

International Political Science Review

<http://ips.sagepub.com/>

Individual and country-level factors affecting support for foreign aid

Pamela Paxton and Stephen Knack

International Political Science Review 2012 33: 171 originally published online 13 October 2011

DOI: 10.1177/0192512111406095

The online version of this article can be found at:

<http://ips.sagepub.com/content/33/2/171>

Published by:



<http://www.sagepublications.com>

On behalf of:



[International Political Science Association \(IPSA\)](http://www.sagepublications.com)

Additional services and information for *International Political Science Review* can be found at:

Email Alerts: <http://ips.sagepub.com/cgi/alerts>

Subscriptions: <http://ips.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://ips.sagepub.com/content/33/2/171.refs.html>

>> [Version of Record](#) - Mar 21, 2012

[OnlineFirst Version of Record](#) - Nov 10, 2011

[OnlineFirst Version of Record](#) - Oct 13, 2011

[What is This?](#)



Individual and country-level factors affecting support for foreign aid

International Political Science Review

33(2) 171–192

© The Author(s) 2011

Reprints and permission:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0192512111406095

ips.sagepub.com



Pamela Paxton

Stephen Knack

Abstract

The determinants of public opinion on foreign aid in donor countries have received little attention. This paper examines support for foreign aid with a large, multi-level, cross-national study. Hypotheses are tested with multi-level models, including both individual-level and country-level variables, to predict positive attitudes. Two datasets are used to measure attitudes in donor countries: (1) the 1995 *World Values Survey*, which has information from approximately 6,000 individuals in nine countries and asks a rich battery of questions at the individual level; (2) the 2002 Gallup *Voice of the People* survey, asks fewer questions of individuals but contains 17 donor countries. Using both surveys combines their distinct strengths and allows tests of individual- and national-level theories across disparate samples. Results generally support the predictions that attitudes toward aid are influenced by religiosity, beliefs about the causes of poverty, awareness of international affairs, and trust in people and institutions.

Keywords

development aid, cross-cultural attitudes, foreign aid, public opinion, World Values Surveys

Foreign aid is an important issue for both developing and developed countries. Aid in the form of money, goods or technical assistance can develop infrastructure, strengthen institutions, or address humanitarian crises in recipient countries. Foreign aid can exceed 10% of a recipient country's national income in many instances (World Bank, 2005). There is growing evidence that aid can produce positive outcomes, from democracy (Finkel et al., 2007) to economic growth (Burnside and Dollar, 2000; Roodman, 2007). Foreign aid can help donor countries as well. In donor countries, foreign aid may be viewed as a strategic foreign policy tool (USAID, 2011). When foreign aid is used by recipient countries to finance public goods, it can lead to welfare improvement *both* in the recipient country and in the donor country (Hatzipanayotou and Michael, 1995).

Corresponding author:

Stephen Knack, Lead Economist, The World Bank, MSN MC3-313, 1818 H St. NW, Washington DC 20433, USA.

Email: sknack@worldbank.org

The supply of foreign aid to recipients is influenced by public opinion in democratic donor countries. Public opinion influences public policies of many types (Holsti, 2004; Jencks, 1985; Shapiro and Jacobs, 2000; see also Burstein, 1998 for an excellent review). In the area of foreign aid, Mosley (1985) demonstrates that states are influenced by citizens in determining the quantity (and quality) of distributed foreign aid. Other theorists view foreign aid as a public good with a market (Dudley and Montmarquette, 1976; Mosley, 1985).

The level of public support for aid affects not only the quality of aid but also the effectiveness of each dollar spent on aid. Paul Collier, in *The Bottom Billion* (2007: 183), asserts: 'The key obstacle to reforming aid is public opinion' in donor countries. Where there is relatively little support for aid, aid agencies are overly risk averse, according to Collier, and are constrained to deliver aid in sub-optimal ways – for example, on projects that provide photo opportunities for politicians.

For these reasons, it is important to understand public support for foreign aid. Understanding the determinants of support for foreign aid can help the aid practitioners make better arguments in favor of aid, and help a national aid agency design policies more consistent with public preferences, for example, with regard to objectives and the means of achieving them. An improved understanding of opinion on foreign aid can also inform the design of development education efforts, and ultimately reduce public opinion as an obstacle to creative and effective foreign aid policy. Further, attitudes about development cooperation and foreign aid constitute an underexplored area of international attitudes. Most literature on public opinion toward aid in donor countries is primarily descriptive rather than analytical (e.g. McDonnell et al., 2003; Stern, 1998). Two existing studies (Chong and Gradstein, 2008; Milner and Tingley, 2008) begin to explore the determinants of support for foreign aid, but the range of factors that could affect support for foreign aid remains underspecified. In this paper, we argue that individual-level factors such as attitudes toward poverty, as well as country-level factors such as a country's existing level of aid, could affect public opinion in support of foreign aid.

