

**Buying Influence:
Development Aid between the Cold War and the War on Terror**

The breathing space between the end of the Cold War and September 11, 2001 provides a unique opportunity to assess the effects of economic aid during a period of low international tensions. Theory suggests that the effects of aid should depend on the donor's reasons for providing it and on the level of institutional capacity in the recipient country. Quantitative analysis of the aid policies of the United States, France, Britain, Germany, Japan and the EU from 1990-2001 reveals that the donors have different objectives, and Heckman models demonstrate that the effects of aid differ markedly across donors. Aid effectiveness is correlated with donor motivations, and aid sometimes promotes and sometimes retards growth. The strongest growth effects occur when aid is motivated by security externalities and recipients have high institutional capacity.

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Development aid had its origins in the Cold War and was designed to check the spread of Communism, and in the aftermath of September 11, 2001, development has once again been subordinated to the priorities of security strategy. During the brief window between the Cold War and the War on Terror, however, there was an opportunity for a development agenda to reassert itself. For poor countries, development aid is a significant feature of the international economy, providing more than 10% of GDP on average in sub-Saharan Africa. Yet the empirical record is unclear as to whether development assistance has in fact improved the lot of the global poor; it may not contribute to economic growth, and may even undermine governance and the rule of law (e.g. Boone 1996; Alesina and Dollar 2000; Burnside and Dollar 2000; Dalgard and Hansen 2000; Knack 2001; Svensson 2003). This essay argues that variations in aid strategies among the major donors during the breathing space of the 1990s provide leverage to explain why aid is not more effective.

Development assistance produces three kinds of benefits for donors: public goods, private goods, and security externalities. Economic development is a significant motivation for development assistance, both because it promotes trade and investment and because it alleviates human suffering, but these benefits are shared diffusely by donors, so purely development-motivated assistance is underprovided. The loose development aid regime—centered on the OECD Development Assistance Committee and donors conferences sponsored by the UN and the World Bank—promotes norms and best practices to target aid where it is most needed, but the regime is not very effective, and its existence is a symptom of the underlying problem. On the other hand, private benefits of development assistance accrue to narrow commercial and financial interests in

the donor countries, and as we have come to expect of foreign economic policies in democracies, a substantial share of aid is captured by such lobbies (Grossman and Helpman 1994, Milner and Tingley forthcoming). Foreign aid would be more severely underprovided if it did not benefit narrow private sector interests, but lobbying distorts aid allocation and creates credibility problems that undermine the effectiveness of aid at promoting development. Finally, numerous studies have found that aid is heavily influenced by the geopolitical interests and foreign policy preferences of the donors (e.g. Maizels and Nissanke 1984; Boone 1996; Cashel-Cordo and Craig 1997; Schraeder, Hook and Taylor 1998; Alesina and Dollar 2000; Alesina and Weder 2002). Although the weight given to particular security concerns varies across donors, security externalities are widely shared in the donor community, so aid for these purposes again tends to be underprovided. Security-linked aid is provided largely by the United States, because the United States plays a sufficiently dominant role in security affairs that other states can safely free-ride (Stone, Slantchev and London 2008).

Donor motivations are critical, because development aid relies on credible conditionality to give governments incentives to reform their economic policies and remove obstacles to growth (Azam and Laffont 2003). When aid distribution follows objectives other than development, those other objectives will be accomplished instead (Pietrobelli and Scarpa 1992; Rodrik 1995; Martens et al. 2001).¹ Aid that is not tied to enforceable conditions will expand government consumption, but may not promote investment, and governments that represent narrow elites will use the extra resources to

¹ This interpretation of aid is suggested by studies that found that aid was correlated with lax enforcement of IMF program conditions (Stone 2002, 2004). Similarly, studies of EU environmental aid to Eastern Europe have found that lobbyists from donor countries were able to influence aid flows in ways that were profitable but often ineffective (Connolly and List 1996, Darst 2001).

benefit their supporters (Boone 1996, Bueno de Mesquita and Smith 2007). To the extent that aid is effective in promoting particular goals, it is effective because the conditionality contract is credible. Pro-development conditionality is weak when donors have concrete commercial or financial incentives to provide aid to particular countries.

Security externalities provide a mixed set of incentives. On one hand, the United States has compelling incentives to use its aid to promote economic development in countries with friendly regimes that are important to long-term U.S. strategies. For example, U.S. foreign aid to Afghanistan is broadly targeted to promote economic development, and three-quarters is distributed through NGOs rather than through the central government. The survival of a viable allied state in Afghanistan is regarded as a key U.S. security interest, which in turn depends on creating a sufficient level of economic prosperity. On the other hand, the existence of security externalities creates credibility problems. Afghanistan again provides examples: the flow of U.S. aid has fueled hyper-corruption, and the Karzai regime engaged in blatant election fraud in 2009 under the noses of UN observers. The problem is that in very fragile polities, aid donors face a “compellence dilemma” (Carter 2009): conditionality cannot be enforced because withdrawing aid would threaten the survival of the regime, and is therefore not a credible threat. This logic implies that the development effects of security-motivated aid are conditional on state capacity: aid is beneficial only in countries from which it can credibly be withheld. Consequently, the empirical tests presented below will use an interaction term between aid and institutional capacity. There is some evidence, although the findings are controversial, that aid flows are most effective in political environments that are receptive to economic reform (Burnside and Dollar 2000, Bräutigam and Knack

2005).² Furthermore, if the reason for the different effects of aid in different institutional settings is the credibility of the donor, these interactive effects should be strongest when strategic externalities are important.

Studies of aid effectiveness generally aggregate aid by recipient without distinguishing the source, because they are concerned with testing hypotheses about direct effects of aid on development in the form of resource flows. If development depends primarily on *policies* rather than *resources*, however, the hypothesis should be that aid affects development by inducing leaders to carry out reforms. Therefore, the research design should look for independent effects of aid from particular donors. Studies of the aid allocations of multiple donors find that the reasons for giving aid vary enormously (Svensson 1999, Alesina and Dollar 2000, Alesina and Weder 2002, Neumayer 2003). If different donors give aid for different reasons, we can expect the conditions they apply to differ as well, so a differentiated empirical design can shed light on aid effectiveness. U.S. aid, which comes with one set of incentives, may have different effects than German or British aid, which are attached to different conditions and priorities. This also suggests a methodological reason to disaggregate aid by donor. The first generation of studies of aid effectiveness failed to account for selection effects—e.g., aid may appear to be harmful, or less beneficial than it really is, because it is not distributed to the countries with the best growth prospects, and subsequent studies have responded to this concern. If the motives of donors vary, however, the selection corrections that apply to their aid should vary as well.

² While the methods, data and results in the Burnside and Dollar study have been controversial, the conclusion that institutions mediate the effectiveness of aid is widely accepted. See Easterly, Levine and Roodman 2004, Doucouliagos and Paldam, 2008.

The hypothesis to be tested is that the effectiveness of foreign aid is compromised by the political objectives that motivate donors to provide it, because the donors' political agendas undermine the enforcement of conditionality. The research design exploits the fact that multiple donors give aid with a variety of motivations. Throughout, the analyses are run separately on aid from six donors—the United States, France, Britain, Germany, Japan, and the European Union—for the period 1990-2001, using data for all countries that were not aid donors. In the first stage of the analysis I develop a picture of donors' motivations, using a probit model to analyze the selection of aid recipients, and OLS to analyze the amount of aid disbursed, conditional on receiving aid. The results confirm that motivations vary substantially across donors. In the second stage of the analysis I test for effects of foreign aid on growth rates, using a FIML Heckman model to control for selection effects, and compare the results across aid donors.

