Conclusion

Disillusionment with policy-based conditionality has prompted calls for its abolition. Some scholars advocate disbursing aid to countries that have already adopted market-oriented policies rather than conditioning aid on promises to reform policies (Burnside and Dollar 2000). Others recommend linking aid disbursements to outcomes such as progress in promoting growth or poverty reduction (Collier et al. 1997). These arguments are not without basis. Many studies show that foreign aid, which has been increasingly conditioned on policy reforms, has had little or no impact on policies (e.g., Burnside and Dollar 2000; Koeberle 2003; Morrissey 2004;

Easterly 2005). Some show that aid has actually reduced incentives for reform (Heckelman and Knack 2005; Remmer 2004)

None of these studies, however, considers whether the impact of aid depends on recipient country characteristics. In this paper, I argue that policy-based conditionality is effective but only when applied on relatively democratic countries. This is because conditional aid's efficacy depends on the value that recipient governments' place on aid, and this value is a function of the degree to which aid disbursement promotes their political survival. Since previous work (Kono and Montinola 2007) shows that the marginal impact of aid on political survival increases with level of democracy, I argue that aid-for-policy deals should be more effective when offered to democratic governments. I test this theory by focusing on aid's impact on fiscal reform. I show that aid does promote fiscal reform but only in countries that are relatively democratic, and the deficit-reducing effect of aid increases with level of democracy.

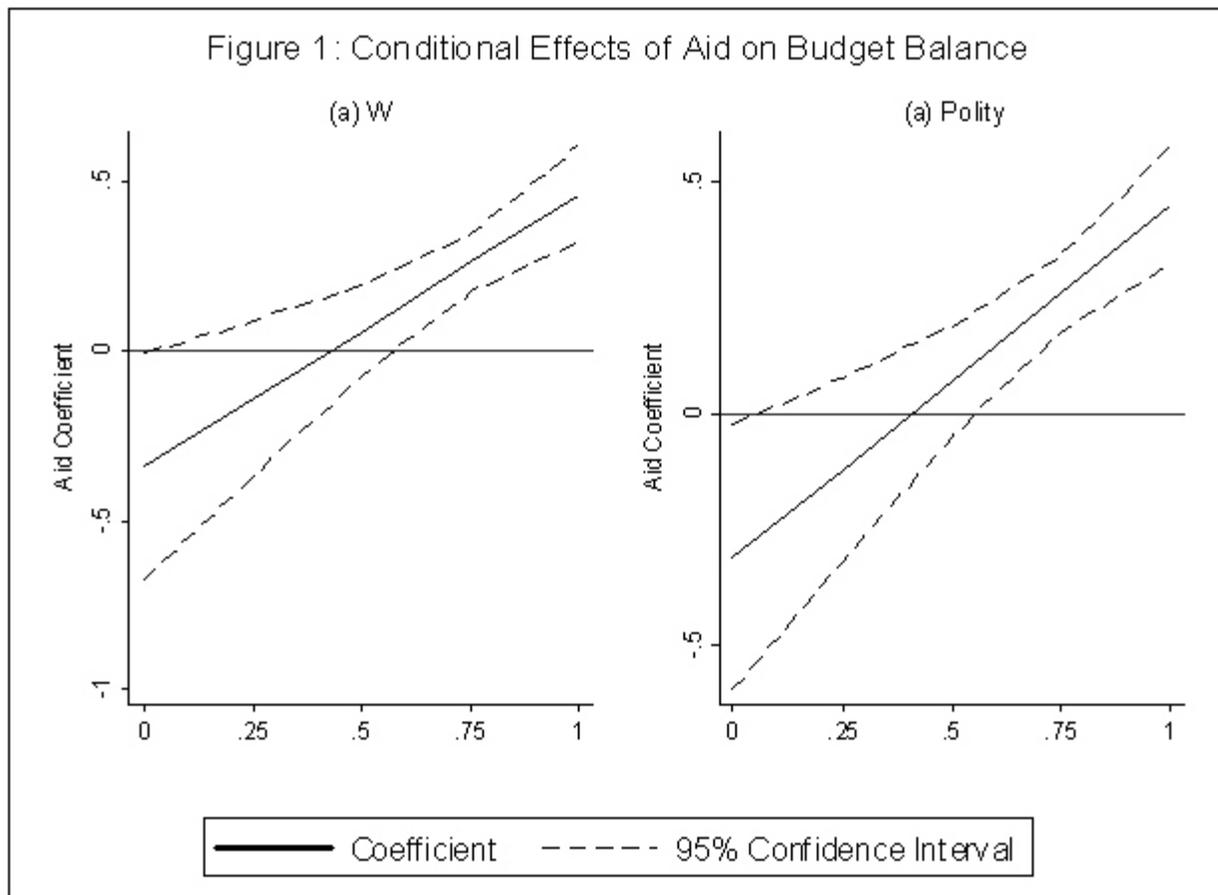
My work has implications for the current debate on the efficacy of conditional aid. It suggests that if one of donors' goals is to promote fiscal reform, policy-based conditionality need not be abandoned altogether in favor of other aid allocation strategies. Aid conditioned on fiscal reform should be offered only to democratic governments. Whether aid's impact on other types of reform also depends on recipients' regime type is still an open question. Aid is typically tied to a program of diverse conditions, including trade liberalization, financial liberalization, privatization, and public sector reform. Future research could center on the conditional impact of aid and regime type on compliance with these other program conditions. Given the Group of Eight (G8) industrialized nations' recent commitment to increase foreign aid, this line of research would be particularly timely.