We examine support for foreign aid with a multi-level, cross-national study. Guided by theory, we outline a series of factors that should affect support for foreign aid, including both individual-level factors and country-level economic and social structures. We introduce two separate datasets to examine attitudes to foreign aid in donor countries: (1) the 1995–1997 wave of the *World Values Survey*, which has information from approximately 6,000 individuals in nine countries and asks a rich battery of questions at the individual level; (2) the 2002 Gallup International 'Voice of the People' survey, which asks fewer questions of individuals but includes 17 donor countries.¹ We test our hypotheses with multi-level models, including both individual-level and country-level variables, to predict support for foreign aid.

Individual and contextual influences on support for aid

Citizens of donor countries have opinions on the provision of foreign aid, defined as the transfer of capital or goods from one nation to another. Individuals can support foreign aid disbursement by their country in general. Individuals may also believe that their country should provide more or less aid than current commitments. As argued by others (e.g. Mosley, 1985), we assume that the electorate is capable of forming clear opinions about their demand for foreign aid. Previous research has shown that public opinion about world affairs is structured and consistent (Chanley, 1999; Hurwitz and Peffley, 1987; Page and Shapiro, 1992; Shapiro and Page, 1988). Indeed, previous work has demonstrated that individuals hold 'stable, internally consistent ... generalized beliefs' about global issues such as the trustworthiness of other nations (Brewer et al., 2004). Support for foreign aid can

be seen as part of a general orientation to foreign policy labeled 'cooperative internationalism' as opposed to 'militant internationalism' (Chanley, 1999; Witkopf, 1990).

Support for foreign aid: individual characteristics

Characteristics of individuals influence orientations to foreign affairs. In this section, we draw on multiple literatures to introduce a set of factors that are likely to influence support for foreign aid. To begin, foreign aid is *aid*: surveys show that demand for aid is partly altruistic – individuals cite moral or humanitarian obligations to help others (Mosley, 1985, citing Bowles, 1978). Viewing foreign aid as aid requires linking to the existing literature on generosity and altruism. For example, the religiosity of respondents – their attendance at religious services and the importance of religion to them – should increase support for aid. Religion has been found to impact altruism of other types, such as philanthropy (Wuthnow and Hodgkinson, 1990) and trust (Delhey and Newton, 2005; Fishman and Khanna, 1999; La Porta et al., 1997), as well as a variety of economic attitudes (Guiso and Zingales, 2003). Most religions offer a compassionate orientation to the world and many religious teachings encourage or even mandate relief for the poor. Jewish and Christian Biblical teachings, for example, urge individuals and leaders to support the poor, the sick, widows, travelers, and orphans. In short, there are a variety of reasons to expect that those who are more religious will express greater support for foreign aid.

A range of other factors, including gender, income, an individual's life course, and psychological characteristics, have been shown to influence various forms of altruism (Flanagan et al., 1998; Musick and Wilson, 2008). Beginning with gender, women typically rate themselves as more altruistic than men (Greeno and Maccoby, 1993) and are more likely to express concern for the well-being of others (Flanagan et al., 1998). Further, women and men differ in their opinions across a range of policy preferences (see Kaufmann, 2006 for a review). For example, women tend to be less militaristic and more opposed to war than men (Conover and Sapiro, 1993). Although Chong and Gradstein (2008) find no differences between the genders in support for foreign aid in looking across multiple donor countries, there are significant gender differences within many countries, with men more supportive of aid in some countries and women more supportive in others.

Income may also affect an individual's support for foreign aid. Those with higher incomes have the flexibility to take risks and this is likely to encourage trusting and altruistic behaviors of all kinds (Musick and Wilson, 2008). Generally, some research suggests that individuals structure attitudes on economic issues along the rich/poor class schema (Hamill et al., 1985). In testing foreign aid directly, Chong and Gradstein (2008) and Milner and Tingley (2008) respectively find that support for foreign aid increases with income and with (self-identified) social class.