I find that the effects of foreign aid vary substantially across donors, which suggests that the motivations of the donor play a critical role in determining the effect of the aid. In particular, donors that are strongly motivated by commercial and financial interests are ineffective at promoting growth, and it is notable in this respect that the European Union is no more effective at promoting growth than its member states. Strikingly, the most effective form of aid at promoting development appears to be aid designed to create security externalities. However, this effect depends upon the capacity of the aid recipient. The United States and France, which are most strongly motivated by security concerns, are most effective in promoting growth in high-capacity countries, but French aid is ineffective in low-capacity countries, and U.S. aid significantly retards

growth in those cases. This suggests that it will be difficult to achieve U.S. objectives in countries such as Afghanistan, Pakistan and Iraq.

Distribution of aid

I take advantage of the substantial empirical literature that has accumulated on the distribution and effects of foreign aid. We have learned that the selection of aid recipients and the distribution of aid budgets among recipients are driven by distinct priorities. This calls for attention both to the selection of recipients and to the distribution of aid among the recipients. A wide range of studies has provided a rich set of hypotheses, in addition to a few novel ones that I introduce, so the models do a good job of explaining the distribution of aid.

Tables A1 and A2 in the appendix present the full results of models of the selection of aid recipients using probit, and of the distribution of aid dollars conditional on receiving aid using OLS, respectively. These models are based upon a substantial literature that has found that the distribution of aid is biased in various ways: towards small countries, towards countries with congruent political perspectives, towards countries in particular regions of the world, towards former colonies, and towards trading partners. Indeed, if there is a single finding on which the foreign aid literature speaks unanimously, it is that foreign aid is not distributed impartially. Need-based criteria are important, as are broad political objectives such as promoting democracy, but the commercial and geopolitical agendas of the donors are critical and shift aid away from need-based allocations (Boone 1996; Alesina and Dollar 2000; Collier and Dollar 2002). The results broadly support these findings. In the following, I combine the results of the

probit and OLS analyses to highlight the effects of three clusters of variables of interest: humanitarian variables, economic concerns, and strategic interests, which represent public goods, private goods, and security externalities, respectively.

The first set of variables that explain the distribution of foreign aid represent the formal eligibility criteria based upon economic need, and these have effects that are consistent across donors. Table 1 displays the effects of four variables (in columns) across regressions using data for different donors (in rows). Under each variable, the first column represents the predicted substantive effect on the probability of receiving aid, with its associated standard error and p-value, and the third represents the OLS coefficient for the amount of aid disbursed. The most significant effects are for pure relief aid. I use aid from the UN High Commissioner for Refugees (UNHCR) as a measure of extreme humanitarian need, and find that across the board, donors are significantly more likely to aid countries that are receiving aid from UNHCR. UNHCR aid did not significantly affect the levels of aid provided by France and Germany, but did increase aid levels provided by the United States, Britain, Japan and the EU: one dollar of UNHCR aid was matched by an additional \$1.06 from the United States, \$0.24 from Britain, \$0.69 from Japan, and \$0.94 from the EU.

Table 1: Effects of Humanitarian Variables (Public Goods)

Aid receipt (probit) and aid amounts (OLS)

	UNHCR				GDP per capita				Population (millions)				Debt/GDP			
	<i>Pr(Aid)</i>		<i>Amount</i>		<i>Pr(Aid)</i>		<i>Amount</i>		<i>Pr(Aid)</i>		<i>Amount</i>		<i>Pr(Aid)</i>		<i>Amount</i>	
	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>Coef.</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>Coef.</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>Coef.</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>Coef.</i> <i>Std. Err.</i>	<i>p</i>
U.S.	3.8% 0.6%	0.00	1.06 0.46	0.02	-0.0025% 0.0004%	0.00	-0.0028 0.0015	0.07	0.006% 0.010%	0.54	-0.011 0.034	0.74	0.002% 0.003%	0.60	-0.0009 0.0032	0.78
France	2.7% 0.3%	0.00	0.02 0.10	0.85	-0.0005% 0.0001%	0.00	-0.0005 0.0002	0.01	0.001% 0.005%	0.78	-0.011 0.007	0.09	0.001% 0.001%	0.64	0.0001 0.0007	0.85
UK	4.0% 0.3%	0.00	0.24 0.05	0.00	-0.0007% 0.0002%	0.00	-0.0006 0.0001	0.00	-0.001% 0.005%	0.83	0.021 0.004	0.00	0.001% 0.002%	0.58	0.0000 0.0004	0.99
Germany	1.4% 0.6%	0.00	0.28 0.35	0.43	-0.0001% 0.0000%	0.00	-0.0007 0.0006	0.25	0.000% 0.001%	0.99	-0.031 0.022	0.16	6.8E-07 1.7E-06	0.69	0.0002 0.0025	0.95
Japan	1.3% 0.3%	0.00	0.69 0.22	0.00	-0.0006% 0.0002%	0.00	-0.0007 0.0004	0.10	-0.015% 0.006%	0.02	0.011 0.015	0.47	0.001% 0.002%	0.66	-0.0005 0.0016	0.74
EU	0.9% 0.7%	0.00	0.94 0.16	0.00	-0.0001% 0.0001%	0.00	-0.0019 0.0004	0.00	0.000% 0.000%	0.86	-0.008 0.010	0.42	4.2E-07 1.1E-06	0.68	-0.0003 0.0011	0.78

Income also has an effect that is statistically significant and robust, but the effects are very small. Across the board, poorer countries are more likely to receive aid than wealthier countries, and are expected to receive more from each donor. Thus, countries with per capita GDP under the international poverty line of \$1 per day were 4% more likely to receive U.S. aid than the average country that was not an aid donor (\$8.76 per day). Of the forty-two countries—most small African countries—that met this criterion for part or all of the time series, twenty-five received U.S. foreign aid. Those countries that are aid recipients receive more aid if they are poor, but again the effects are modest. Countries with per capita GDP of \$1 per day received an average of \$7.9 million more than the average country from the United States, \$1.4 million more than the average country from France, \$1.8 million from the United Kingdom, and \$5.9 million from the European Union. On a per capita basis, of course, these magnitudes are very small: the total effect of poverty on aid from the United States, the United Kingdom, France and the EU amounts to \$0.49 per person per year for the average country of 35 million. Indeed, had we not controlled for the fixed effects for Israel and Egypt, U.S. aid would exhibit the opposite trend, being distributed disproportionately to wealthier countries rather than

to poorer ones. In short, foreign aid generally responds in a symbolic and half-hearted way to international poverty.

A third humanitarian variable of interest is population. Aid distribution is biased against large countries, which receive substantially less aid than smaller countries in per capita terms. Only British aid allocations increase with population even in absolute terms, and British aid, too, declines in per capita terms. French aid actually decreases in absolute terms as a function of population. This suggests non-humanitarian motivations, since the scale of need is related to population. A likely explanation is that the leaders of large countries are less susceptible to being influenced by foreign aid because their tax bases are so much larger. If aid is intended to buy influence, its marginal productivity is highest in small countries.

Finally, bilateral development aid does not appear to respond in any systematic way to international indebtedness as a proportion of GDP. The results for aid eligibility are mixed, some negative and some insignificant, but indicate that countries are indifferent or less inclined to extend aid when countries become highly indebted. Similarly, there are no significant relationships between debt levels and levels of aid. This may be related to the risk of becoming involved in an expensive debt bailout, or a high level of debt may be regarded as a symptom of poor governance. In any case, it is clear that donors are not eager to rush in to help countries that become highly indebted. There was widespread concern at the outset of the 1990s that sovereign debt had mired developing countries in a low-development trap, and numerous initiatives sought to link debt relief to environmental progress. Nevertheless, during the 1990s, debt did not make

countries more likely to receive development aid or likely to receive more of it.³ In summary, humanitarian concerns, while clearly a part of the calculus of development aid, constitute only a small part of the motivations for bilateral aid flows.

