

Foreign Aid as Globalization: Does the Road to Aid Parallel Trade?

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Abstract

Studies of foreign aid have followed work in international political economy that explore and test the microfoundations of common political economy models. Nevertheless, they remain focused on determinants of aid in the “traditional” donors: members of the Organization for Economic Cooperation and Development’s Development Assistance Committee (DAC). Non-DAC donors and potential donors (that is, the states that do not give aid) are frequently ignored. I argue that a Stolper-Samuelson model of relative endowments of skilled and unskilled labor determine preferences for aid, just as they do for trade. Aid can alter factor endowments and their productivity in the recipient country. These changes, in turn, affect the returns to factors in potential donor countries and thus influence preferences among citizens. I test this approach using the 1995 World Values Survey. I contribute to the literature on individual preferences for aid by testing this argument without respect to a country’s donor status: both DAC, non-DAC, and non-donor countries are included in this sample. I then discuss “next steps” to connect individual level aid research to macro-level data.

In recent years, the number of countries that give foreign aid has increased (Manning 2006). Additionally, donor countries like China have increased in significance, even though they have been giving aid for many years (Woods 2008). The rise of new donors raises important questions about the practice of aid giving. Although studies about aid’s effects imply that donors pursue those particular results, few aid studies systematically address aid allocation across all donors. This includes both allocation in the “traditional”

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donors who are members of the Organization for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC) and the many, old (China, the Arab Gulf states) and new (Thailand, Malaysia, Argentina, for example), that do not belong to DAC. One approach to this problem is to collect this data to improve quantitative analyses.¹

However, even if we had high-quality data on aid allocation and generosity, such approaches, at best, can only test one set of implications that can be drawn from arguments about aid. These approaches neglect microfoundations, especially where we think that individual decision-making might be the underlying driver of behavioral and policy outcomes. Another approach evaluates individual attitudes toward aid. This follows a recent trend in international political economy research to evaluate the microfoundations of arguments that scholars had previously tested at the macro level. This work has studied determinants of individual attitudes toward trade (Scheve and Slaughter 2001; Mayda and Rodrik 2005; Hainmueller and Hiscox 2006), foreign direct investment (Scheve and Slaughter 2004), monetary policy (Broz et al. 2008), and immigration (Hanson et al. 2007; Hatton and Williamson 2005). The aid literature has likewise followed this trend (Baker et al. 2008; Broz 2008; Chong and Gradstein 2006; Knack and Paxton 2008; Milner and Tingley 2007, 2008). Analyses of individual attitudes on aid (or votes, see Broz (2008); Milner and Tingley (2007, 2008)) fall short in that they focus on attitudes in “donor” countries—that is, DAC donors, rather than all donors, or even potential donors (in other words, citizens in all states). Rather than limit my analysis to DAC donors, I consider a broader sample that includes non-DAC and non-donor countries.

I argue that individual preferences for aid follow a Stolper-Samuelson logic. Specifically, individuals endowed with more skills in a skilled-labor abundant country should support aid. Individuals with fewer skills in that country should oppose aid. In unskilled-labor abundant countries, those with fewer skills should support aid. My core contribution is

¹Such efforts are already underway. The Project-Level Aid Database, based out of The College of William and Mary and Brigham Young University is a notable example

in expanding the sample to consider Stolper-Samuelson determinants of trade to consider their effects in non-DAC and non-donor countries. (Baker et al. 2008) is unique among the studies of individual determinants of aid in focusing on Stolper-Samuelson arguments. Their test, however, is restricted to donor countries. My primary contribution is expanding a test of these arguments without respect to a country's donor status. I test these microfoundational arguments using a question from the World Values Survey (1995) that asks respondents in all countries where the survey was given to evaluate whether their country should give aid. I then discuss how aid research can better tie microfoundational analyses into the political economy of (potential) donor states.

The Puzzle: Why Do States Give Aid?

The host of articles published about the effectiveness of foreign aid assumes that states allocate foreign aid by developmental criteria. Recent studies have begun to disaggregate foreign aid, examining the relationship between aid that targets project or program aid (Mavrotas and Ouattara 2006) and the impact of aid that should be beneficial in the short or long term (Bermeo 2006; Clemens et al. 2004; Rajan and Subramanian 2005). These studies still assume that aid is targeted to have some impact on development. However, other studies indicate that aid is more often allocated with an eye to strategic and commercial concerns than developmental aims (Alesina and Dollar 2000; Bueno de Mesquita and Smith 2007; Maizels and Nissanke 1984; McKinlay and Little 1977).

Unfortunately, this conclusion is too easy. Aid may indeed be allocated as a foreign policy tool, but arguments about state level preferences for maintaining strategic or commercial relationships neglect important implications of their arguments by ignoring micro-level data. An analysis of the relationship between aid allocation and specific issues, beyond traditional analysis that emphasizes recipient need or donor commercial or strategic interests, helps us address these roots. Do voter (or even citizen) concerns matter in aid policy-

making? Micro-level research provides an opportunity to examine these issues. Although recent micro-level analysis has emphasized economic effects on attitudes or votes for, it has much to offer in terms of understanding how individuals respond to potential economic conditions that might result from aid giving.

Table 1 presents data on aggregate trade and aid preferences for DAC, non-DAC and non-donor countries. Although the correlation between trade and aid is only .090—effectively nonexistent—this table nevertheless presents some evidence that individuals in developing, non-donor countries occasionally have preferences for aid that are greater than their preferences for trade. With the exception of Georgia, Latvia, and Ukraine, in every country surveyed preferences for aid-giving (and not aid-recipiency) was at least as great as those for trade. Why do preferences for aid so frequently surpass those for trade? Although a discussion of why individuals who do not support aid support trade is beyond the scope of this paper, I argue that aid and trade have common roots in individual and aggregate factor endowments.

Individual Preferences for Aid

Several recent papers address individual preferences for foreign aid. Some of these focus on individual preferences expressed in public opinion surveys (Baker et al. 2008; Chong and Gradstein 2006; Knack and Paxton 2008), while the others emphasize legislators' votes on aid bills in the United States Congress (Broz 2008; Milner and Tingley 2007, 2008). These papers specify a host of explanatory factors, at the individual, district (for Congressional votes) and national levels. Baker, Broz, and Milner and Tingley (2007, 2008) together provide evidence that favors a Stolper-Samuelson approach to aid, while Chong and Gradstein and Knack and Paxton suggest (with Baker) a broader set of demographic, individual and even national factors that might affect aid.

Table 1: Average Pro-trade and Pro-aid Attitudes

Country	Pro-trade	Pro-aid	Country	Pro-trade	Pro-aid
Albania	0.27	0.84	Macedonia	0.39	0.57
Argentina**	0.14	0.44	Mexico	0.17	0.45
Armenia	0.54	0.63	Moldova	0.33	0.64
Australia*	0.24	0.75	Montenegro	0.62	0.74
Azerbaijan	0.56	0.57	New Zealand*	0.36	0.69
Belarus	0.58	0.6	Nigeria	0.47	0.59
Bosnia-Herzegovina	0.51	0.77	Norway*	0.48	0.82
Brazil	0.13	0.65	Peru	0.17	0.89
Bulgaria	0.4	0.42	Philippines	0.29	0.64
Chile**	0.23	0.57	Puerto Rico	0.21	0.87
China**	0.24	0.85	Romania	0.4	0.65
Croatia	0.47	0.95	Russia	0.32	0.37
Czech Republic	0.29	0.64	Serbia	0.51	0.6
Dominican Republic	0.26	0.68	Slovakia	0.23	0.59
Estonia	0.46	0.57	Slovenia	0.3	0.72
Finland*	0.4	0.75	South Africa	0.36	0.51
Georgia	0.6	0.56	Spain*	0.26	0.87
Germany*	0.47	0.79	Sweden*	0.42	0.84
Hungary	0.27	0.68	Taiwan**	0.46	0.76
India	0.22	0.63	Ukraine	0.6	0.45
Japan*	0.72	0.88	United States*	0.27	0.56
Latvia	0.49	0.33	Uruguay	0.07	0.63
Lithuania	0.31	0.31	Venezuela	0.12	0.34

Pro-aid and pro-trade attitudes correlate at 0.090. Source: World Values Survey, 1995 and author's calculations.

* indicates DAC donor, ** indicates non-DAC donor (in 1995)

Chong and Gradstein (2006) use a formal model to generate hypotheses about the effect of income, inequality and government efficiency on attitudes toward aid and aid allocation generally. They test their models with survey data and aggregate allocation data and generally find support for their arguments. Knack and Paxton (2008) argue that Chong and Gradstein fail to connect their models to the macro-level; that is, national-level factors such as the level of aid disbursed, military spending and the number of a donor's former colonies likewise influence individual attitudes about aid. They also specify additional arguments to include religiosity, positions on poverty, attention to international affairs, psychological characteristics, trust in government and international institutions, political ideology, and demographic and "life-course" events as important regressors. They find support for many of these arguments using World Values Survey and Gallup International polling data.