Another demographic factor that could change an individual's attitude about foreign aid is the significant life-course event of having a child. The direction of effect is unclear, however. On the one hand, children may act to broaden an individual's perspective, helping a parent to be more sympathetic to others, and thereby increase his or her support for foreign aid. On the other hand, parents may feel the need to focus resources on their own children and therefore favor more domestic policies over international ones.

Finally, certain psychological characteristics, such as a sense of agency or trust in others, have been linked to altruism of other types (e.g. Musick and Wilson, 2008) and should therefore affect support for foreign aid. Personality traits are understood to develop early in the life course, influencing both the perception and interpretation of events, and are generally stable, consistent, and enduring. Political psychologists therefore argue that 'the influence of basic traits such as anxiety, hostility, or low self-esteem should be both pervasive and distinctive, exerting a consistent and

unifying pressure upon a wide range of responses' (Sniderman and Citrin, 1971: 402). Indeed, Sniderman and Citrin (1971) find that self-esteem is related to isolationism. Further, previous work links trust to public opinion about world affairs (Brewer and Steenbergen, 2002; Popkin and Dimock, 2000; Uslaner, 2002). Uslaner (2002: 196) argues that those who trust have 'greater comfort' with individuals unlike themselves, including those from other nations.

Helping others depends on the definition of 'other', so support for foreign aid is also likely to be influenced by an individual's understanding of poverty. Individuals likely extrapolate from their beliefs about the poor, or their general ideological position, in making decisions about supporting the poor in other countries. If individuals feel that the poor are lazy, or that they can easily escape poverty, then they are unlikely to support aid, either domestically or abroad. The argument we make here is related to low-information rationality – that citizens use information shortcuts to allow opinions on politics even when they lack expert knowledge (e.g. Fiske and Taylor, 1984). Individuals 'cope with an extraordinarily confusing world ... by structuring views about specific foreign policies according to their more general and abstract beliefs' (Hurwitz and Peffley, 1987: 114). For example, economic individualism has been linked to attitudes about welfare policy (Feldman, 1983). Overall, it is reasonable to assume that people's positions on the left–right political spectrum, or their attitudes about the poor in general, can help predict their attitudes about the provision of foreign aid.²

It is also important to recognize that foreign aid is *foreign* and therefore likely to be influenced by how people view the world around them, especially the unknown, foreign, world. Greater awareness of foreign and international affairs should therefore increase support for foreign aid. Individuals with greater exposure to events outside their own country's borders are more likely to understand the depth of poverty in other countries, and to know that current levels of foreign aid are a tiny fraction of government budgets in donor countries (Kull, 2001). Some existing evidence suggests that an individual's breadth of perspective matters for economic attitudes. For example, Mayda and Rodrik (2005) find that individuals who express stronger attachment to their neighborhood, county, region or nation are less favorable toward free trade than are respondents who express stronger attachment to their continent. Other factors should also demonstrate breadth of perspective. Certainly, education and media exposure influences the views that individuals have of other nations (Page and Shapiro, 1992). Certain occupations, such as being a teacher, or a member of the armed services, are more likely than others to expose individuals to international affairs.

Foreign aid is filtered through governments, so people's trust in their own government and other international bodies is also likely to influence their support for foreign aid.³ When people trust government or other institutions, they perceive those institutions to be working well and evaluate them positively. Those who distrust government are likely to advocate restricting its activities while those who trust the government should support its activities. Institutional trust will matter for the support or rejection of *any* government activity, including foreign policy. However, Hetherington and Globetti (2002) argue that trust in the government is particularly important when the benefits of the government's activity accrue to others (as would happen with foreign aid). Further, citizens who are confident in their government's abilities are more likely to believe it can successfully intervene in other nations (Popkin and Dimock, 2000). And previous research has related pride in one's country with more positive attitudes toward trade (Mayda and Rodrik, 2005).⁴

Besides trust in the government, trust in international institutions, such as the World Bank, UN or international NGOs, may also influence whether an individual feels that foreign aid funds will be used wisely or wasted (see also Brewer et al., 2004). The issue is particularly relevant for citizens of donor countries who channel substantial amounts of aid through these multilateral institutions. The United States channels only about one tenth of its aid through multilaterals. In contrast,

in most years Italy channels over one half of its aid through multilaterals. Overall, nearly a quarter of Development Assistance Committee (DAC) members' foreign aid is channeled through these institutions, making public trust in them particularly relevant.