On the other hand, commercial and financial interests are substantial motivations for aid donors, but these motivations differ sharply by donor. Table 2 presents the effects of the four most important private interest variables—exports, distance, debt exposure, and OPEC membership—from the same regressions discussed above, and again presenting the probit results for receiving aid next to the OLS results for the amount of aid received. [Table 2 about here]

Table 2: Effects of Economic Variables (Private Goods)
Aid receipt (probit) and aid amounts (OLS)

	Exports				Distance (1000 miles)				Debt Exposure				OPEC			
	Pr(Aid)		Amount		Pr(Aid)		Amount		Pr(Aid)		Amount		Pr(Aid)		Amount	
	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p
U.S.	0.003%	0.41	-0.01	0.08	0.16%	0.81	-2.85	0.13	0.02%	0.73	0.10	0.54	-32.2%	0.00	6.90	0.74
	0.004%		0.01		0.65%		1.90		0.05%		0.16		5.8%		20.88	
France	0.006%	0.60	0.12	0.00	1.34%	0.00	-0.73	0.12	0.19%	0.01	0.82	0.00	4.6%	0.00	-8.68	0.00
	0.011%		0.01		0.49%		0.47		0.07%		0.10		1.1%		2.87	
UK	0.002%	0.87	0.02	0.03	0.25%	0.53	0.13	0.63	-0.04%	0.70	0.05	0.60	-2.3%	0.22	-0.12	0.95
	0.011%		0.01		0.40%		0.26		0.11%		0.10		2.2%		1.74	
Germany	0.000%	0.72	0.08	0.00	0.18%	0.03	-3.91	0.02	0.02%	0.13	0.56	0.07	0.6%	0.01	-23.17	0.02
	0.001%		0.02		0.14%		1.62		0.02%		0.31		0.4%		9.56	
Japan	0.003%	0.18	0.02	0.00	-0.80%	0.08	-3.95	0.00	0.02%	0.84	1.48	0.00	5.0%	0.01	-3.90	0.52
	0.003%		0.01		0.45%		0.86		0.08%		0.19		1.3%		6.06	
EU	0.002%	0.04	0.18	0.00	0.00%	0.99	-2.44	0.00	0.01%	0.03	0.23	0.10	-0.9%	0.01	-16.63	0.00
	0.002%		0.02		0.04%		0.72		0.01%		0.14		0.8%		5.30	

Foreign aid is an important tool that developed countries use to promote their exports, either overtly—by tying aid to commitments to spend a portion of the aid in the donor country or donating surplus agricultural products—or indirectly, through diplomatic pressure. Each of the major donors maintains a corps of commercial officers

³ The Highly Indebted Poor Countries (HIPC) initiative of the IMF and the World Bank, which provided substantial debt relief linked to the Millennium Challenge goals, followed the period covered by this study, and covered debt owed to the multilateral international financial institutions.

in recipient countries dedicated to promoting their respective exports. In addition, aid allocations take place in the shadow of negotiations over bilateral trade and investment treaties, and negotiations that take place in the WTO or in regional forums about trade restrictions and trade preferences. Aid is a potent bargaining chip to use with many small countries, and the effects of trade prospects on aid distribution are substantial. Exports are associated with only a slightly higher probability of receiving aid, and the effects are significant only for the EU. Trade has substantial effects on aid volumes, however. One million dollars of export trade is translated into \$120,000 of French aid, \$20,000 of British aid, \$85,000 of German aid, \$20,000 of Japanese aid, and \$180,000 of EU aid. In spite of legal linkages between U.S. aid and exports, the United States is the only country that does not allocate more aid to countries that absorb its exports when controlling for other influences. A result of the linkage between trade and aid is that aid is shifted to countries that are able to absorb developed-country exports, and away from the countries that are least able to afford them.

Previous studies have generally found that aid declines with distance, and this is generally the case in terms of aid receipts here, as well.⁴ There is no consistent pattern with respect to the selection of aid recipients, and France and Germany are slightly more likely to provide aid to distant countries. On the other hand, distance is clearly associated with lower amounts of aid, reflecting weaker interest in more distant countries. The effect is significant for Germany, Japan and the EU, and marginally significant for the United States and France. Distance is an important factor in international trade, which is reflected in gravity models of trade flows based on distance, but it remains significant

⁴ Distance is measured in miles between the recipient's capital and Washington for U.S. aid, Tokyo for Japanese aid, and Paris for European donors.

when controlling for trade because it captures a variety of other motivations, such as concerns about immigration and refugees. In the case of the EU, the regional focus reflects the emphasis on expansion into Eastern Europe and the former Soviet Union after the end of the Cold War, which was pioneered by the PHARE and TACIS aid programs that transformed EU aid policy during the 1990s (see Table A2 for the full table of results).

Another important donor interest is assuring the timely repayment of developing-country debt, and aid is diverted for this purpose as well, but the effects differ markedly across donors.⁵ Most aid recipients are highly indebted countries, and the aid donors represent the creditors that attempt to enforce repayment or finance debt restructuring when this becomes necessary. Once a country becomes involved in the debt rescheduling process, other forms of private financing evaporate, and official aid becomes a much more important incentive to keep debtor countries repaying their debts. As noted above, aggregate debt levels do not motivate donors to increase aid, and the results in Table A2 indicate that the same is true of debt arrears. In contrast to these public benefits of avoiding default, private incentives are compelling. *Debt exposure* captures the degree to which a donor country stands to lose from a developing country's default, measured as the percentage of the country's foreign debt denominated in the donor country's currency. The results indicate substantial variation in the degree to which donors are motivated by this concern when they contribute to working out debt crises. For France and the EU (where debt exposure is measured as the fraction of debt in French francs), higher levels of exposure lead to higher probabilities of extending aid. For France, Japan,

⁵ Tomz (2007) demonstrates that trade sanctions and military intervention have not been used systematically to facilitate debt collection, arguing that the evidence points to a reputational model of debt repayment. He does not investigate the role of aid flows, however.

Germany ($p=.07$) and the EU ($p=.1$), higher exposure leads to greater amounts of aid, as well. The effects are starker when translated into dollars: 10% exposure in francs leads to \$8.2 million in annual French aid and \$2.3 million in EU aid, 10% exposure in DM is associated with \$5.6 million in German aid, and 10% exposure in yen leads to \$14.8 million in Japanese aid. France, Germany and Japan have the most concentrated patterns of bank lending, and consequently have the strongest interests in sustaining repayment and make the most substantial contributions. Other donors' aid policies appear to be much less substantially motivated by debt collection.

The politics of oil weighs heavily in the distribution of aid. While the United States and the European Union are less likely to give aid to members of OPEC than to non-members, France, Germany and Japan are more likely to give aid to OPEC members. The only OPEC members to receive aid from the United States during this period were Nigeria and Venezuela, while France, Germany and Japan also aided Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates. These additional recipients did not qualify for development assistance based on economic criteria, nor are they models of good governance or respect for human rights, so political calculations appear to be at work. The smaller European powers and Japan are disproportionately dependent upon Middle Eastern oil, and they may be seeking insurance against a renewed oil embargo, but it seems unlikely that they are paying for access to oil, which is available at the prevailing world price on the global market. More likely, they are paying for preferred treatment of national oil companies. The amounts of aid that OPEC countries receive are not substantial. France, Germany and the European Union give less aid to OPEC

members than to non-members in absolute terms—on average 32 percent, 77 percent, and 49 percent less, respectively—and those figures would be lower as shares of GDP.