Baker et al. (2008) supplement Knack and Paxton's list of factors with arguments derived from Stolper-Samuelson, Ricardo-Viner, and Dutch disease models: individuals will support aid because of its effects on factor prices, import-competing industries, and donor exporters and importers via exchange rates. Aid might also have effects on immigration, which also connects to Heckscher-Ohlin-derived trade models (Hanson et al. 2007). Individuals who benefit from the donor's domestic spending should also oppose aid (assuming budgets are fixed). They test their arguments on individual attitudes for aid in fifteen European countries, using data from Eurobarometer 50.1. They find support for most of their models; where they predict differing preferences based on Stolper-Samuelson and Ricardo-Viner arguments, they find support for the Stolper-Samuelson model. They do not, however, consider how positions might change based on relative factor abundance (that is, they do not include an interaction term to assess this). Since Stolper-Samuelson predictions are conditional on the level of factor abundance in the donor country, neglecting this term misspecifies the model. Although Baker et al.'s sample only includes developed donors, implying capital and high-skill abundance, it is unclear how much variation here

might still be important.

Modeling determinants of votes rather than individual preferences sidesteps an important critique of public opinion research on aid. Even if individuals have stable preferences for aid, there may be little reason to assume what is traditionally a low-salience issue will be a determining factor in an election (Cooper and van Themaat 1989; Lancaster 2000). Thus, politicians might use aid for their own ends, rather than for those that voters prefer (Milner 2006; Lundsgaarde 2007). By arguing that the composition of their districts influences legislative votes, Broz, Milner and Tingley provide some evidence that helps weaken this criticism. Milner and Tingley test hypotheses based on Stolper-Samuelson and Ricardo-Viner models of trade as well as a “presidential dominance” hypothesis, in which legislators defer to the president on issues like aid if he is of their own party. Broz follows Woods (2007) in arguing that international financial institutions (IFIs) contribute to globalization by pressuring countries to open their economies. Thus, Stolper-Samuelson or Ricardo-Viner predictions ought to apply to US Congressional votes in increase funding to the IMF, the World Bank and the regional development banks. He also argues that political action committees connected to money-center banks will benefit from international financial institution intervention in other countries.

Broz (2008) Milner and Tingley (2007, 2008) and Baker et al. (2008) find support for Stolper-Samuelson arguments. These papers suggest that although there are a host of plausible factors that might determine why individuals support aid, there seems to be common support for Stolper-Samuelson arguments in aid.

Aid’s Economic Effect on the Donor

The Stolper-Samuelson theory, applied to a two-sector case in which the sectors are skilled and unskilled labor, suggests that skilled individuals in a skill-abundant economy support trade, while unskilled individuals in that economy oppose it. On the other hand, skilled

individuals in a skill-scarce economy oppose trade, while unskilled individuals should support it. This result obtains from the expectation that wages should be low where a factor is scarce and high where a factor is abundant. Abundant factors imply low wages and thus low prices, while scarce factors imply the opposite. When faced with the choice to open the economy to trade, individuals who produce high-priced goods in a closed economy will oppose opening the economy, since everyone can now purchase those same goods that were high-priced under domestic production from countries where they are cheaper as a result of factor abundance in a trading partner.

The logic as applied to aid is similar. Skilled individuals in a skill-abundant economy support aid, while unskilled individuals in that economy oppose it. Skilled individuals in a skill-scarce economy oppose aid, while unskilled individuals should support it. If aid has any effect on individual welfare in the donor state, it must do so via income (Mayer and Raimondos-Moll 2003; Milner and Tingley 2007, 2008). This can occur via the mechanisms specified in the Stolper-Samuelson theory—that is, by liberalizing and opening recipient countries, as argued by Broz (2008) and (Woods 2007). Alternatively, aid can alter terms of trade and income accrued by productive factors (Milner and Tingley 2007, 2008).

Aid might influence the recipient country's openness, which provides a direct tie into Stolper-Samuelson arguments. Aid can do this directly, by attaching various conditions to project or program aid that should increase the openness of recipient countries. Woods' (2007) concept of the IMF, World Bank and regional development banks as "globalizers" touches on this notion. Additionally, Broz (2008) argues that the role these institutions play in opening recipient countries to international markets provides one of the main mechanisms by which US Congress people support the international financial institutions, and the only one that directly connects to Stolper-Samuelson logic. Not all aid, even from these institutions, aims at increasing recipients' openness, although, lacking good data, studies frequently make the assumption that conditionality is a core part of what aid does. Aid includes both conditional and selective lending, as well as projects and programs de-

signed to increase openness in the recipient country. Aid might also influence openness indirectly, since recipient country policymakers may choose to open to international markets as wages become more competitive.

Aid can also create incentives to support aid by its effects on the terms of trade and factor income. First, individuals in the recipient country have different marginal propensities to consume imports, depending on their own factor endowments and the factor endowments in their country. We can assume that recipient countries are low-skill abundant, so low-skilled workers benefit from importing goods produced in high-skill abundant countries, which are cheaper than those produced by their high-skilled compatriots. In addition to increasing liberalization and openness, aid increases incomes and the well-being of individuals in recipient countries². An increase in income, or a reduction in necessary spending that results from better health, among other things, allows individuals to increase their consumption of all goods, whether production is low- or high-skill intensive. On average, this should generate some increase in consumption of imported high-skill intensive goods, which, although initially decreasing the recipient's terms of trade, increases the donor's terms of trade. Individuals in the donor country who produce high-skill intensive goods will benefit from aid and support it.

Aid should also influence the marginal productivity of factors in a recipient economy. Some aid targets unskilled labor while some targets skilled labor. Aid does not affect the level of unskilled labor directly, but can supplement levels of skilled labor via technical assistance. Aid increases the productivity of factors. Building a road or a clinic that targets unskilled labor increases the marginal productivity of unskilled labor: the individuals who are served by that clinic or who live near the road can produce more due to increased health or the ability to get products to market or to get to the clinic more quickly, so they

²This can occur without increases in income necessarily aggregating up into growth. Noted aid critic William Easterly notes that aid appears to have been beneficial in increasing public health and education in recipient countries, both of which might improve well-being, even if they don't increase income Easterly (2006, 177). Recent research has begun exploring links between aid and non-income related changes in well-being (For example, Gebhard et al. 2008).

have more time to produce and increasing their wages. Alternatively, these interventions might also affect the reserve wage of individuals, bringing more unskilled labor into the market, which drives wages down. Effects should be similar for aid that targets skilled labor in developing countries. Although aid does not directly change the levels of unskilled labor in the market, it can supplement skilled labor by importing skilled individuals directly into the market, which could in turn reduce the wages to skilled labor. An increase in marginal factor productivity generates a decrease in the price of exports produced by low-skilled labor in the recipient country. This, in turn, increases the amount of exports demanded by high-skilled labor in high-skill abundant countries. Although the equilibrium result of both of these processes is unclear, these mechanisms sketch the path by which individuals in donor countries might benefit from increasing foreign aid.

Although these effects should be most pronounced for countries currently giving aid, I apply this approach without respect to a country's donor status. In countries currently giving aid, individuals experience changes in their welfare as a result of foreign aid giving. In countries that do not give aid, individuals should be able to prospectively evaluate how aid-giving would benefit them. An analysis of the determinants of individual attitudes toward aid without reference to donor status provides insight into how economic policies like trade and aid might have similar roots. It also might suggest why some countries do and do not give aid.

Data and Results

I test my arguments initially by following Mayda and Rodrik. They use data from the 1995 World Values Survey (Association 2008) to create a binary dependent variable for trade preferences. Using a question on foreign aid, I likewise create a dichotomous dependent variable, to draw out the comparison between the Stolper-Samuelson effects on trade and those that I expect for aid. Next, I expand my model in various ways. I also

test these models using all states in the sample, and two restricted samples: one includes all foreign aid donors, while the second includes only DAC donors. Additionally, I test my model against those specified by Chong and Gradstein and Knack and Paxton. Finally, I test the robustness of my model using a multinomial logit model.

I use the World Values Survey for 1995 for several reasons³. First, it is difficult to find a survey that asks questions that allow me to test these arguments. Specifically, I need variables on trade and aid, to show that the Stolper-Samuelson effect moves in the same direction for both models, as well as measures I can use to estimate the effect of skills on the dependent variable⁴. Including both a trade and aid question allows me to test if preferences for aid and trade move in similar directions for similar reasons. The skills question allows me to create an additional measure to test Stolper-Samuelson effects, in addition to education levels. Respondents were asked the aid question in all countries where the survey was conducted, regardless of donor status.

Second, when surveys include an aid question, they often restrict questions about aid to the DAC donors. As I have discussed before, our evaluations of aid allocation consistently ignore non-DAC donors. There is no reason to limit a study of individual attitudes on aid to respondents in DAC donor countries⁵. Indeed, work that connects individual attitudes and aid policy outcomes should take variation in public opinion across both donor

³Unlike Chong and Gradstein, I do not use the 2000 World Values Survey data since the 1995 and 2000 surveys have important differences. Although the core question is the same, the response categories differ. In the 2000 survey, respondents can select answer “A lot more than we do now,” “somewhat more than we do now,” “about the right amount/same,” “somewhat less than we do now,” and “a lot less than we do now.” In addition to having five instead of the four responses that the 1995 survey has, these responses assume that the respondent has some knowledge of how much his or her country gives in aid. The 1995 survey simply asks if the respondent favors (or disfavors) giving aid. Unfortunately, the World Values Survey documentation (European Values Study Group and World Values Survey Association 2006) does not indicate this difference and treats these responses as the same.