Support for foreign aid: contextual effects

To this point, we have focused on individual-level influences on support for foreign aid. But the aggregate social and institutional features of a *nation* may also encourage or discourage support. We must distinguish arguments at the individual level (e.g. higher income increases support for foreign aid) from those at the aggregate level (e.g. countries with higher GDP per capita display more support for foreign aid). Countries vary systematically on political, economic, and cultural characteristics, all of which could influence individual levels of support.

To begin, at the national level, a country's existing level of foreign aid could influence citizen opinion on foreign aid. On the one hand, citizens in countries with high existing foreign aid allocations may express more support for foreign aid in general. On the other, when considering marginal aid (the question of whether to increase foreign aid, as asked by Gallup International), citizens in countries with high levels of existing aid may express *less* support than citizens from other countries. Relatedly, military spending may affect attitudes toward aid in donor countries. Definitions of foreign aid often couple military and economic spending.⁵ Where military spending is high, citizens may feel that their country is fulfilling its global citizenship duties through enhancing security. This logic is most likely to apply in the United States, but also to some extent in the UK and France.

A country's population may matter as a country-level variant of the global awareness variables. Citizens of smaller nations are more likely to speak foreign languages, interact regularly with foreigners, and be informed about foreign affairs. In Norway, for example, the level of foreign aid provision is often a major issue in parliamentary debates and even in election campaigns (McDonnell et al., 2003). In contrast, in countries with larger populations, citizens are able to assist 'far-off' disadvantaged people without resources ever crossing national boundaries. As an example, even if Americans know as much about the way people live 500 miles away as an Austrian or Spaniard does, the people 500 miles away are still Americans, not Hungarians or Moroccans or Portuguese. The size of a country – measured by population and area – almost inevitably makes larger countries more provincial.

Similarly, citizens in donor countries with experience as a colonial power may have greater awareness about development issues in aid recipients. A history as a colonial power indicates sustained contact with a developing country. Citizens of colonial powers are likely to be better informed about the developing world, understand development issues facing other countries, and be aware of inequality between colonizers and the colonized. These citizens may also feel a greater sense of responsibility for the welfare of people in ex-colonies and other developing countries. Citizens of ex-colonial powers are therefore hypothesized to be more likely to support foreign aid. Finally, in an aggregate version of the income hypothesis discussed earlier, we might expect citizens of countries with higher average income to demonstrate more support for aid, controlling for their own household income.

Data and methods

Data come from two independent sources. First, the *World Values Survey* (European Values Study Foundation and World Values Survey Association, 2006) contains individual-level demographic information as well as a wide range of questions capturing religiosity, an international focus, left/

right position, and individual psychological characteristics. The *World Values Survey* (WVS) includes information for 5,693 individuals in nine donor countries.⁶ To measure the dependent variable, *Support for Foreign Aid*, individuals answered the following question: ‘Some people favor, and others are against, having this country provide economic aid to poorer countries’. It is coded with four response categories indicating increasing favor.

The second survey is Gallup International’s *Voice of the People* 2002 survey. This survey contains many fewer individual-level variables than the WVS. It contains demographic information, as well as questions about political interest and trust of individuals and various organizations. The strength of the Gallup International (GI) survey is that it includes information for 6,194 individuals in 17 of the 22 possible donor countries.⁷ To measure the dependent variable *Give More Foreign Aid*, individuals answered the following question: ‘Do you think that the wealthier nations should give more financial help to the poorer nations or are they giving enough now?’ It is coded 1/0; or ‘should give more’/‘giving enough’.⁸

There are two notable differences in the WVS and GI questions on aid. First, WVS ascertains the respondent’s support for aid from his/her own country, while GI asks about aid from ‘the wealthier nations’ more generally. Second, WVS inquires about support for providing aid, while GI asks about giving *more* aid. In principle, one could favor aid (i.e. affirmative response in WVS) while simultaneously opposing increases in aid (negative response in GI). However, the difference in wording – with one exception, explained below – does not have any clear implications for most of our hypotheses.

Individual-level independent variables

In the WVS analyses, the individual-level independent variables correspond to the four factors outlined above. Two variables in the WVS measure religiosity: *Importance of Religion* ranges in four categories from ‘very important’ to ‘not at all important’. How often a respondent Attends Services is coded as days per year.