The third cluster of significant variables captures public goods with security externalities: alliances, voting in the United Nations, colonial ties and membership in post-colonial international organizations. These results are presented in Table 3. [Table 3 about here.] These strategic ties play an important role in determining the distribution

Table 3: Effects of Strategic Variables (Security Externalities)
Aid receipt (probit) and aid amounts (OLS)

	Alignment				UN voting				French Colony				Commonwealth			
	Pr(Aid)		Amount		Pr(Aid)		Amount		Pr(Aid)		Amount		Pr(Aid)		Amount	
	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p	dF/dx Std. Err.	p	Coeff. Std. Err.	p
U.S.	-68.3%	0.00	-11.50	0.64	27.6%	0.00	-40.45	0.03	5.6%	0.07	-16.79	0.07	1.7%	0.57	-5.67	0.51
	9.7%		24.28		5.5%		18.76		2.9%		9.37		2.9%		8.61	
France	-9.8%	0.01	-2.42	0.60	11.3%	0.00	-10.78	0.04	-1.6%	0.35	7.28	0.00	-3.6%	0.02	-1.81	0.30
	4.0%		4.65		3.7%		5.17		1.9%		2.27		1.7%		1.76	
UK	2.6%	0.49	-5.54	0.03	1.5%	0.62	1.00	0.71	-0.1%	0.93	-1.07	0.33	5.5%	0.00	6.13	0.00
	3.7%		2.51		3.0%		2.64		1.2%		1.09		1.5%		1.10	
Germany	-1.6%	0.02	-28.91	0.06	0.4%	0.59	72.47	0.00	0.0%	0.92	-10.57	0.12	0.0%	0.99	0.99	0.87
	1.2%		15.44		0.8%		17.92		0.3%		6.86		0.3%		5.88	
Japan	-2.7%	0.60	10.67	0.28	7.5%	0.13	-20.98	0.11	2.6%	0.14	6.82	0.13	6.2%	0.00	-4.36	0.22
	5.0%		9.90		4.9%		13.13		1.6%		4.48		1.4%		3.55	
EU	1.1%	0.00	8.24	0.24	0.7%	0.03	8.77	0.28	0.3%	0.01	-3.23	0.35	0.4%	0.00	2.16	0.43
	1.0%		7.08		0.7%		8.05		0.3%		3.44		0.4%		2.76	

of aid, but the pattern of effects varies across donors. Alliances are measured by the S-score capturing the similarity of two profiles of alliance memberships, ranging from -1 (opposite alignment) to 1 (perfectly congruent alignment). In a series of specifications that are not reported, I found that the only alignment that affects the aid given by any donor is that with the United States. French aid is unaffected by the degree to which the recipient is aligned with France, for example, and British aid is unaffected by the degree of the recipient's alignment with Britain. However, the United States appears to condition its aid on how closely the recipient is aligned with the United States, and so do Britain, France, Germany and the EU. This is an interesting commentary on the post-

Cold War international system, in which only one strategic alignment has any real significance. The countries that are most likely to receive aid and that receive the most are those that are least closely aligned with the United States. This supports the interpretation that aid is used to buy influence, rather than simply to reward close friends. Influence need not be bought from close allies, and aid is allocated strategically to influence those least likely to be cooperative. The EU is the only donor that appears to favor U.S. allies when choosing aid recipients. For most donors, alignment affects eligibility for aid rather than its volume, but a one-standard deviation shift in alignment towards the United States is associated with a decrease of about 1 million dollars in British aid and about 5.5 million dollars in German aid.

The second strategic variable of interest is voting in the UN General Assembly, which is captured by an S-score measuring the affinity between the donor's and the recipient's voting patterns. Several studies have found associations between UN voting and aid from various donors and international institutions (Alesina and Dollar 2000, Barro and Lee 2002, Oatley and Yackee 2000, Thacker 1999, Stone 2004). Examining the selection of recipients and the distribution of aid separately, however, reveals an interesting pattern. When selecting aid recipients, donors uniformly prefer to support governments with similar policies. Although the United States and its close allies tend to vote similarly in the UN, the votes cast by each donor are the strongest predictor of which countries it selects as aid recipients. When determining the distribution of aid among recipients, however, donors diverge sharply: the United States and France distribute substantially more aid to recipients that are unsupportive of their positions in the UN, while Germany distributes more of its aid to recipients that are supportive.

Positive associations between UN voting and aid could reflect vote buying, and it is likely that this occurs on some important votes; since most UN votes are relatively unimportant to donors, however, these S-scores capture the overall similarities in foreign policy perspectives between donors and aid recipients. The strong negative associations between aid and voting similarity with the United States and France, on the other hand, cannot be explained by vote buying, but are consistent with the strategic logic of alignment. The United States and France have extensive international commitments, and they use their aid to purchase acquiescence on a variety of issues that are unrelated to voting in the United Nations. Countries whose preferences are most divergent demand the most aid in return for altering their policies, and those that habitually vote in opposition to the United States or France, respectively, are the ones with the most divergent preferences. In this view, the difference between U.S. and French aid policies, on one hand, and German policies, on the other, is the difference between strategic and sincere aid allocations, which is analogous to the distinction between strategic and sincere voting. The former donors provide aid to countries when it will be pivotal in getting them to support their far-flung strategic commitments; the latter have no such commitments, and give their aid to the regimes that they sincerely regard as most sympathetic.

The effects of UN voting are net of the effects of alignment, and the different effects suggest that the two variables are capturing differing aspects of international politics.⁶ Alignment captures a crisp political commitment along a single security dimension, while UN voting captures a more diffuse foreign policy posture on a constantly shifting agenda. Whereas alliances, once made, constrain both actors and

⁶ The correlation of the two measures among aid recipients is .16

reduce the incentives to reward compliance, UN voting is a less predictable form of soft cooperation that better measures the similarity in countries' foreign policy preferences.

Former colonial ties have lingering effects in the 1990s, but the payoff comes only to countries that have maintained close ties with the former imperial center. Thus, being a former British colony brings no additional probability of receiving aid from Britain (in specifications that are not reported), but being a member of the Commonwealth of Nations significantly increases the probability of receiving aid. Forty-six percent of former colonies that were non-members received British aid, compared to 63% of former colonies that were Commonwealth members. Within the population of aid recipients, Commonwealth countries receive \$6.1 million per year more aid from Britain than non-members. Strikingly, membership in the Commonwealth also increases the probability of receiving aid from the European Union and Japan, perhaps because Commonwealth membership constitutes a seal of approval for national policies, and is associated with good governance and respect for human rights. For example, Zimbabwe was expelled from the Commonwealth for violating these principles, and South Africa was readmitted to the Commonwealth after the abolition of Apartheid.

Similarly, status as a former French colony has no significant effect on the probability of receiving aid from France, although it does increase the probability of receiving aid from the European Union. However, the absence of a positive association with aid does not signal that former colonies are no longer important to France. Rather, France draws clear distinctions among its former colonies, rewarding those that cooperate, and ostracizing those that do not. France provides aid to only 29% of its former colonies, but it gives an average of \$7.3 million more aid to its former colonies

than to other countries, if it chooses to grant them aid. The European Union follows the French lead on whether to grant aid to former French colonies. Indeed, within the set of former French colonies, receiving aid from France appears to be necessary and sufficient in order to receive aid from the European Union.

In summary, aid is motivated by humanitarian, economic and strategic interests, but the humanitarian impulse is the weakest. The reasons for providing aid to particular countries vary substantially depending upon the donor. The continental European and Japanese aid strategies emphasize commercial and financial interests, while U.S. and French aid emphasize geopolitical concerns. These conclusions may lead to pessimistic expectations about the effectiveness of aid, but they suggest that using the differences among the donors to gain explanatory leverage is a promising strategy.

Effects of foreign aid

In order for foreign aid to promote economic development, it must create incentives for governments to pursue growth-friendly public policies. Every leader faces a trade-off between providing public goods, such as fair and efficient administration, infrastructure, public health and education, and providing private goods for his or her elite allies and personal consumption. Particularly in authoritarian systems, the incentives to divert public funds from socially beneficial uses may be intense (Bueno de Mesquita et al. 2003). Consequently, in the absence of strong incentives created by the donor, foreign aid money should not be expected to promote development. Furthermore, there are reasons to expect foreign aid to have negative consequences for growth. By expanding the distributive functions of the state, aid creates new and enhanced incentives

for rent seeking, and promotes corruption (Knack 2001). By making the state a more valuable prize, aid increases the incentives for military officers to attempt coups, and for guerrilla leaders to launch rebellions. By strengthening the position of the incumbent, it prevents bad policies from leading to leadership turnover, which would otherwise lead to improved policies. If aid fails to actively promote growth because it is not connected with credible incentives to pursue growth-friendly policies, there is reason to expect it to be counterproductive rather than neutral.