⁴For example, the 2002 Worldviews Survey (Chicago Council on Foreign Relations & German Marshall Fund of the Uni 2004) conducted in the US and Europe lacks a question about trade and has an inconsistent measure of occupation and skills across the US and European surveys. It does include a measure of educational attainment, but given Hainmueller and Hiscox’s (2006) critique of education as a measure of skill, it makes the most sense to use additional measures of skill.

⁵A distinction made in Eurobarometer 50.1 (Melich 1998) and 67.3 (Papcostas 2007) and the 2005 wave of the World Values Survey (Association 2008); these surveys did not ask non-donors about aid giving.

and non-donor countries. Third, although using an additional wave of the survey does not create a panel, it does provide additional observations. I can take advantage of data on when the survey was administered in a given country to control for unobserved temporal heterogeneity.

The World Values Survey asks “Some people favor, and others are against, having this country provide economic aid to poorer countries. Are you personally...

- Very much for
- For to some extent
- Somewhat against
- Very much against [it]?”

For the initial analysis, I dichotomize the variable, facilitating probit analysis. Later, I use a multinomial logit model based on the original responses. The trade question asks “Do you think it is better if: 1. Goods made in other countries can be imported and sold here if people want to buy them; or that 2. There should be stricter limits on selling foreign goods here, to protect the jobs of people in this country.”

Based on prior discussions, my core independent variable is skill endowments; trade and aid should move in the same direction. As high-skilled workers become relatively abundant, highly skilled workers favor aid (and trade) and low-skilled workers oppose it; as high-skilled workers become relatively scarce, highly skilled workers oppose aid and low-skilled workers favor it. Since I assess support for aid in both potential and current donors, in developed and developing countries, I must account for variation in individual-level factor endowments as well as country-level variation. Prior cross-national studies of aid attitudes have not taken this into account.

In specifying my initial models, I follow Mayda and Rodrik (2005) as much as possible. Mayda and Rodrik’s basic specification, adapted to aid, is:

$$aid_{i,j} = \beta_0 + \beta_1 age_{i,j} + \beta_2 male_{i,j} + \beta_3 birthcountry_{i,j} + \beta_4 skill_{i,j} + \beta_5 skill_{i,j} * GDP_j + \alpha_j + \varepsilon_{i,j}$$

where i indexes individuals and j indicates countries. *Skill* represents various measures of skill: the respondent's skill level (*skill*), the skill of the chief wage earner in the respondent's household (*CWE Skill*), and the respondent's level of education (*Educ. Attainment*). Following Mayda and Rodrik, I use logged per capita GDP in 1995 as a proxy for skill abundance.⁶ In later models I replace this with the GDP for the year before the survey was administered in a given country⁷. Higher values of skill indicators in countries with higher levels of GDP per capita should increase support for aid, while higher values of skill indicators in countries with lower levels of GDP per capita should decrease support for aid. Skill measures should have negative coefficients while the interaction between skill and GDP per capita should have positive coefficients. *Birth country* is a dummy indicating whether the country the respondent lives in is his or her country of birth. Mayda and Rodrik include it as part of their “naive demographic model” of trade, where they use it without specifying how it should influence trade preferences. With respect to aid, we can expect those who were born in other countries to support aid, as it may be more likely to support family, friends, and the economic climate of an individual’s home country. Thus, *birth country* should have a negative coefficient. Other variables in the base model *male* and *age* also derive from Mayda and Rodrik’s naive demographic model. Table 2 presents summary statistics. The regressions include a country fixed effect (α_j) to deal with unobserved heterogeneity, which is plausibly correlated with the independent variables and cluster standard errors by country. When I include GDP per capita lagged relative to the year the survey was administered, I also include year dummies. Hausman tests suggest that the dummies are not necessary for the initial model, but that they should be included for models that move beyond my initial specifications. I also cluster standard errors by country. Table 3 presents results from the initial specification that uses GDP per capita for 1995 and fixed effects.

⁶Mayda and Rodrik admit this is a weak proxy, but argue that the best alternative, the Barro-Lee Barro and Lee (2001) human capital data, lacks face validity.

⁷This information is available at www.worldvaluessurvey.org under the link “technical information.”

Table 2: Summary Statistics

	N	Mean	St. Dev.	Minimum	Maximum
Pro-trade	60,100	0.36	0.48	0	1
Pro-aid	63,500	0.65	0.48	0	1
Very much against aid	63,500	0.13	0.33	0	1
Somewhat against aid	63,500	0.22	0.42	0	1
Somewhat for aid	63,500	0.46	0.50	0	1
Very much for aid	63,500	0.19	0.39	0	1
Educ. Attainment	61,000	5.6	2.3	1	9
Skill	49,400	5.9	2.7	1	11
Chief Wage Earner's (CWE) Skill	28,400	6.0	2.8	1	11
Log(GDP per capita)	61,000	8.9	0.82	6.8	10
Education*GDPpc	58,500	49	21	6.8	92
Skill*GDPpc	47,500	53	25	6.8	110
CWE Skill*GDPpc	27,200	53	26	6.8	110
Age	63,500	41	16	15	99
Income Scale	53,700	4.5	2.5	1	10
Male	63,500	0.48	0.50	0	1
1 or More Children	63,500	0.73	0.45	0	1
Confident in Gov't	60,100	2.3	0.90	1	4
Satisfied with People in Office	59,500	2.1	0.82	1	4
Religion Important	62,200	2.8	1.1	1	4
Attends Religious Services	61,700	3.6	2.0	1	7
Citizen of the World	62,700	0.094	0.29	0	1
Proud of Nation	60,500	3.4	0.79	1	4
Political Interest	61,600	2.3	0.95	1	4
Hours of TV	61,000	2.6	0.96	1	4
Birth Country	62,200	0.93	0.25	0	1
In the Military	63,500	0.013	0.11	0	1
Poor are Lazy	55,400	0.29	0.45	0	1
Poor can Escape Poverty	60,500	0.40	0.49	0	1
Right	50,300	0.41	0.49	0	1
Less Poverty	61,300	2.5	0.74	1	3
Has Agency	61,700	6.6	2.5	1	10
Satis. with Financial Sit.	63,000	5.2	2.7	1	10
Trust	61,100	0.27	0.44	0	1

Values for N calculated using three significant digits, all others for two, unless the value is a single digit, in these cases I used a single significant digit.

Table 3: Stolper-Samuelson Effects on Trade and Aid Attitudes

	1: Pro-trade	2: Pro-trade	3: Pro-trade	4: Pro-aid	5: Pro-aid	6: Pro-aid
Ed. Attainment	-.277** .0847			-.171* .0842		
Education*GDP	.0373*** .00989			.0215* .00945		
Skill		-.192** .069			 .0453	 -.0661
Skill*GDP		.0269*** .00799			 .00877	 .00502
Chief Wage Earner's Skill			 .0969	 -.0693		 -.008
CWE Skill*GDP				 .011		 .0638
Male	 .121*** .0258	 .146*** .0293	 .106*** .0252	 -.0245 .0164	 -.0381* .0176	 -.0171 .0268
Age	 -.00759*** .00148	 -.0101*** .00139	 -.00918*** .00134	 -.00096 .00079	 -.00102 .000632	 -.00301** .000925
Birth Country	 -.109* .0539	 -.133* .0535	 -.0418 .0712	 -.069* .0348	 -.0683 .0418	 -.0582 .0366
Constant	 -.56*** .0638	 -.468*** .0594	 -.0634 .118	 .519*** .0893	 .706*** .0553	 .501*** .0693
Wald Test, Skill and Skill*GDP	0.000	0.000	0.002	0.005	0.007	0.131
Pseudo R ²	0.09	0.10	0.09	0.09	0.10	0.11
Log Likelihood	-31845.45	-25809.77	-14816.68	-34264.85	-27351.83	-15315.30
N	54,225	43,965	25,169	57,279	46,415	26,605

* p<0.05, ** p<0.01, *** p<0.001

First, notice that the signs for each of the skill variables, *Educ.*, *Attainment*, *Skill*, *CWE Skill* and their interactions with GDP per capita move in the same direction as those for trade. In all three trade models, the skill variables are negative and their interactions with GDP per capita are positive, and both are significant. Only in model 3 are neither variable individually significant. Still, Wald tests provide evidence that these variables are jointly significant. Additionally, *Male* has a positive, significant association with pro-trade attitudes in all three trade models, while *Age* has a negative, significant association in all three trade models. *Birth Country* is significant in two of the three trade models. These results align with the findings of Mayda and Rodrik.

Models 4 through 6 test the same model on aid attitudes. Although the skill variables and their interactions are significant with signs that match those in the trade models, only in model 4 (*Educ.*, *Attainment*) are these variables individually significant. Wald tests for models 4 and 5 provide evidence that these variables are jointly significant at the .05 level. Additionally, *Male*, *Age*, and *Birth Country* all have negative effects on support for aid, although their significance is inconsistent. Given that a particular wave of the World Values Survey is administered within a range of years and that causal analysis necessitates being able to claim temporal precedence Trochim and Donnelly (2006)⁸, I lag GDP per capita with reference to the year in which the World Values Survey was administered. Doing this does not change the results substantially.