Seven WVS variables capture a respondent’s attention to international affairs. Individuals who respond that they are a *Member of the World* are distinguished (1) from those who chose towns, regions, or countries (0). *National Pride* is measured in four categories from ‘very proud’ to ‘not at all proud’. *Interest in Politics* is coded in four categories from the question, ‘How interested would you say you are in politics?’ *Television Consumption* ranges from 0 hours of TV viewing to over 3 hours per day. Two occupations that might reflect enhanced familiarity with overseas development issues are identified: members of the *Armed Forces* (1/0) and professional workers including *Lawyers and Teachers* (1/0). Finally, respondents who were *Born in Country* (1) are distinguished from all others (0). While any one of these variables may be deficient, our use of multiple indicators captures various aspects of attention to international affairs.

The WVS analyses also include four variables to measure Left/Right Position. First respondents were asked to place themselves on a 1 to 10 scale indicating their *Left/Right Position*, where higher values indicate positions closer to the right. Next, three variables capture traditional left/right views on poverty. First, individuals who feel that others ‘are poor because of laziness and lack of will power’ (*Poor Are Lazy* = 1) are contrasted to those who believe others are poor because society treats them unfairly (0). Individuals who believe the *Poor can Escape Poverty* (1) are distinguished from those who believe they have very little chance (0). Respondents’ assessments of whether there are *More Poor* today than ten years ago are coded in three response categories.

Lastly, the WVS analyses include three psychological characteristics. Respondents indicated their *Satisfaction with Their Financial Situation* on a 1 to 10 scale with higher values indicating

greater satisfaction. *Agency* is also measured as a 1 to 10 scale, with higher values indicating a feeling of ‘free choice and control’. *Trust* is assessed with the question, ‘Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?’

The WVS measures *Income* as quintiles within each country’s income structure. Three other demographic variables are included in the WVS analysis: a respondent’s *Age*, whether the respondent is *Female*, and whether a respondent has *Any Children*.⁹

The Gallup International data contain fewer individual-level variables. Demographic variables record a respondent’s *Age*, whether the respondent is *Female*, whether the respondent is *Employed*, and an individual’s level of *Education* in three categories. *Political Interest* in the GI survey is measured with a question asking whether the respondent had contacted any public officials to provide an opinion on a public issue (1) or not (0).

More questions about individual trust are available in the GI survey. *Trust* is measured with the same question as in the WVS survey – ‘Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?’ But the GI survey also asks whether individuals feel ‘this country is run by a few big interests looking out for themselves, or that it is run for the benefit of all the people’ (*Run for Big Interests*). Further, GI asks respondents about their trust in a variety of specific institutions: *Trust in Government*, *Trust in the United Nations and the World Bank*, and *Trust in NGOs* (non-governmental organizations such as environmental or social advocacy groups). The trust in institutions variables are coded along a four-category scale, from ‘a lot of trust’ to ‘no trust at all’.

Contextual-level independent variables

Analysis is restricted to the 22 donor countries that are members of the Development Assistance Committee (DAC). Although results may not generalize to some of the emerging non-DAC donors – particularly those that are non-western or non-democratic – so far only a very small percentage of total aid is provided by these emerging donors. Of the 22 DAC members, 19 appear in either our analysis of WVS data (2), Gallup data (10), or both (7). Belgium, France, and Greece are missing from both surveys.¹⁰

Country-level variables are all taken from the World Bank’s *World Development Indicators* dataset. Data correspond to 2002 in analysis of the GI data, and to 1995 for the *World Values Survey analysis*. ODA is measured as Official Development Assistance (ODA) as a share of GNP, or alternatively on the basis of aid in dollars per capita, using aid data collected by the OECD-DAC (Development Assistance Commission). Income per capita is measured using the purchasing power parity adjustments. *Military Spending* is measured as a share of GNP. In adding up the number of former *Colonies*, we consider only the most recent colonizing power (e.g. Philippines counts as an American, not Spanish colony).¹¹

Table 1 lists the country-level variables for the larger 17-nation GI sample, the percentage of survey respondents in each country supporting increased aid, and the percentage of survey respondents who favor aid only to non-corrupt countries. Interestingly, the percentage of respondents who favor aid only to non-corrupt countries is always less than the percentage who favor aid in general, except in the United States. Table 1 also provides level-2 summary statistics for the GI sample. These rows demonstrate considerable variability across countries in all of these variables, including support for foreign aid. Actual aid levels, as a share of national income for each year from 1994 to 2009, are shown in Table 2. We use aid/GNI for 1995 and 2002, respectively, in the WVS and GI analyses; however, values tend not to change very much for most donors over the period.