The previous section demonstrated that aid is allocated primarily to meet the donors' economic and strategic priorities rather than the recipients' development needs, so we expect conditionality to be weak. The reasons for allocating aid differ sharply among donors, however, so aid from different donors may have different effects. In particular, the aid provided by two donors, the United States and France, is significantly motivated by security externalities, which suggests that in some cases these donors may have long term interests in promoting development. I hypothesize that whether a donor's security interests translate into a credible commitment to development depends upon the capacity of the recipient government. Very weak governments are at risk of collapse, so aid cannot credibly be withheld to sanction non-compliance, and the incentives for recipients to carry out politically risky reforms are weak. High-capacity governments, on the other hand, can be credibly threatened, and have stronger incentives to comply. The development effects of aid should interact with institutional capacity, and the interaction should be most important when the donor has a long-term strategic interest in the client state.

A problem with all commonly used measures of administrative capacity is that they are systematically missing for the countries with the lowest capacity. Consequently, the measure of administrative capacity used here is derived from missing data: it captures the degree to which countries collect and report financial data (Stone 2008).⁷ This variable is derived from the pattern of missing data in the information reported to the IMF and published in *International Financial Statistics*. For each of eighteen key variables, I coded a dummy variable to take the value 1 if data were missing in a given month and 0 otherwise.⁸ Principal components analysis was used to extract the common factor associated with failure to report data, and the result was normalized to [0,1], where high values represent high capacity. This capacity measure was interacted with aid in the regressions presented below.

Estimation results

There is an extensive literature on the determinants of economic growth. Without attempting to survey this literature here, I build a model that incorporates several strands. Growth is assumed to depend upon domestic investment and foreign direct investment, to have historical dynamics (hence a lagged dependent variable and its square), and to

⁷ Alternatively, this could be regarded as a measure of the degree to which governments deliberately hide information in order to evade accountability (Bueno de Mesquita et al., 2003). Two considerations argue against this interpretation. First, reporting data of this sort is a significant administrative task, which represents a difficult hurdle for many developing countries. Second, if leaders are determined to hide their corrupt behavior, it would be preferable to falsify the data that they report than to fail to collect them. The data are an important administrative resource, and while international agencies generate incentives to report data, they do not enforce accurate reporting. The IMF does not attempt to verify the data submitted by member governments except when they represent performance criteria under IMF programs, and in those cases failing to report data is not an attractive option.

⁸ The eighteen variables were: imports, exports, current account, the interest rate on treasury bills, the change in the money supply (M1), the exchange rate, international reserves, inflation, aggregate domestic credit, claims on the central government, central bank claims on the central government, central bank foreign liabilities, budget balance, net domestic borrowing, net foreign borrowing, foreign debt, commercial bank foreign liabilities and commercial bank reserves.

depend upon openness to the international economy (trade/GDP). Following recent papers, I allow growth to depend upon inflation and foreign debt. In addition, growth is assumed to depend upon international and civil conflict and democracy (Przeworski et al. 2000). I include a fixed effect for sub-Saharan Africa, and since the data cover the 1990s, another for the East Asian crisis. Each of these factors helps to explain growth in more limited specifications, but not all are significant in the composite model. Finally, I expect that growth should depend upon the institutional capacity of the state to perform administrative tasks and provide public goods (Easterly 2001, Stiglitz 2002), and that the effectiveness of international aid flows depends upon institutional capacity, so I include an interaction term between aid and missing data.

Table 4 presents the results of Heckman selection models regressing growth on a common set of control variables, aid as a proportion of GDP from each of six donors, missing data, and an interaction between missing data and aid [Table 4 about here]. The interpretation of the effect of aid is not straightforward because of the interaction with capacity, and this is discussed below, but the table reveals several conclusions. The results show that missing data are a strong predictor of (poor) economic growth. The effects of foreign aid depend critically upon the institutional capacity of the recipient, and those interaction effects vary substantially across the six donors.

The tests of significance reported in Table 4 for the effects of aid flows are valid only in the case where capacity takes a value of zero, so Table 5 presents the corresponding tests while allowing the interaction term to vary and explores the substantive effects of aid at various levels of capacity. [Table 5 about here.] Reading down the rows of the table, one finds the results of linear Wald tests of the hypothesis

that the effect of aid/GDP from a particular donor plus the interaction term with missing data is indistinguishable from zero when capacity measured in terms of missing data is at its mean, one standard deviation below its mean, and one standard deviation above its mean.

Table 5: Substantive Effects of Aid on Growth

	U.S.		France		UK		Germany		Japan		EU	
	<i>Coef.</i>	<i>p</i>	<i>Coef.</i>	<i>p</i>	<i>Coef.</i>	<i>p</i>	<i>Coef.</i>	<i>p</i>	<i>Coef.</i>	<i>p</i>	<i>Coef.</i>	<i>p</i>
<i>Capacity:</i>												
Low	-1.86	0.01	3.45	0.10	-0.35	0.88	-3.17	0.11	6.19	0.80	-0.53	0.43
	<i>0.65</i>		<i>2.12</i>		<i>2.31</i>		<i>2.00</i>		<i>24.00</i>		<i>0.66</i>	
Mean	-0.75	0.01	4.08	0.01	0.14	0.97	-1.83	0.25	2.97	0.78	-0.66	0.29
	<i>0.30</i>		<i>1.67</i>		<i>4.26</i>		<i>1.61</i>		<i>10.71</i>		<i>0.62</i>	
High	0.30	0.01	4.67	0.01	0.62	0.93	-0.56	0.75	-0.09	0.96	-0.79	0.34
	<i>0.11</i>		<i>1.89</i>		<i>6.55</i>		<i>1.72</i>		<i>1.98</i>		<i>0.83</i>	

Note: Effect of aid/GDP (%) on change in GDP (%), conditional on capacity, standard errors in italics. "Low" and "High" indicate one standard deviation below and above the mean, respectively.

U.S. foreign aid has significant effects, but the benefits are strictly limited to countries that are well governed; the effect of U.S. aid on low-capacity countries is to retard growth. When the degree of missing data is distinctly below average, U.S. foreign aid has significant positive effects on growth. Foreign aid worth one percent of GDP produces 0.3 percentage points of growth. An increase in aid of one standard deviation (3.4% of GDP) increases growth by 1% per year. This effect drops off as governance deteriorates, and by the time the level of missing data reaches the mean, the effect has switched signs: U.S. foreign aid has a highly significant effect that retards growth. At average levels of capacity, aid worth 1% of GDP reduces growth by 0.75% of GDP, and at one standard deviation below the mean, the same aid volume reduces growth by almost 2% of GDP. This indicates that U.S. foreign aid—unlike that of the Europeans—is

unsuccessful at overcoming governance problems, building institutional capacity, and promoting reform. When it falls on fertile soil, U.S. aid can promote economic growth, albeit very inefficiently; when it falls into hands that lack the capacity or the will to provide public goods, it exacerbates these governance problems and restrains growth. This is consistent with the interpretation that countries that routinely receive large amounts of U.S. aid are unfettered by credible conditionality—their leaders know that aid is tied to their foreign policies rather than their domestic ones—so aid fails to promote growth-oriented reform. To the contrary, when leaders know that they are too important to U.S. policies for the United States to allow them to fail, aid creates moral hazard problems and perpetuates the rule of corrupt regimes.