Using an educational attainment measure as a proxy for individual skill endowments suggests that Hainmueller and Hiscox's (2006) critique of education as a measure of skills may hold. They argue that using education as a measure of skill abundance may capture the effect of college educated students taking basic economics courses, in which they learn that trade is "good." It is not clear if foreign aid makes it onto undergraduate syllabi in economics classes, and if it does, what students would be taught about it. The current consensus among American economists appears to be that aid does not work, although

⁸Where this is possible, for example, by lagging values of GDP per capita relative to the year the survey was administered in each country, I do this.

this remains a hotly debated topic. Although secondary, Hainmueller and Hiscox also suggest that education may pick up an effect from increased cosmopolitanism as a result of education. I control for this effect in later models. In either case, there is little reason to suspect that the effect of education should change as GDP per capita increase, which figure 1 illustrates.

Figure 1, based on model 4, illustrates how the coefficients for *Educ. Attainment* change with respect to GDP per capita. As GDP increases, the signs on the coefficients flip from negative (at low levels of GDP) to positive (at higher levels of GDP). This supports the general hypothesis that developing countries and developed countries should have opposite predictions with respect to overall skill abundance. Although the sign change does occur within the data, a confidence interval around a regression line plotted through the coefficients suggests that uncertainty around this estimate encompasses the the coefficients at the low end of the scale. That is, while there are coefficients in the lower left quadrant providing some evidence that higher levels of skills have negative effects on support for aid at lower levels of GDP per capita, much of the action appears to be in the upper right hand quadrant of the graph.

I calculate predicted probabilities and present them in figure 2. I use the base model with *Educ. Attainment* (model 4) to simulate them following (Brambor et al. 2006). When GDP per capita is at its minimum, increases in education decrease support for aid; when GDP per capita is at its maximum, increases in education increase support for aid. Although ninety-five percent confidence intervals based on simulated values clearly overlap, a more traditional difference of means via a t-test indicates that the predicted probabilities are significantly different at all levels of *Educ. Attainment*⁹.

Next, I consider how these results might change if I restrict the sample to DAC donors and non-DAC donors, respectively. Information on which countries were DAC donors can

⁹(Gelman and Stern 2006) argue that testing to see if the difference of two effects captures the notion that a pair of effects are statistically different, as opposed to checking to see if estimates lie within each other's confidence intervals. The latter approach is common in assessing significant effects based on simulated predicted probabilities.

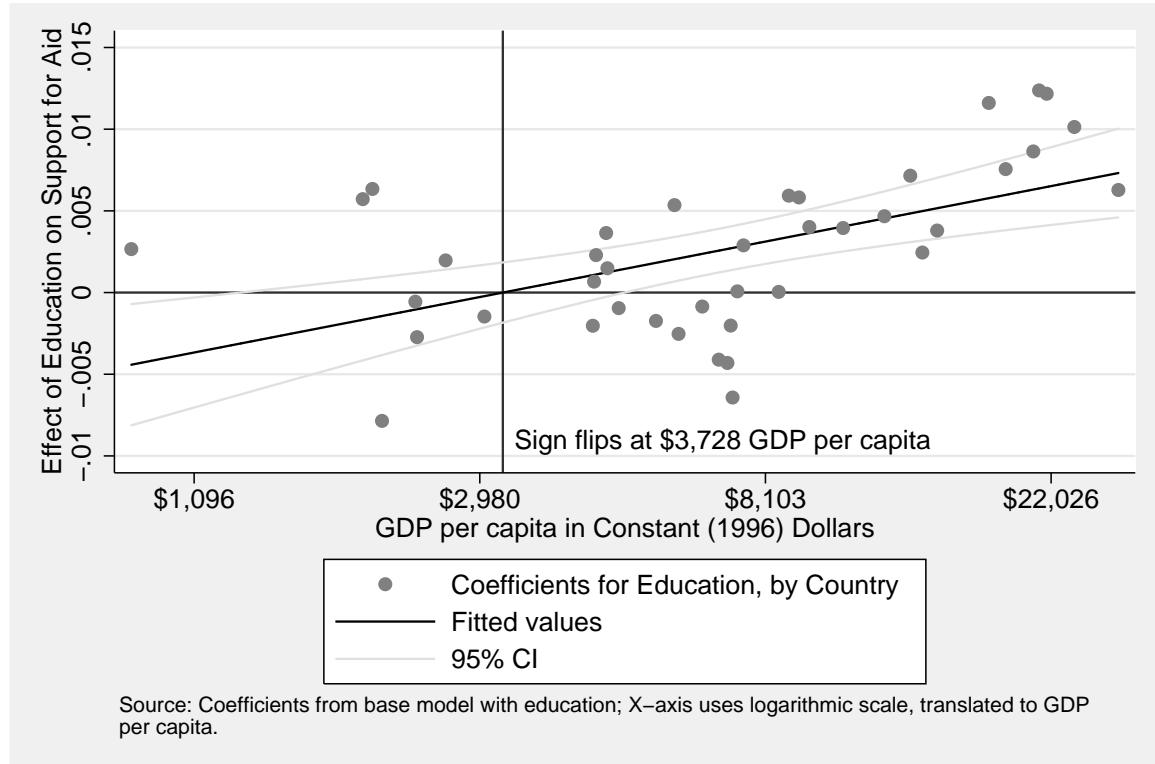


Figure 1: Effect of GDP per capita on Model Coefficients, for Base Model

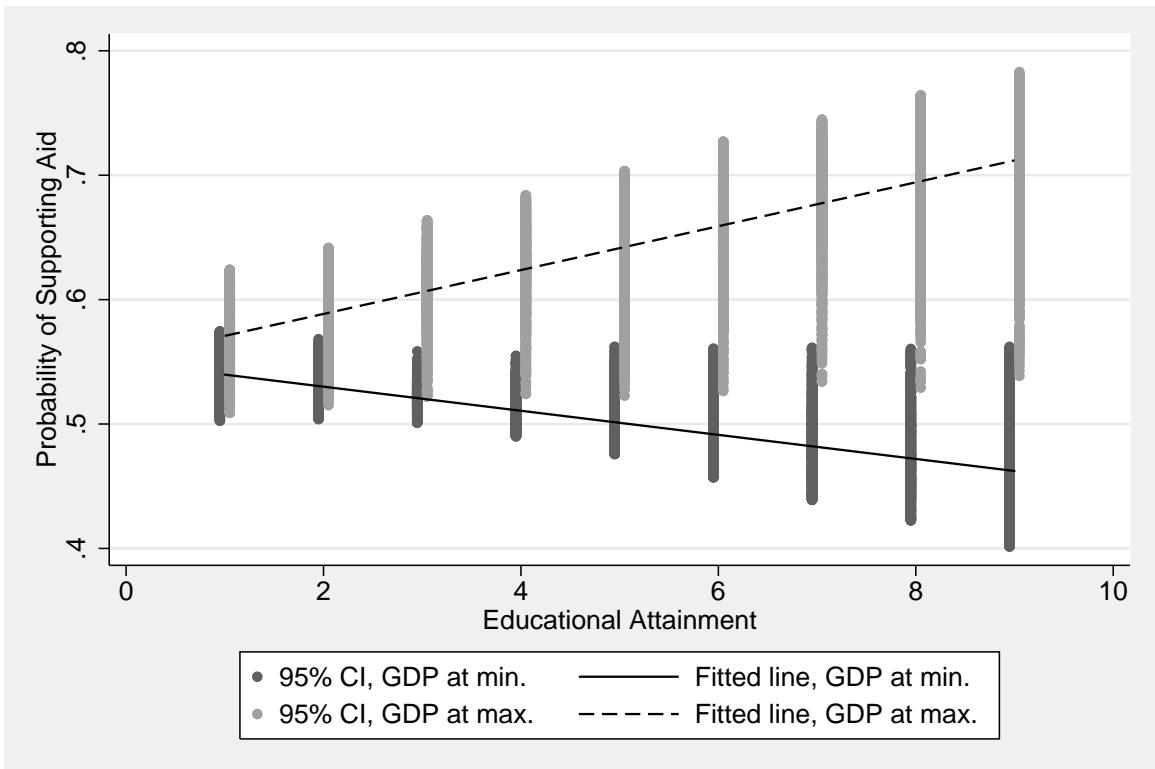


Figure 2: Effect of Education on Predicted Probabilities, for Base Model

be found on the OECD's website. Information on non-DAC donors, on the other hand, can be more difficult to come by. I use preliminary reports on non-DAC donors produced by the Project Level Aid Database at The College of William and Mary to produce this data. These reports discuss the donor status for a variety of non-DAC donors, and usually include a discussion of when aid activities began. Where this information was not available, I do not code a country as a donor. Table 1 includes this information. Table 4 presents these results. In general, the results match those in table 3. Although the interaction between education and GDP per capita is individually significant only in model 10 and none of the other skill variables or skill-GDP per capita interactions are individually significant, all of the signs move in the right directions and they are all jointly significant with p-values of at least .002. Note that the size of the effect appears much larger on the skill variables on the DAC models (7-9) than those on the skill variables in the non-DAC donors (10-12) than on previous models that include all countries in the sample. Although I cannot directly compare models based on different samples, the apparent stronger effect should hold in countries that actually give aid, as the Stolper-Samuelson effects of aid in the donor economy should be realized in these countries, while in the potential donor countries this outcome is hypothetical. Indeed, although figure 1 provides some contrary evidence, these effects may be driving the results in the models that include all countries, irrespective of the country's donor status. I will explore this further in the future. Signs on *Male*, *Age*, and *Birth Country* all match the previous models: the effect of *Birth Country* is significant at very high levels across these models. Additionally, *Age* is highly significant in four of the six models in table 4, while *Male* is significant in none of them.