Table 3 provides bivariate correlations among support for aid and the country-level independent variables. Two of the significant correlations in this table show that survey respondents in larger countries tend to be less supportive of increasing aid, even though larger countries already tend to provide less aid, as a share of national income. Larger countries tend to spend a larger percentage of national income on the military, consistent with collective action theories of Olson (1965) and Olson and Zeckhauser (1966). Richer countries tend to provide more aid.

The multi-level model

To test the theories outlined above, we use multi-level models that simultaneously estimate individual- and country-level effects. The data in both surveys are hierarchically organized with individuals nested within countries, and information at both the individual level and the country level is used to determine support for foreign aid. We use the statistical package HLM 6.04 for the analyses (Raudenbush et al., 2001). In the WVS analysis, the full specification of level one of the multi-level model is:

$$y_{ij} = \beta_{0j} + \beta_{1j} \text{ Female} + \beta_{2j} \text{ Age} + \beta_{3j} \text{ Any Children} + \beta_{4j} \text{ Income} + \beta_{5j} \text{ Importance of Religion} + \beta_{6j} \text{ Attends Religious Services} + \beta_{7j} \text{ Member of the World} + \beta_{8j} \text{ National Pride} + \beta_{9j} \text{ Interest in Politics} + \beta_{10j} \text{ TV Consumption} + \beta_{11j} \text{ Born in Country} + \beta_{12j} \text{ Military} + \beta_{13j} \text{ Lawyers and Teachers} + \beta_{14j} \text{ Left-Right Position} + \beta_{15j} \text{ Poor are Lazy} + \beta_{16j} \text{ Poor can Escape} + \beta_{17j} \text{ Poor Growing} + \beta_{18j} \text{ Agency} + \beta_{19j} \text{ Satisfaction with Finances} + \beta_{20j} \text{ Trust} + r_{ij}$$

where y_{ij} is respondent i in country j 's attitude to foreign aid. Preliminary random-coefficients models (not shown) indicated that female, age, any children, income, member of the world,

Table 1. Gallup International "Voice of the People" 2002 Sample

Donor Country	% who favor more aid	% who favor aid only for non-corrupt countries	GNP per capita	Population (millions)	Military spending % of GNP	Number of ex-colonies
Australia	63%	45%	26766	19.6	1.8	0
Canada	64%	48%	28307	31.4	1.2	0
Denmark	53%	42%	28814	5.4	1.5	0
Finland	61%	31%	26629	5.2	1.2	0
Germany	68%	30%	25579	82.5	1.5	0
Ireland	87%	40%	31478	3.9	0.6	0
Italy	83%	46%	25750	57.2	2	3
Japan	45%	18%	26106	127.4	1	3
Luxembourg	71%	26%	49861	0.4	0.8	0
Netherlands	50%	29%	28604	16.1	1.5	2
Norway	63%	40%	35219	4.5	2.1	0
Portugal	89%	43%	18398	10.4	2	7
Spain	91%	29%	23119	41.3	1.2	20
Sweden	69%	33%	27005	8.9	1.8	0
Switzerland	71%	42%	31204	7.3	1	0
United Kingdom	69%	43%	27897	59.3	2.5	59
United States	45%	53%	34669	288.4	3.4	4
Mean	67%	38%	29141	45.3	1.6	5.8
Standard Deviation	14%	9%	6665	71.5	0.7	14.6
Minimum	45%	18%	18398	0.4	0.6	0
Maximum	91%	53%	49861	288.4	3.4	59