French aid exhibits the same interactive effect, producing the most growth in high-capacity countries, but its effect on growth is positive even at mean levels of capacity, and French aid has insignificant effects on growth rather than negative ones at low levels of capacity. This is consistent with the observation that French aid policy, at least since France dismantled its colonies, has been less apt to become captured by corrupt regimes. As noted above, France draws sharp distinctions among its former colonies, rewarding some for their cooperation and ostracizing others. Nevertheless, France has pursued a long-term strategy of state building and influence expansion in sub-Saharan Africa. This policy has gone so far as to create and subsidize common currency areas, and France plays a special role as mediator between these countries and the international financial institutions, the World Bank and the IMF. French aid has markedly higher productivity than U.S. aid: one percentage point of GDP in French aid is associated with over four percentage points of growth at average and high levels of

capacity. This presumably reflects the extreme poverty of the African countries that are the major recipients of French aid, where small amounts of foreign financing have substantial buying power. However, it is not the case that French aid has a larger impact on development than U.S. aid in the aggregate when capacity is high. French aid averages less than 0.04 percent of GDP in recipient countries, with a standard deviation of 0.55 percent, compared to U.S. aid that averages 0.16 percent of recipient GDP, with a standard deviation of 3.4 percent. The uncertainty of the point estimate of the substantive effect of French aid, combined with the larger scale of U.S. aid, ensures that the 95 percent confidence intervals of the effect of French and U.S. aid overlap. In other words, the results cannot reject the hypothesis that U.S. aid plays at least as large a role in promoting development as French aid in high-capacity countries, although it takes more U.S. aid to produce the same effects.

Aid from the other donors has no statistically significant effects on growth. This suggests that aid from these countries is not accompanied by substantial conditionality. Recall that Germany and Japan were the two countries that focused their aid most single-mindedly on promoting domestic economic interests. Both provide significantly more aid to countries that have substantial debt exposure in their currencies, and Germany is more likely to provide aid to countries in that case. Both provide substantially more aid to countries that are in arrears on their debts in order to encourage repayment. Both provide substantially more aid to countries that import their products, and Japan is more likely to provide aid to countries that represent import markets. On the other hand, both countries are significantly less likely to provide aid to democracies than to non-democracies. Both provide aid to relatively wealthy members of OPEC. The effects of

geography, again, seem to follow economic interests. Both countries channel aid disproportionately to future EU accession states, which are important export markets and investment sites, but not to the less lucrative former Soviet republics (aside from Russia, in the German case). Recipients of German and Japanese aid apparently recognize that their good fortune relies on geography, trade and financial ties rather than on carrying out economic reform, and they behave accordingly.⁹

To summarize, the results of growth equations lead to three main conclusions. First, foreign aid can benefit development, but aid can also be highly counterproductive. Second, the effects of foreign aid depend critically upon institutional capacity. When the recipient's institutional capacity is low, foreign aid can aggravate domestic governance problems, with negative effects upon growth. Third, the effects of a dollar of foreign aid differ substantially depending upon the donor, indicating that the reasons for giving aid may be more important to development than the quantity of aid. U.S. and French aid, which were motivated by long-term security externalities, were most effective at stimulating growth. However, these were also the cases where institutional capacity played the greatest role: low institutional capacity rendered aid ineffective in the French case and counterproductive in the U.S. case. Aid effectiveness is correlated with the politics of aid distribution, which directs attention to the credibility of the conditionality contract.

⁹ Given the importance of Russia as a recipient of German aid and Russia's lackluster economic performance in the 1990s, one might suspect that Germany's poor record of promoting development is due to Russia. Dropping Russia from the sample did not change the qualitative effects of German aid on growth, however.

Conclusions

Although the evidence presented here diverges from much of the aid literature in finding positive effects of development aid on growth, it nevertheless confirms important features of that literature's pessimistic consensus. I find that aid can promote economic development, but its effectiveness depends critically on the institutional capacity of the recipient country and the motivations of the donor. Development aid is generally less effective when government capacity is low, and it can become counterproductive. Indeed, the mechanism that leads aid to be ineffective for development appears to be that aid from most donors exacerbates the governance problems in poor countries, magnifying the development-retarding impact of weak state capacity.

The selection of aid recipients and the distribution of aid among them provides evidence that aid is not intended primarily as an instrument to promote economic development. Aid is highly politicized. It is directed to client states, to countries that are judged to be susceptible to foreign influence, to countries that represent important export markets, and to countries that owe substantial amounts of debt to domestic financial institutions. There is evidence of humanitarian motivations for providing aid, but such public good-motivated aid is generally underprovided, and the evidence is that it accounts for a small fraction of development aid. The story of foreign aid distribution is overwhelmingly a story of donors promoting their own national interests, and this surely limits the effectiveness of foreign aid. The reasons for giving aid are quite diverse. Some donors, such as Britain and the European Union, are highly concerned with humanitarian crises and the alleviation of poverty; Germany, France and Japan pursue commercial and financial interests; France and Britain direct aid to subsets of their

former colonies that continue to cooperate with their policies and objectives. The United States has so skewed its aid distribution to reflect foreign policy priorities that it gives more money to wealthier countries than to poor ones.

The development effects of foreign aid are correspondingly diverse. British, German, Japanese and EU aid have no significant effects; French aid has significant growth-promoting effects, but these effects decline and eventually become insignificant as capacity falls; U.S. aid has significant positive effects only at above-average levels of capacity, and becomes counterproductive when administrative capacity is average or low. These differences appear to be consistent with the differing agendas that lead different donors to distribute development assistance. The donors that are most successful at promoting development, the United States and France, are those that are most strongly motivated by security externalities. These security externalities provide incentives for donors to take a long-term view of aid relationships and use their aid to create incentives for real development. However, these security concerns also hold aid policies hostage to short-term concerns about the survivability of favored regimes in low-capacity countries, which renders the effort to create incentives for economic reform incredible. Low capacity undermines the effectiveness of aid in the presence of security externalities, and in extreme cases makes aid highly counterproductive, promoting corruption and ensuring the survival of predatory regimes. Aid effectiveness is correlated with the politics of aid distribution.

This study focused on the interregnum between the Cold War and the War on Terror because this was the period in which geopolitical influences were weakest. For example, the United States cut aid to the corrupt and repressive government of Zaire

when it was no longer needed as a Cold War ally, and had not yet begun to funnel aid to the failed states of Afghanistan and Iraq. This should make the 1990s the decade in which it is hardest to find evidence that aid policies are shaped by foreign policy objectives, but the evidence is nevertheless clear that these agendas were active. On the other hand, if the distraction of security concerns were the major obstacle to effective development assistance, the 1990s should have been a good decade for aid effectiveness. The weak and insignificant effects of aid flows from Britain, Germany, Japan and the EU suggest that this is not the case. A pessimistic conclusion of this analysis is that donors appear to require a strong security motivation to make their aid effective at promoting development, but an optimistic result is that they are able to promote development when the incentive is strong. Unfortunately, security externalities appear to lead to successful aid policies only when the recipients have high-capacity governments, where donors can credibly threaten to withhold the aid. When aid recipients can credibly threaten to collapse when aid is withdrawn, and security concerns are binding, aid has counterproductive effects for development. These conclusions suggest that expectations for development aid should be very modest as long as U.S. foreign policy remains focused on rebuilding failed states in the Middle East.