In the next sets of models I add control variables, drawn primarily from (Chong and Gradstein 2006; Knack and Paxton 2008)¹⁰. I present models that consider Chong and Gradstein's variables alongside mine, Knack and Paxton's variables alongside mine, and finally a "full"

¹⁰Where (Baker et al. 2008) propose hypotheses that differ from Chong and Gradstein and Knack and Paxton they also require additional data that I have not collected. Thus, several hypotheses tested by Baker et al. are also tested by these other authors.

Table 4: Stolper-Samuelson Effects on Aid Attitudes, by Donor Status

	7: DAC	8: DAC	9: DAC	10: Non-DAC	11: Non-DAC	12: Non-DAC
Educ. Attainment	-.428 .514			-.47 .241		
Education*GDP	.0534 .0517			.0556* .0249		
Skill		-.617 .678			-.176 .146	
Skill*GDP		.0656 .0683			.0207 .0149	
Chief Wage Earner's Skill			-.139 .186			-.182 .107
CWE Skill*GDP			.0181 .0186			.0214 .011
Male	-.0922 .0563	-.0963 .056	-.13* .0631	-.0493 .0379	-.0522 .0387	-.064 .0536
Age	-.00157 .00127	-.00459*** .00132	-.00518*** .00144	-.00161 .000826	-.00381*** .00114	-.00444*** .00113
Birth Country	-.181*** .0268	-.208*** .04	-.246*** .0494	-.195*** .0342	-.211*** .0425	-.264*** .0578
Constant	.24* .116	.776*** .0958	1.5*** .0451	1.48*** .214	1.49*** .0986	1.52*** .0761
Wald Test, Skill and Skill*GDP	0.000	0.000	0.000	0.000	0.002	0.000
Pseudo R ²	0.04	0.03	0.04	0.04	0.04	0.05
Log Likelihood	-3,215.64	-3,313.72	-1,390.77	-5,609.03	-5,338.64	-2,546.55
N	6,132	6,439	2,913	10,359	10,079	4,954

* p<0.05, ** p<0.01, *** p<0.001

model that includes all of these variables as well as an indicator for whether or not the respondent supports freer trade. I add this last variable in addition to the controls specified in other models to see if support for one dimension of globalization has effects outside of the Stolper-Samuelson framework. In other words, is all of the globalization action in the Stolper-Samuelson variables, or is there more that might be captured along with an independent preference for trade? If the skill variables remain significant alongside these controls, I take it as suggesting that preference for aid is indeed driven by a preference for globalization.

Neither Chong and Gradstein nor Knack and Paxton consider Stolper-Samuelson effects. Chong and Gradstein, in addition to testing the effects of taxation, suggest that opinions on the effectiveness of government should drive attitudes about aid. I include these variables, as well as *Educ. Attainment, income scale*, an ordinal measure of income used by the World Values Survey, and *Age* and *Male*. Although they present their results for DAC donors, they run the model without respect to donors and find support for their arguments in both cases. (Knack and Paxton 2008), on the other hand, argue that a group of variables they describe as religion (importance and attendance of services), attention outside the country (if the individual identifies as a member of the world over any other geographical area, level of national pride, television consumption *TV*, if the respondent is a member of the military or a lawyer or teacher¹¹), left-right position (location on political spectrum, indicators that express the opinion that the poor are lazy and that the poor can escape poverty, and whether there are more poor than there were ten years ago), and psychological characteristics (a belief that they have agency, satisfaction with their financial situation, and trust in others). Chong and Gradstein's variables derive nicely from a formal model, while Knack and Paxton's are based on a variety of theoretical sources. See table 5 for these results.

¹¹It is not clear from (Knack and Paxton 2008) how they coded this last variable from the World Values Survey data. I cannot find it.

Table 5: Stolper-Samuelson Effects on Aid Attitudes,
Chong & Gradstein and Knack & Paxton Models

	C&G: 13	C&G: 14	C&G: 15	K&P: 16	K&P: 17	K&P: 18
Educ. Attainment	-0.19* 0.09			-0.20* 0.08		
Education*GDP	0.02* 0.01			0.02* 0.01		
Skill		-0.08 0.06			-0.07 0.06	
Skill*GDP		0.01 0.01			0.01 0.01	
Chief Wage Earner's Skill			0.04 0.07			0.00 0.09
CWE Skill*GDP			-0.00 0.01			-0.00 0.01
Male	-0.02 0.02	-0.04* 0.02	-0.00 0.03	-0.02 0.02	-0.03 0.02	0.00 0.03
Age	-0.00 0.00	-0.00 0.00	-0.00** 0.00	-0.00* 0.00	-0.00 0.00	-0.00** 0.00
Income Scale	0.00 0.01	0.01 0.01	0.00 0.01	-0.01 0.01	0.00 0.01	-0.00 0.01
Confident in Gov't	0.13*** 0.01	0.14*** 0.01	0.12*** 0.02			
Satis. with People in Office	0.16*** 0.02	0.16*** 0.02	0.16*** 0.02			
1 or More Children				-0.05* 0.02	-0.03 0.02	-0.03 0.03
Religion Important				0.08*** 0.01	0.06*** 0.01	0.07*** 0.02
Attends Religious Services				0.01 0.01	0.01 0.01	0.01 0.01
Citizen of the World				0.15*** 0.04	0.16*** 0.04	0.11* 0.05
Proud of Nation				0.10*** 0.03	0.09*** 0.02	0.10*** 0.03
Interested in Politics				0.09*** 0.01	0.09*** 0.01	0.10*** 0.02
Hours of TV				-0.02 0.01	-0.02 0.01	-0.01 0.01
Birth Country				-0.11** 0.04	-0.12** 0.04	-0.20** 0.06
In the Military				-0.03 0.06	-0.03 0.06	-0.04 0.14
Poor are Lazy				-0.04 0.03	-0.09* 0.04	-0.06 0.05

* p<0.05, ** p<0.01, *** p<0.001

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	13: C&G	14: C&G	15: C&G	16: K&P	17: K&P	18: K&P
Poor can Escape Poverty				0.20***	0.21***	0.19***
Right				0.03	0.03	0.05
Less Poverty than 10 Years Ago				-0.02	-0.01	0.04
Has Agency				0.03	0.03	0.04
Satis. with Financial Sit.				-0.05	-0.06	-0.05
Trusts Others				0.04	0.04	0.05
Constant	-0.23*	0.51***	0.76***	-0.20	0.46***	0.50*
	0.10	0.08	0.10	0.16	0.13	0.22
Wald Test, Skill and Skill*GDP	0.000	0.001	0.082	0.037	0.466	0.999
Pseudo R ²	0.11	0.12	0.13	0.10	0.11	0.12
Log Likelihood	-26358.15	-21324.15	-11372.62	-16277.64	-13179.44	-7,055.10
N	44,598	36,791	20,035	27,684	22,773	12,440

* p<0.05, ** p<0.01, *** p<0.001

Including Chong and Gradstein's variables, I find that the effects of the respondent's confidence in government (*Confident in Gov't*) and *Satisfaction with Those in National Office* correlate strongly and positively with support for aid. *Income Scale* has no effect, while *Educ. Attainment* moves in accordance with Stolper-Samuelson predictions. Of the other skill measures, only *Skill* has the right signs, while *CWE Skill* and its interaction change signs. The Stolper-Samuelson variables are jointly significant at the .05 level for *Educ. Attainment* and *Skill*, but not for *CWE Skill*. In the Knack and Paxton model, I find that Stolper-Samuelson variables have the right signs in the *Educ. Attainment* and *Skill* models (16 and 17), but not in the *CWE Skill* model (18). They are only significant in model 16, and at much lower levels than before. The Stolper-Samuelson variables are jointly significant with a p-value of .037 in model 16. Finally, table X presents the results of the full model. Respondents who consider religion to be important, view themselves as "citizen[s] of the world," are proud of their nation, are interested in politics, were born in another country, believe that the poor can escape poverty, are satisfied with their financial situation, or who trust others are all significantly more likely (at at least a .001 level)

to support aid. *Citizen of the World* controls for the cosmopolitanism that could also explain preferences for aid. While it is clear from this analysis that the effect of the Stolper-Samuelson variables are weaker here, it is not clear that *Citizen of the World* is driving this effect.

The results in the full model (table 6) generally match those in the Knack and Paxton regressions. The Stolper-Samuelson variables have nearly the same effect as in models 16, 17, and 18. *Confident in Gov't* and *Satisfaction with Those in National Office* are significant and positive as before. Aside from combining these models, the novelty here is the inclusion of a pro-trade variable, which is positive and significant at at least the .05 level in models 19 and 20, but insignificant in model 21.