Table 1. Conditional Effects of Total Aid on Budget Balance				
	W		Polity	
	(1) Coefficient	(2) Long-run Multiplier	(3) Coefficient	(4) Long-run Multiplier
<i>First Differences</i>				
ΔAid	0.120 (0.220)		-0.057 (0.190)	
ΔAid*Democracy	-0.055 (0.227)		0.249 (0.209)	
ΔDemocracy	1.883 (1.343)		-0.227 (1.128)	
Δ Terms of Trade	0.011 (0.009)		0.013 (0.009)	
ΔTrade Openness	0.018 (0.018)		0.028 (0.021)	
ΔPer Capita GNI	0.001 (0.000)**		0.001 (0.000)**	
<i>Lags</i>				
Aid	-0.181 (0.092)	-0.342 (0.166)*	-0.164 (0.079)*	-0.309 (0.142)*
Aid*Democracy	0.424 (0.227)**	0.802 (0.218)**	0.403 (0.110)**	0.756 (0.185)**
Democracy	-0.544 (1.095)	-1.029 (2.029)	-1.590 (0.921)	-2.978 (1.582)
Terms of Trade	-0.004 (0.008)	-0.008 (0.016)	-0.001 (0.009)	-0.003 (0.017)
Trade Openness	0.029 (0.010)**	0.054 (0.019)**	0.034 (0.010)**	0.064 (0.018)**
Per Capita GNI	0.0003 (0.000)*	0.0005 (0.000)**	0.0003 (0.000)**	0.0007 (0.000)**
Budget Balance	-0.528 (0.050)**		-0.533 (0.061)**	
Constant	-3.584 (1.340)**		-3.630 (1.228)**	
Observations	813		785	
R-Squared	0.11		0.10	
Prob > F	0.000		0.000	

* p < .05, ** p < .01; Robust standard errors clustered by country.

Table 2. Long-Run Multipliers for Aid on Budget Balance by Source				
	Multilateral Aid		Bilateral Aid	
	(1) W	(2) Polity	(3) W	(4) Polity
Aid	-0.619** (0.176)	-0.855* (0.390)	-0.564 (0.369)	-0.424 (0.218)
Aid*Democracy	1.904** (0.431)	2.182** (0.683)	1.183* (0.469)	0.994** (0.283)
Democracy	-0.072 (2.017)	-2.798 (1.591)	-0.943 (2.124)	-2.667 (1.572)
Terms of Trade	-0.009 (0.017)	-0.007 (0.016)	-0.008 (0.016)	-0.002 (0.017)
Trade Openness	0.053** (0.020)	0.069** (0.017)	0.055** (0.019)	0.063** (0.018)
Per Capita GNI	0.0005* (0.0002)	0.0006** (0.0001)	0.0005** (0.0002)	0.0007** (0.0001)
Observations	813	785	813	785
R-Squared	0.11	0.10	0.12	0.11
Prob > F	0.000	0.000	0.000	0.000

* $p < .05$, ** $p < .01$; Robust standard errors clustered by country.



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