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Table 4: Effects of Foreign Aid on Growth
FIML Heckman Selection Model Estimates

	U.S.		France		UK		Germany		Japan		EU	
	Coef. Std. Err.	p	Coef. Std. Err.	p	Coef. Std. Err.	p	Coef. Std. Err.	p	Coef. Std. Err.	p	Coef. Std. Err.	p
Growth _(t-1)	0.30 0.03	0.00	0.30 0.02	0.00	0.34 0.03	0.00	0.29 0.02	0.00	0.27 0.02	0.00	0.29 0.02	0.00
Growth ² _(t-1)	0.0045 0.0008	0.00	0.0038 0.0008	0.00	0.0085 0.0011	0.00	0.0040 0.0008	0.00	0.0044 0.0008	0.00	0.0038 0.0008	0.00
GDP per cap	-0.0004 0.0001	0.00	-0.0002 0.0001	0.01	-0.0004 0.0001	0.00	-0.0002 0.0001	0.04	-0.0001 0.0001	0.10	-0.0003 0.0001	0.02
Trade (% GDP)	-0.0088 0.0056	0.12	-0.0112 0.0048	0.02	-0.0079 0.0046	0.09	-0.0093 0.0046	0.05	-0.0077 0.0046	0.09	-0.0113 0.0047	0.02
FDI (% GDP)	0.07 0.04	0.15	0.08 0.03	0.01	0.06 0.03	0.04	0.07 0.03	0.01	0.07 0.03	0.01	0.08 0.03	0.00
Investment (%GDP)	0.03 0.02	0.24	0.07 0.02	0.00	0.09 0.02	0.00	0.07 0.02	0.00	0.08 0.02	0.00	0.07 0.02	0.00
Inflation (annual CPI)	-0.0010 0.0003	0.00	-0.0012 0.0003	0.00	-0.0011 0.0003	0.00	-0.0010 0.0003	0.00	-0.0013 0.0003	0.00	-0.0010 0.0003	0.00
Short-term debt (%)	0.06 0.02	0.00	0.05 0.01	0.00	0.04 0.01	0.00	0.03 0.01	0.01	0.03 0.01	0.01	0.05 0.01	0.00
For. debt/GDP	-0.0006 0.0004	0.15	-0.0036 0.0014	0.01	-0.0001 0.0006	0.89	0.0009 0.0021	0.68	-0.0006 0.0005	0.28	0.0004 0.0006	0.44
War	-0.22 1.18	0.85	-0.24 1.11	0.83	-0.30 1.07	0.78	-0.33 1.08	0.76	0.07 1.11	0.95	-0.52 1.08	0.63
Civil War	-2.26 0.61	0.00	-2.48 0.58	0.00	-1.96 0.56	0.00	-1.98 0.57	0.00	-2.08 0.55	0.00	-2.29 0.57	0.00
Polity	0.00 0.03	0.96	-0.03 0.03	0.23	0.01 0.03	0.67	-0.04 0.03	0.17	-0.03 0.03	0.27	-0.03 0.03	0.23
Sub-Sah. Africa	0.05 0.39	0.90	0.00 0.37	1.00	0.13 0.36	0.71	0.02 0.35	0.95	0.00 0.35	1.00	0.02 0.35	0.95
Aid/GDP	-2.74 0.94	0.00	2.96 2.78	0.29	-0.75 2.23	0.74	-4.24 2.54	0.10	8.76 34.60	0.80	-0.42 0.87	0.63
Aid x Capacity	3.04 0.99	0.00	1.71 3.13	0.59	1.37 7.17	0.85	3.68 2.64	0.16	-8.85 36.54	0.81	-0.37 1.22	0.76
Capacity	5.25 1.04	0.00	7.06 0.98	0.00	5.59 1.00	0.00	5.76 0.98	0.00	7.02 1.09	0.00	5.67 1.00	0.00
E. Asian Crisis	-0.70 0.57	0.22	-0.93 0.55	0.09	-0.33 0.52	0.53	-1.13 0.53	0.03	-1.09 0.52	0.04	-0.99 0.53	0.06
Constant	-3.50 1.12	0.00	-5.54 1.02	0.00	-5.38 1.04	0.00	-4.15 1.02	0.00	-5.53 1.10	0.00	-4.13 1.04	0.00
Number of obs	1672		1521		1584		1508		1503		1567	
Censored	520		208		322		178		188		245	
Uncensored	1152		1313		1262		1330		1315		1322	
Pr(indep eqns)		0.004		0.004		0.00		0.02		0.09		0.06

Appendix: Additional Tables

Table A1: Selection of Aid Recipients

Probit estimates

	U.S.		UK		France		Germany		Japan		EU	
	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>	<i>dF/dx</i> <i>Std. Err.</i>	<i>p</i>
Land area, mln m ²	-1.2E-04 1.1E-04	0.26	6.8E-05 5.7E-05	0.22	-3.6E-05 4.9E-05	0.46	-4.3E-06 9.4E-06	0.63	5.1E-05 6.1E-05	0.40	-1.6E-06 4.6E-06	0.72
Population, mln	6.4E-05 1.0E-04	0.54	-1.1E-05 5.3E-05	0.83	1.3E-05 4.7E-05	0.78	-1.1E-07 8.4E-06	0.99	-1.5E-04 6.4E-05	0.02	-7.7E-07 4.5E-06	0.86
Arrears, mln	9.2E-07 7.7E-06	0.91	4.8E-06 3.9E-06	0.21	1.5E-06 4.1E-06	0.73	-2.3E-07 7.6E-07	0.76	7.0E-07 5.2E-06	0.89	-7.3E-08 3.7E-07	0.84
Debt/GDP	1.6E-05 3.0E-05	0.60	8.8E-06 1.6E-05	0.58	5.8E-06 1.2E-05	0.64	6.8E-07 1.7E-06	0.69	6.7E-06 1.5E-05	0.66	4.2E-07 1.1E-06	0.68
GDP per capita	-2.5E-05 3.5E-06	0.00	-6.9E-06 1.8E-06	0.00	-4.6E-06 1.2E-06	0.00	-6.6E-07 4.5E-07	0.00	-5.9E-06 1.5E-06	0.00	-8.3E-07 7.6E-07	0.00
Civil war	0.03 0.03	0.43	0.02 0.01	0.20	-0.01 0.02	0.44	-0.01 0.01	0.04	-0.04 0.02	0.05	0.00 0.00	0.69
Interstate war	0.09 0.05	0.15	0.03 0.01	0.10	0.03 0.02	0.21	0.01 0.00	0.17	0.04 0.02	0.24	0.00 0.00	0.22
Alignment	-0.68 0.10	0.00	0.03 0.04	0.49	-0.10 0.04	0.01	-0.02 0.01	0.02	-0.03 0.05	0.60	0.01 0.01	0.00
Exports	3.2E-05 3.8E-05	0.41	1.8E-05 1.1E-04	0.87	5.8E-05 1.1E-04	0.60	3.4E-06 9.8E-06	0.72	3.5E-05 2.6E-05	0.18	2.0E-05 1.9E-05	0.04
Distance	1.6E-06 6.5E-06	0.81	2.5E-06 4.0E-06	0.53	1.3E-05 4.9E-06	0.00	1.8E-06 1.4E-06	0.03	-8.0E-06 4.5E-06	0.08	-5.2E-09 4.3E-07	0.99
Pdity	7.9E-03 2.2E-03	0.00	8.3E-04 8.7E-04	0.33	1.1E-05 9.2E-04	0.99	-1.2E-05 1.7E-04	0.94	-3.0E-03 1.2E-03	0.01	9.2E-05 1.2E-04	0.30
UN voting	0.28 0.05	0.00	0.01 0.03	0.62	0.11 0.04	0.00	0.00 0.01	0.59	0.07 0.05	0.13	0.01 0.01	0.03
UNHCR	0.04 0.01	0.00	0.04 0.00	0.00	0.03 0.00	0.00	0.01 0.01	0.00	0.01 0.00	0.00	0.01 0.01	0.00
Debt Exposure	1.7E-04 4.9E-04	0.73	-4.3E-04 1.1E-03	0.70	1.9E-03 7.3E-04	0.01	2.1E-04 1.8E-04	0.13	1.6E-04 8.2E-04	0.84	1.3E-04 1.3E-04	0.03
French Colony	5.6E-02 2.9E-02	0.07	-1.1E-03 1.2E-02	0.93	-1.6E-02 1.9E-02	0.35	2.7E-04 2.6E-03	0.92	2.6E-02 1.6E-02	0.14	2.9E-03 2.8E-03	0.01
Commonwealth	0.02 0.03	0.57	0.05 0.02	0.00	-0.04 0.02	0.02	3.1E-05 2.6E-03	0.99	0.06 0.01	0.00	3.8E-03 3.7E-03	0.00
EU accession	-0.07 0.05	0.15	0.04 0.01	0.01	0.03 0.01	0.10	4.2E-03 3.7E-03	0.17	0.04 0.02	0.03	3.2E-03 3.1E-03	0.01
OPEC	-0.32 0.06	0.00	-0.02 0.02	0.22	0.05 0.01	0.00	6.2E-03 4.3E-03	0.01	0.05 0.01	0.01	-8.8E-03 7.8E-03	0.01
Capacity	0.18 0.05	0.00	0.04 0.02	0.03	0.01 0.02	0.69	3.7E-03 4.7E-03	0.35	0.10 0.03	0.00	-9.3E-04 2.0E-03	0.63
Correctly Predicted	0.80		0.83		0.89		0.91		0.91		0.90	
Number of obs	1914		1890		1889		1901		1892		1889	
Pseudo R2	0.25		0.21		0.13		0.13		0.11		0.27	