Table 6: Stolper-Samuelson Effects on Aid Attitudes,
Full Models

	19	20	21
Educ. Attainment	-0.20*		
	0.08		
Education*GDP	0.02**		
	0.01		
Skill		-0.08	
		0.06	
Skill*GDP		0.01	
		0.01	
Chief Wage Earner's Skill			0.03
			0.09
CWE Skill*GDP			-0.00
			0.01
Male	-0.03	-0.04	-0.00
	0.02	0.02	0.03
Age	-0.00*	-0.00	-0.00**
	0.00	0.00	0.00
1 or More Children	-0.04**	-0.04	-0.03
	0.02	0.02	0.03
Income Scale	-0.00	0.00	0.00
	0.01	0.01	0.01
Confident in Gov't	0.10***	0.11***	0.09***
	0.02	0.02	0.02
Satisfied with People in Office	0.13***	0.13***	0.12***
	0.03	0.03	0.03

* p<0.05, ** p<0.01, *** p<0.001

Continued on next page

	19	20	21
Pro-trade	0.07*	0.08*	0.06
	0.03	0.03	0.04
Religion Important	0.07***	0.06***	0.07**
	0.01	0.01	0.02
Attends Religious Services	0.00	0.00	-0.00
	0.01	0.01	0.01
Citizen of the World	0.15***	0.16***	0.10*
	0.03	0.04	0.05
Proud of Nation	0.08**	0.07**	0.09**
	0.03	0.02	0.03
Interested in Politics	0.08***	0.08***	0.09***
	0.01	0.01	0.02
Hours of TV	-0.02	-0.03*	-0.01
	0.01	0.01	0.02
Birth Country	-0.10*	-0.11*	-0.20***
	0.04	0.04	0.06
In the Military	-0.04		-0.04
	0.07		0.14
Poor are Lazy	-0.05	-0.10**	-0.08
	0.03	0.04	0.05
Poor can Escape Poverty	0.16***	0.18***	0.16***
	0.03	0.03	0.05
Right	-0.03	-0.03	0.02
	0.03	0.03	0.03
Less Poverty	-0.02	-0.03	-0.03
	0.04	0.03	0.04
Has Agency	0.02**	0.01*	0.01
	0.00	0.01	0.01
Satis. with Financial Sit.	0.01*	0.01	0.02**
	0.01	0.01	0.01
Trusts Others	0.14***	0.16***	0.13**
	0.03	0.03	0.04
Constant	-0.66**	-0.75***	0.18
	0.22	0.21	0.22
Wald Test, Skill and Skill*GDP	0.009	0.355	0.955
Pseudo R ²	0.11	0.12	0.12
Log Likelihood	-15157.12	-12307.76	-6,563.95
N	26,044	21,460	11,678

* p<0.05, ** p<0.01, *** p<0.001

Predicted probabilities (figure 3) and coefficient (figure 4) graphs for the full model confirm the rather mixed picture that table 6 presents. On one hand, predicted probabilities move in the directions that support the Stolper-Samuelson model generally. A 95% confidence interval based on simulated values suggests significant overlap in the effects. A t-test

of the difference of these two means provides evidence that the effects of education do vary at low and high levels of GDP per capita. A graph of the coefficients by country from the full model provides some evidence that signs change as GDP per capita increases, although the confidence interval always includes zero, suggesting that this effect is not significant. As a final check on the robustness of my analysis, I use a multinomial logit to take advantage of the multiple levels in the original question.

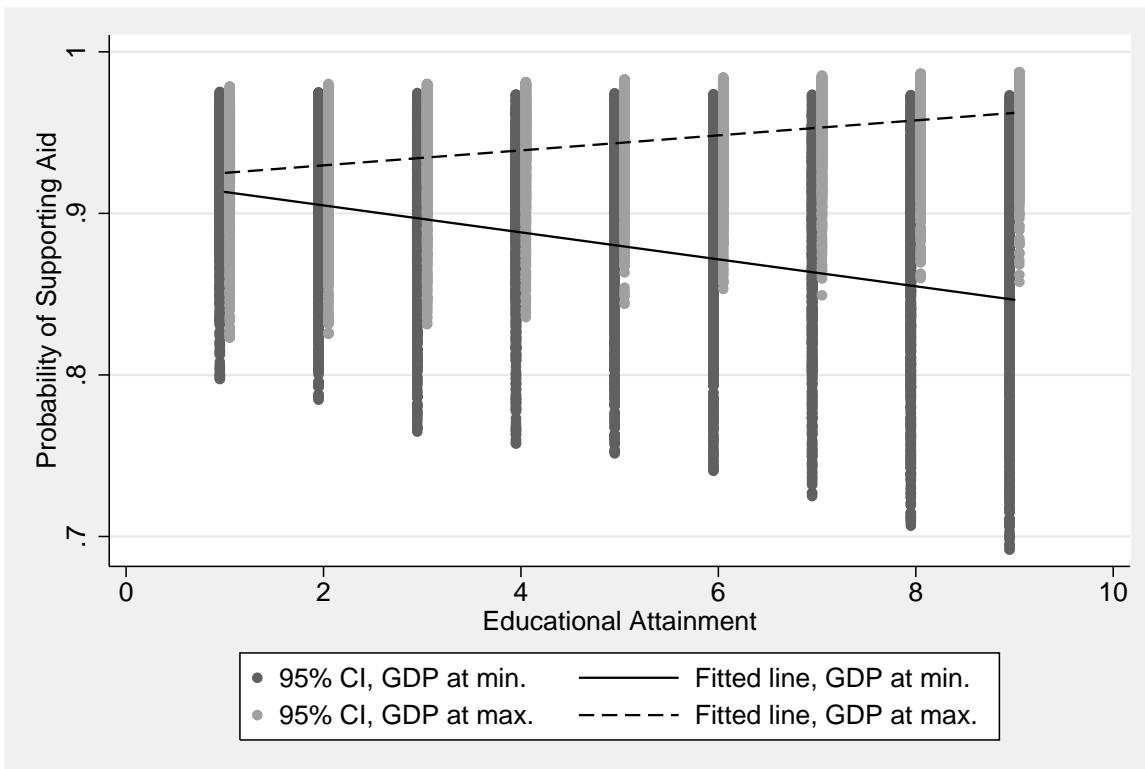


Figure 3: Effect of Education on Predicted Probabilities, for Full Model

Since the aid question I use has four ordinal outcomes, an ordinal response model should be the most appropriate model for these data. An ordered probit model compares a series of binary regressions across categories of the dependent variable. In doing so, the model assumes that the coefficients across these models, or the slopes of the lines in each model, are equal or parallel. Violations of this assumption can bias outcomes (Long 1997); Brant tests provide evidence that this assumption is not satisfied in this data. There are at least two alternatives: I can analyze a generalized ordered probit (goprobit) model or a multino-

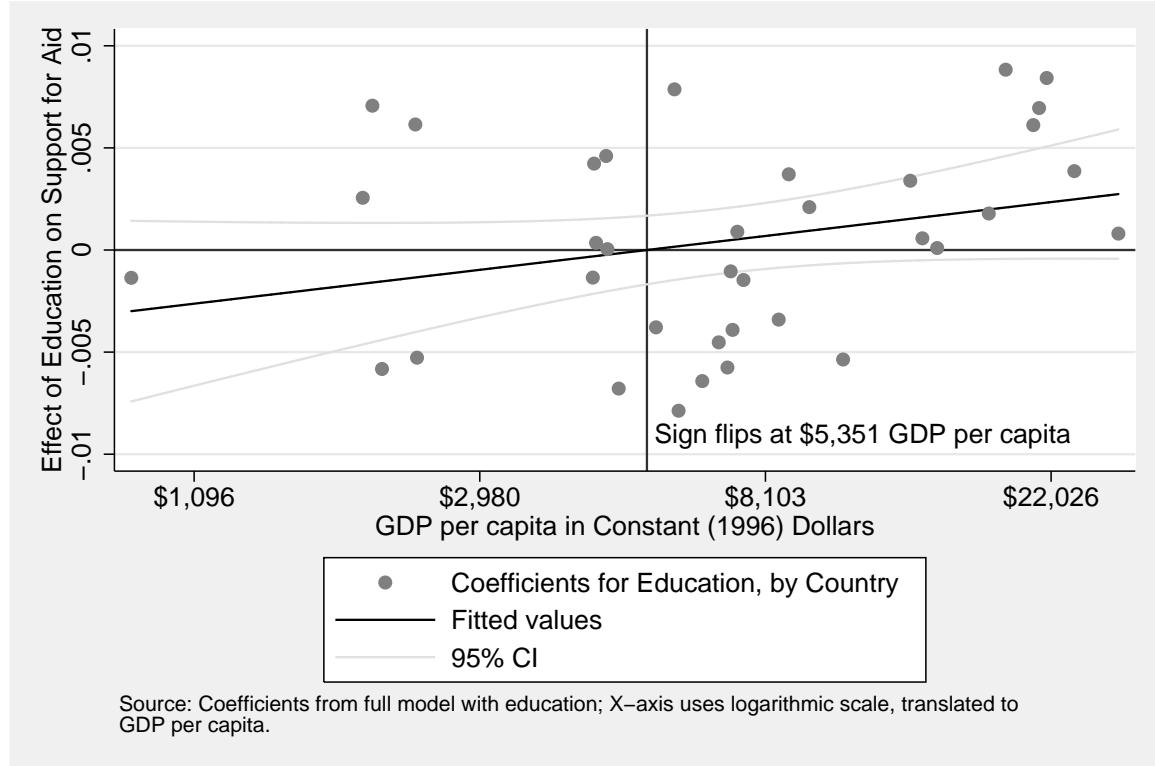


Figure 4: Effect of GDP per capita on Model Coefficients, for Full Model

mial logit model. The generalized ordered probit model allows one to either specify which of the coefficients are unlikely to be parallel or to specify an appropriate model using an iterative approach (Williams 2006). Lacking a theoretical justification for restricting any particular parameters, attempts to use the iterative approach locked up the computer I used to estimate the models. An easier approach is to use a multinomial logit model, which compares $M - 1$ binomial regressions, where M is the number of categories of the dependent variable. Without the parallel lines assumption to restrict parameter values, a multinomial logit model generates $K(M - 1)$ parameter estimates, where K is the number of coefficients estimated in each model. I re-estimate my base models (models 4-6). For clarity of presentation, I only present estimates for *Male*, *Age*, *Birth Country* and the constant for the first model (see table 7).