Table 2. Aid Levels as a Percentage of National Income, 1994–2009

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Australia	0.34	0.34	0.27	0.27	0.27	0.26	0.27	0.25	0.26	0.25	0.25	0.25	0.30	0.32	0.32	0.29
Austria	0.17	0.27	0.23	0.24	0.22	0.24	0.23	0.34	0.26	0.20	0.23	0.52	0.47	0.50	0.43	0.30
Canada	0.43	0.38	0.32	0.34	0.30	0.28	0.25	0.22	0.28	0.24	0.27	0.34	0.29	0.29	0.33	0.30
Denmark	1.03	0.96	1.04	0.97	0.99	1.01	1.06	1.03	0.96	0.84	0.85	0.81	0.80	0.81	0.82	0.88
Finland	0.31	0.31	0.33	0.32	0.31	0.33	0.31	0.32	0.35	0.35	0.37	0.46	0.40	0.39	0.44	0.54
Germany	0.33	0.31	0.32	0.28	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.36	0.36	0.37	0.38	0.35
Ireland	0.25	0.29	0.31	0.31	0.30	0.31	0.29	0.33	0.40	0.39	0.39	0.42	0.54	0.55	0.59	0.54
Italy	0.27	0.15	0.20	0.11	0.20	0.15	0.13	0.15	0.20	0.17	0.15	0.29	0.20	0.19	0.22	0.16
Japan	0.29	0.27	0.20	0.21	0.27	0.27	0.28	0.23	0.23	0.20	0.19	0.28	0.25	0.17	0.19	0.18
Luxembourg	0.40	0.36	0.44	0.55	0.65	0.66	0.70	0.77	0.78	0.86	0.79	0.79	0.89	0.92	0.97	1.01
Netherlands	0.76	0.81	0.81	0.81	0.80	0.79	0.84	0.82	0.81	0.80	0.73	0.82	0.81	0.81	0.80	0.82
New Zealand	0.24	0.23	0.21	0.26	0.27	0.27	0.25	0.25	0.22	0.23	0.23	0.27	0.27	0.27	0.30	0.29
Norway	1.05	0.86	0.83	0.84	0.89	0.88	0.76	0.80	0.89	0.92	0.87	0.94	0.89	0.95	0.88	1.06
Portugal	0.34	0.25	0.21	0.25	0.24	0.26	0.26	0.25	0.27	0.22	0.63	0.21	0.21	0.22	0.27	0.23
Spain	0.28	0.24	0.22	0.24	0.24	0.23	0.22	0.30	0.26	0.23	0.24	0.27	0.32	0.37	0.45	0.46
Sweden	0.96	0.77	0.84	0.79	0.72	0.70	0.80	0.77	0.84	0.79	0.78	0.94	1.02	0.93	0.98	1.12
Switzerland	0.36	0.34	0.34	0.34	0.32	0.35	0.34	0.34	0.33	0.37	0.40	0.43	0.39	0.38	0.44	0.47
UK	0.31	0.29	0.27	0.26	0.27	0.24	0.32	0.32	0.31	0.34	0.36	0.47	0.51	0.36	0.43	0.52
USA	0.14	0.10	0.12	0.09	0.10	0.10	0.10	0.11	0.13	0.15	0.17	0.23	0.18	0.16	0.19	0.20

Table 3. Correlations among country-level variables, Gallup International sample (N = 17)

	Aid/GNI	GNP p.c.	Population	Military spending	Number ex-colonies
Favor more aid	-0.23	-0.23	-0.45*	-0.26	0.18
Aid/GNP	1	.48*	-0.45*	-0.12	-0.15
GNP p.c.		1	0.03	-0.12	-0.17
Population			1	.62**	0.1
Military spending				1	0.34

* $p < .10$, 2-tailed test; ** $p < .01$, two tailed test

political interest, TV consumption, born in country, military, lawyers and teachers, and satisfaction with finances did not vary and were therefore fixed. All other coefficients were estimated as random (allowed to vary by country).¹²

In the GI analysis, support for foreign aid is a 0/1 variable so we use a Bernoulli distribution with a logit link function for estimation. The full specification of level one of the multi-level model is:

$$\text{Log}[p_{ij}/(1-p_{ij})] = \beta_{0j} + \beta_{1j} \text{Female} + \beta_{2j} \text{Age} + \beta_{3j} \text{Employed} + \beta_{4j} \text{Education} + \beta_{5j} \text{Political Interest} + \beta_{6j} \text{trust} + \beta_{7j} \text{Run for Big Interests} + \beta_{8j} \text{Trust NGOs} + r_{ij}$$

where p_{ij} is the probability that respondent i in country j supports giving more foreign aid (*Give More Foreign Aid* = 1). Preliminary random-coefficients models indicated that employed and political interest did not vary and were therefore fixed. All other coefficients were estimated as random.

In analyses of both surveys, the specification of the first country-level model is:

$$\beta_{0j} = \beta_{00} + \beta_{01} \text{ODA} + u_{0j}$$

With only 9 countries in the WVS analysis, the level-two variables are included sequentially. Subsequent level-two models include GDP, *Military Spending Population*, and *Log Colonies* in place of ODA. In GI, the same level-two variables are assessed.