Table A2: Correlates of Aid
 OLS estimates, conditional on receiving aid

	U.S. Aid		French Aid		UK Aid		German Aid		Japanese Aid		EU Aid	
	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t
	<i>Std. Err.</i>		<i>Std. Err.</i>		<i>Std. Err.</i>		<i>Std. Err.</i>		<i>Std. Err.</i>		<i>Std. Err.</i>	
Aid _{t-1}	0.37	0.00	0.71	0.00	0.77	0.00	0.36	0.00	0.74	0.00	0.63	0.00
	<i>0.03</i>		<i>0.02</i>		<i>0.02</i>		<i>0.02</i>		<i>0.02</i>		<i>0.02</i>	
Land area, mln m ²	0.135	0.00	-0.008	0.13	-0.002	0.59	0.111	0.00	-0.018	0.11	-0.010	0.23
	<i>0.024</i>		<i>0.005</i>		<i>0.003</i>		<i>0.019</i>		<i>0.011</i>		<i>0.008</i>	
Population, mln	-0.011	0.74	-0.011	0.09	0.021	0.00	-0.031	0.16	0.011	0.47	-0.008	0.42
	<i>0.034</i>		<i>0.007</i>		<i>0.004</i>		<i>0.022</i>		<i>0.015</i>		<i>0.010</i>	
Arrears, mln US\$	0.001	0.69	1.4E-04	0.77	9.3E-05	0.70	0.004	0.01	0.002	0.06	0.001	0.42
	<i>0.002</i>		<i>4.6E-04</i>		<i>2.4E-04</i>		<i>0.002</i>		<i>0.001</i>		<i>0.001</i>	
Debt/GDP	-8.7E-04	0.78	1.4E-04	0.85	6.0E-06	0.99	1.6E-04	0.95	-5.2E-04	0.74	-3.3E-04	0.78
	<i>3.2E-03</i>		<i>7.3E-04</i>		<i>3.7E-04</i>		<i>2.5E-03</i>		<i>1.6E-03</i>		<i>1.1E-03</i>	
GDP per capita	-2.8E-03	0.07	-5.0E-04	0.01	-6.2E-04	0.00	-7.3E-04	0.25	-7.3E-04	0.10	-1.9E-03	0.00
	<i>1.5E-03</i>		<i>1.9E-04</i>		<i>1.3E-04</i>		<i>6.4E-04</i>		<i>4.4E-04</i>		<i>3.7E-04</i>	
Civil war	8.83	0.41	-0.16	0.95	0.58	0.63	-9.55	0.23	7.15	0.16	0.72	0.84
	<i>10.73</i>		<i>2.32</i>		<i>1.22</i>		<i>8.00</i>		<i>5.10</i>		<i>3.65</i>	
Interstate war	7.58	0.73	-6.48	0.15	0.57	0.81	-15.47	0.31	-14.58	0.15	-5.06	0.48
	<i>21.64</i>		<i>4.47</i>		<i>2.38</i>		<i>15.21</i>		<i>10.22</i>		<i>7.13</i>	
Alignment	-11.50	0.64	-2.42	0.60	-5.54	0.03	-28.91	0.06	10.67	0.28	8.24	0.24
	<i>24.28</i>		<i>4.65</i>		<i>2.51</i>		<i>15.44</i>		<i>9.90</i>		<i>7.08</i>	
Exports	-0.01	0.08	0.12	0.00	0.02	0.03	0.08	0.00	0.02	0.00	0.18	0.00
	<i>0.01</i>		<i>0.01</i>		<i>0.01</i>		<i>0.02</i>		<i>0.01</i>		<i>0.02</i>	
Distance	-2.9E-03	0.13	-7.3E-04	0.12	1.3E-04	0.63	-3.9E-03	0.02	-4.0E-03	0.00	-2.4E-03	0.00
	<i>1.9E-03</i>		<i>4.7E-04</i>		<i>2.6E-04</i>		<i>1.6E-03</i>		<i>8.6E-04</i>		<i>7.2E-04</i>	
Polity	1.35	0.04	-0.14	0.30	0.14	0.06	0.67	0.14	0.55	0.07	0.26	0.23
	<i>0.66</i>		<i>0.14</i>		<i>0.07</i>		<i>0.46</i>		<i>0.30</i>		<i>0.22</i>	
UN voting	-40.45	0.03	-10.78	0.04	1.00	0.71	72.47	0.00	-20.98	0.11	8.77	0.28
	<i>18.76</i>		<i>5.17</i>		<i>2.64</i>		<i>17.92</i>		<i>13.13</i>		<i>8.05</i>	
UNHCR	1.06	0.02	0.02	0.85	0.24	0.00	0.28	0.43	0.69	0.00	0.94	0.00
	<i>0.46</i>		<i>0.10</i>		<i>0.05</i>		<i>0.35</i>		<i>0.22</i>		<i>0.16</i>	
Debt Exposure	0.10	0.54	0.82	0.00	0.05	0.60	0.56	0.07	1.48	0.00	0.23	0.10
	<i>0.16</i>		<i>0.10</i>		<i>0.10</i>		<i>0.31</i>		<i>0.19</i>		<i>0.14</i>	
French Colony	-16.79	0.07	7.28	0.00	-1.07	0.33	-10.57	0.12	6.82	0.13	-3.23	0.35
	<i>9.37</i>		<i>2.27</i>		<i>1.09</i>		<i>6.86</i>		<i>4.48</i>		<i>3.44</i>	
Commonwealth	-5.67	0.51	-1.81	0.30	6.13	0.00	0.99	0.87	-4.36	0.22	2.16	0.43
	<i>8.61</i>		<i>1.76</i>		<i>1.10</i>		<i>5.88</i>		<i>3.55</i>		<i>2.76</i>	
EU accession	13.23	0.39	3.58	0.29	-0.79	0.66	-33.05	0.00	-12.68	0.06	27.49	0.00
	<i>15.28</i>		<i>3.41</i>		<i>1.77</i>		<i>11.47</i>		<i>6.70</i>		<i>5.31</i>	
OPEC	6.90	0.74	-8.68	0.00	-0.12	0.95	-23.17	0.02	-3.90	0.52	-16.63	0.00
	<i>20.88</i>		<i>2.87</i>		<i>1.74</i>		<i>9.56</i>		<i>6.06</i>		<i>5.30</i>	
Capacity	-5.68	0.73	5.46	0.10	-1.03	0.57	-7.92	0.48	14.91	0.05	-11.17	0.04
	<i>16.56</i>		<i>3.35</i>		<i>1.80</i>		<i>11.14</i>		<i>7.70</i>		<i>5.39</i>	
Constant	39.63	0.11	6.07	0.14	3.90	0.07	28.28	0.02	23.25	0.02	22.14	0.00
	<i>24.93</i>		<i>4.08</i>		<i>2.13</i>		<i>12.39</i>		<i>10.03</i>		<i>6.39</i>	
Number of obs	1315		1590		1472		1624		1606		1551	
R-squared	0.68		0.75		0.73		0.35		0.77		0.56	