Table 7: Stolper-Samuelson Effects on Aid Attitudes,
Multinomial Logit

	22	23	24
“Somewhat against aid” vs. “Very much against”			
Educ. Attainment	0.21** 0.08		
Education*GDP	-0.02* 0.01		
Skill		0.08 0.10	
Skill*GDP		-0.01 0.01	
Chief Wage Earner’s Skill			0.25* 0.10
CWE Skill*GDP			-0.03* 0.01
Male	-0.03 0.04	-0.03 0.04	-0.06 0.06
Age	-0.01*** 0.00	-0.01*** 0.00	-0.01** 0.00
Birth Country	0.02 0.09	0.04 0.09	-0.07 0.13
Constant	0.43** 0.15	0.69*** 0.19	0.52** 0.18
“For to some extent” vs. “Very much against”			
Educ. Attainment	0.05 0.16		
Education*GDP	-0.00 0.02		
Skill		0.04 0.11	
Skill*GDP		-0.00 0.01	
Chief Wage Earner’s Skill			0.22 0.12
CWE Skill*GDP			-0.02 0.01
“Very much for” vs. “Very much against”			
Educ. Attainment	-0.65** 0.25		
Education*GDP	0.08** 0.03		
Skill		-0.30 0.17	
Skill*GDP		0.04	

* p<0.05, ** p<0.01, *** p<0.001

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	22	23	24
	0.02		
Chief Wage Earner's Skill		0.04	
		0.16	
CWE Skill*GDP		-0.00	
		0.02	
Wald Test, Skill and Skill*GDP	0.00	0.00	0.01
Pseudo R ²	0.08	0.09	0.09
Log Likelihood	-67371.27	-53756.26	-30801.51
N	57279.00	46415.00	26605.00

* p<0.05, ** p<0.01, *** p<0.001

In the first model, which compares individuals who are “somewhat against aid” to those who are “very much against aid,” skill variables increase a respondent’s propensity to be “somewhat” against aid, while the skill-GDP per capita interaction has a negative effect. These signs are opposite our expectations, implying that in countries abundant in highly-skill individuals, these highly-skilled individuals will be less likely to respond as being “somewhat against aid.” In this case, however, being less likely to respond as “somewhat against aid” implies that an individual will be “very much against aid.” This sign is consistent across skill variables at this level. These effects are only individually significant for *Educ. Attainment* and *CWE Skill* and their interactions with GDP per capita. When comparing the effect of Stolper-Samuelson variables on being “for [aid] to some extent” (as opposed to “very much against”), the same pattern holds. Highly-skilled individuals in countries with many highly-skill individuals are less likely to support aid “to some extent.” Finally, when comparing the extreme cases—“very much for” to “very much against”—the expected result returns. That is, highly-skilled individuals who live in countries with an abundance of highly-skilled individuals support aid, at least in models 22 and 23. This effect is only individually significant in model 22. In model 24, which uses *CWE Skill*, the previous result holds. Each of the skill variables and their interactions are significant, but it’s difficult to know what this means in this context. To better flesh out the implications of this model, I present predicted probabilities in figures 5, 6, and 7.

Figure 5 compares the probability of being “somewhat against” aid instead of respond-

ing as being “very much against” aid. In the low GDP per capita case, an increase in education increases the probability of being moderately against aid; moving from have no education to a university degree in a poor country increases one’s probability of being less opposed to aid by about 0.15. In a wealthy country, a corresponding change in education decreases the probability of being less opposed to aid by about 0.1. As indicated in table ??, the signs are opposite what we expect based on Stolper-Samuelson predictions. These effects are significant for this equation, as well as in model 24, that uses *CWE Skill*. Although t-tests reject equivalence of the mean value of the predicated probabilities at low and high levels of GDP per capita (as they do for all of the predicted probabilities based on the multinomial logit model presented in table ??), the simulated 95% confidence intervals do not diverge until an individual has had at least some university preparatory secondary education (or *Educ. Attainment* equal to 6).

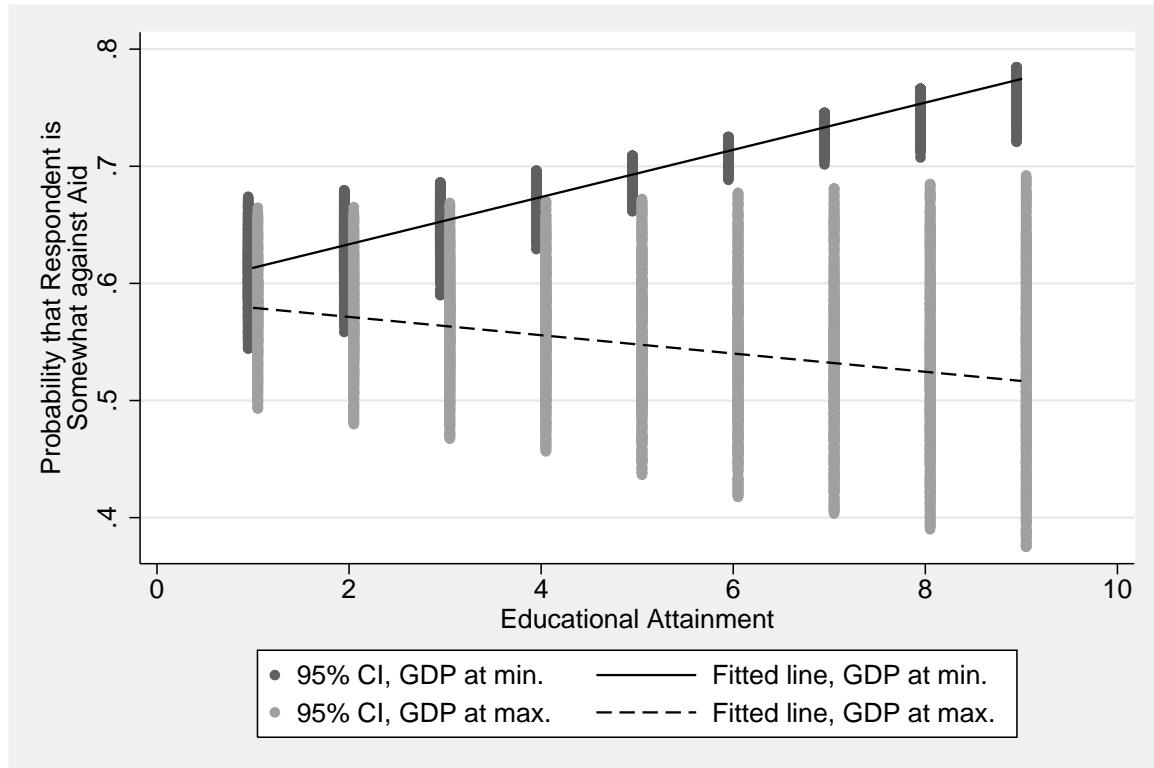


Figure 5: Effect of Education on Predicted Probabilities of Being “Somewhat against Aid”

The probability of being “for [aid], to some extent” increases in approximately the same

way, irrespective of the level of GDP per capita (see 6). Further, although t-tests again reject equivalence of the means of the predicted probabilities at both levels, the simulated confidence interval for the effect of education with GDP at its maximum encompasses that of the effect of education with GDP at its minimum.

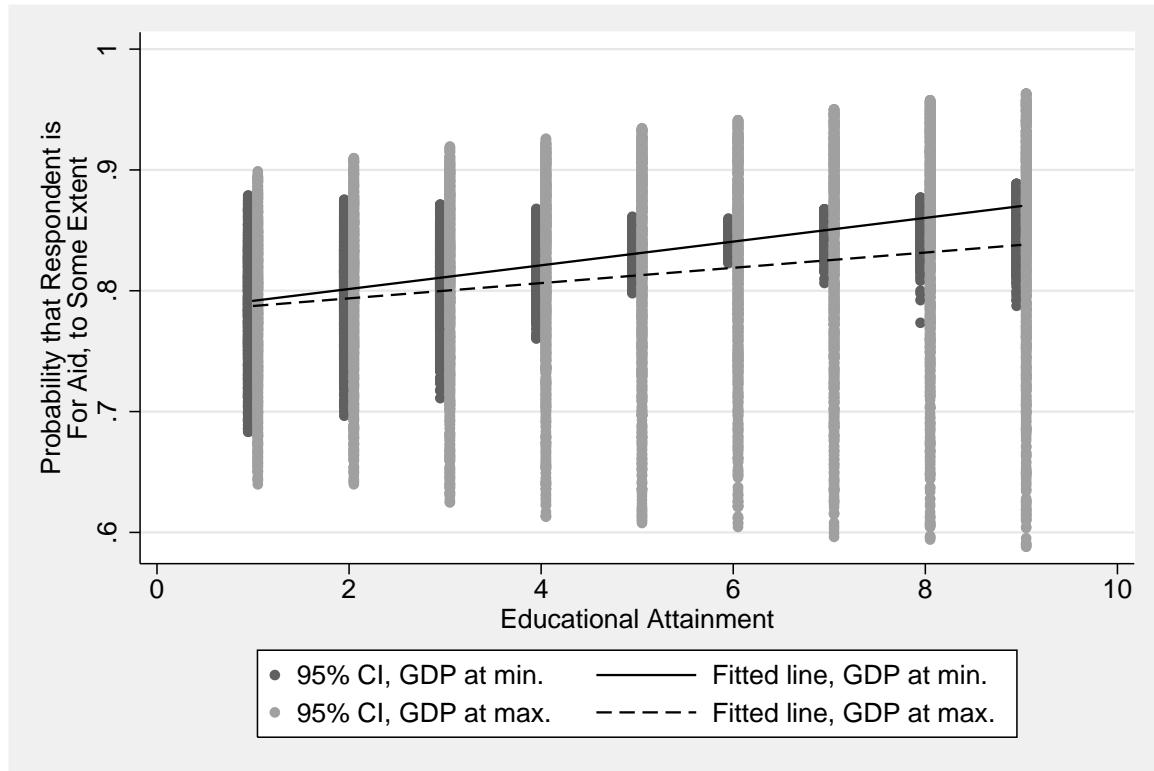


Figure 6: Effect of Education on Predicted Probabilities of Being “Somewhat for Aid”

Finally, table 7 shows us the effect we have been expecting: an increase in education in a country with low GDP decreases the probability of being strongly in favor of aid, while an increase in education in a country with high GDP increases the probability of being strongly in favor of aid. The effect is especially pronounced in the former case, as the probability of being “very much in favor” of aid decreases from nearly .8 to about .45, dropping by almost fifty percent. Although t-tests provide evidence that the means are different at every level of *Educ. Attainment*, the effects only begin to diverge at about a value of five or six, corresponding to an individual who has completed a vocational or technical secondary program.

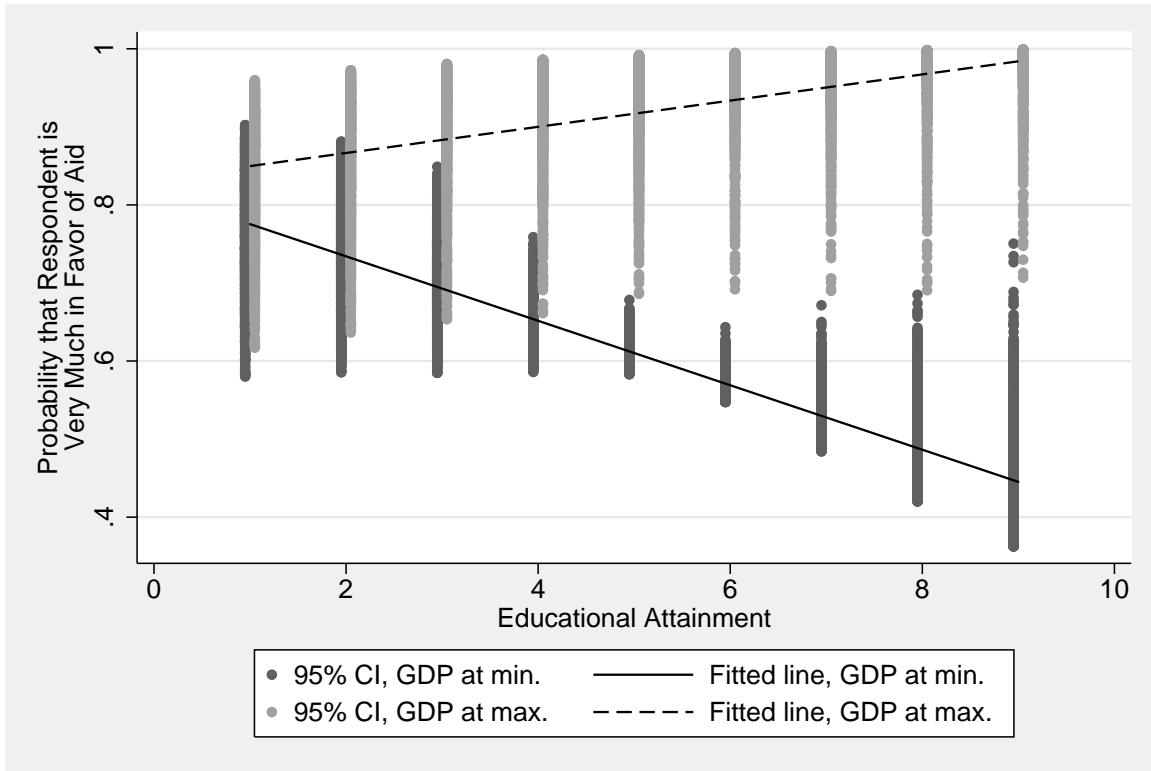


Figure 7: Effect of Education on Predicted Probabilities of Being “Very Much for Aid”

It is not clear what figures 5 and 6 tell us. Although the effects appear to be significant, they may be more the result of vague differences between the response categories. It makes sense, then, that the strongest effects in support of the Stolper-Samuelson argument should appear in the equation that makes the comparison between the two strongest categories.

Overall, there appears to be modest support for a Stolper-Samuelson model of aid. In all but a few instances, the *CWE Skill* variable and its interaction had the weakest effects, and although the other skill variables performed well over most models, neither of them was robust to all the specifications presented here. The results become inconsistent as I add more control variables; careful additional analysis can identify which of these additional controls weakens the relationship between skill variables, their interactions, and preferences for aid. The overall results provide additional support for other approaches to individual support for aid as well: Chong and Gradstein’s variables consistently perform

well, as do several of those from Knack and Paxton's study. Notably, it does appear that the paths to aid and trade look similar across both donor and non-donor countries. The significance of the *pro-trade* variable in the full models (19-21) suggests that some effect of trade on aid, or an additional common factor, drives an association between trade and aid beyond the Stolper-Samuelson effects I have argued for.

Limitations and Next Steps

This study has important limitations. Most importantly, although the question asks if respondents think their country should give poorer countries economic aid, the question itself may be insufficient to anchor their responses. Even if it does, individuals may think of aid in very different ways. I have tried to capture this theoretically by considering that aid that aims to liberalize and open the recipient's economy should have the same effects, in Stolper-Samuelson terms, as aid targeted toward development. Although the results lead me to conclude that Stolper-Samuelson effects are important in determining aid flows, there may be explanations that generate similar outcomes.

Second, I have not addressed many of the proposed arguments about why individuals favor aid. Some of these I cannot address because of data constraints; this includes a test of Ricardo-Viner effects on aid, which may bias my own results in favor of a Stolper-Samuelson model. The broad support for these outcomes across other micro-level analyses does provide some confidence in the results in spite of this.

Third, although the membership in DAC and DAC donor status is easy to assess, collecting data on non-DAC donors—even donor status—can be difficult. On one hand, non-DAC donors do not report their aid through a common channel; on the other, not only are there more developing country bilateral donors than we might expect, but there are more developing countries that donate through multilateral aid institutions, especially through smaller, regional and subregional institutions to which scholars pay little attention.

tion (O'Keefe 2008). Additionally, although this survey is notable for including non-DAC and non-donor countries, the survey does not contain responses from several prominent non-DAC donors, especially the Gulf Arab states. A more inclusive sample of these countries should generate better estimates of the effects of factor endowments on individual preferences for aid.

These results do not imply that public opinion drives aid generosity at the policymaking level. Indeed, although Broz (2008) and Milner and Tingley (2007, 2008) make an important contribution to this approach, creating research that builds on theirs in other donor countries appears unclear. I am not familiar with the availability of voting data on aid in other countries; less clear is which countries vote on aid measures and which do not. The issue becomes further muddied for studying aid decision-making in authoritarian regimes. “Votes,” if they occur in authoritarian regimes (formally or informally among selectorates, see (Bueno de Mesquita et al. 2003), are unlikely to publicly available. In spite of these constraints, work on public opinion ought to connect to policy making. One way to do this is to use aggregate public opinion results on aid generosity.

In identifying some of the shortcomings of the current work, I have also identified some of the shortcomings in the literature generally. To some degree, attention is being paid to these issues of data collection. There is certainly much work to be done.

Conclusion

According to the Stolper-Samuelson model of trade, individuals with higher levels of skills, in countries in which the number of other individuals with high skills is abundant, support trade, as it lowers the prices they pay on imported goods produced by low-skilled workers in other countries that have high levels of low-skilled individuals. As aid can have similar effects on the wages that high and low skilled workers can demand, it should have similar effects. I have provided some evidence in support of the proposition that individuals sup-

port aid for similar reasons that they support trade. This result is relatively robust across the models I have tested. Controlling for political ideology, religiosity, and pro-trade attitudes, individuals support aid in terms of their factor endowments.

In this paper, I make several contributions. First, following (Broz 2008) and (Milner and Tingley 2007, 2008), I attempt to place aid studies squarely within international political economy. Of course, aid is not solely driven by economic factors. Strategic factors continue to matter, although even these may have economic roots. Second, I build on recent work that takes individual attitudes toward aid and abandon the assumption that only the variation that occurs within DAC donors matters. Indeed, even variation that occurs in states that do not (as far as we know) have aid programs or bureaucracies should reveal interesting patterns about how and why states give aid. This goes hand in hand with my argument that we need better data for the non-DAC donors to evaluate the broader factors that drive aid across different donors. Fortunately there are some efforts along these lines.

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