In both the WVS analyses and the GI analyses, all non-dummy individual-level independent variables are grand-mean centered, creating a variable with a mean of zero across all the cases. Grand-mean centering holds compositional differences in individual characteristics constant and is appropriate when aggregate versions of the variables are not included in the model. Weights are included to compensate for sampling issues in the GI analyses. HLM 6.04 uses a weighting technique developed for hierarchical data (Pfefferman et al., 1998).

Results and discussion

Calculating the ICC demonstrates that approximately 10 percent of the total variance in support for foreign aid can be attributed to between-country differences (7% in the WVS and 13% in GI).¹³ Thus, a non-trivial amount of the variance in support occurs across countries and it is important to explain this variation as well as the variation within countries. Indeed, a simple ANOVA indicates that there is statistically significant country-level variance in support for foreign aid in both analyses. That is, support for foreign aid varies a significant amount across countries.

We begin our discussion of the results with the WVS analyses. Table 4 tests individual-level theories of support for foreign aid. These five models consider only individual-level effects but account for the clustering of individual respondents within countries with a random coefficients regression model (Bryk and Raudenbush, 1992).

Table 4. World Values Survey Individual-level Models, coefficients and standard errors

	Model 1	Model 2	Model 3	Model 4	Model 5
intercept	2.914 *** (.075)	2.948 *** (.08)	2.955 *** (.073)	2.944 *** (.069)	2.863 *** (.079)
<i>Demographic</i>					
female	0.071 ** (.021)	0.060 * (.024)	0.071 * (.025)	0.065 * (.026)	0.055 * (.025)
age	-0.001 (.001)	-0.002 t (.001)	-0.002 t (.001)	-0.001 (.001)	-0.002 t (.001)
any children	-0.053 t (.028)	-0.049 (.028)	-0.030 (.027)	-0.027 (.028)	-0.008 (.028)
income	0.055 *** (.014)	0.057 ** (.014)	0.032 * (.011)	0.040 ** (.013)	0.022 (.013)
<i>Religion</i>					
Importance of Religion		0.032 (.021)	0.028 (.021)	0.036 (.021)	0.037 (.021)
Attends Services		0.004 * (.002)	0.003 t (.002)	0.004 * (.002)	0.003 * (.001)
<i>Attention to International Affairs</i>					
Member of the World			0.170 ** (.047)	0.150 ** (.045)	0.146 ** (.048)
National Pride			-0.023 (.024)	-0.012 (.023)	-0.018 (.021)
Interest in Politics			0.102 *** (.015)	0.096 *** (.015)	0.090 *** (.015)
TV Consumption			0.052 ** (.013)	0.053 ** (.015)	0.044 * (.014)
Born in Country			-0.081 (.055)	-0.093 t (.049)	-0.094 t (.049)
Armed Forces			-0.093 (.159)	-0.064 (.148)	-0.029 (.15)
Lawyers and Teachers			0.164 *** (.037)	0.153 ** (.041)	0.126 * (.044)
<i>Left/Right Position</i>					
Poor are Lazy				-0.117 t (.054)	-0.119 * (.051)
Poor Can Escape Poverty				0.134 ** (.033)	0.109 ** (.032)
Left/Right Position				-0.044 *** (.009)	-0.043 *** (.008)
More Poor				-0.045 (.03)	-0.039 (.029)
<i>Psychological Characteristics</i>					
Agency					0.007 (.01)
Satisfaction with Financial Situation					0.021 ** (.006)
Trust					0.190 ** (.047)

t: p<.10 two-tailed; *: p<.05 two-tailed; **: p<.01 two-tailed; ***: p<.001 two-tailed
 N_i (individuals) = 5,693 N_j (countries) = 9

A preliminary look across the models in Table 4 suggests that all four theories of individual differences in support for foreign aid find some support.¹⁴ First, although the *Importance of Religion*

to an individual does not have a significant effect on support for foreign aid, *Attending Services* does have a positive and significant effect. Using the coefficient from model 2, compared with those who never attend religious services, individuals who attend at least weekly are expected to increase their support for foreign aid by .21, which across the dependent variable's four response categories is approximately $\frac{1}{4}$ of a standard deviation.¹⁵

Variables to assess an individual's attention to events outside his or her own country find mixed support in Table 4. Individuals who respond that they are a *Member of the World* are significantly more likely to support foreign aid than those who state that they are a member of a town, region, or country. *Interest in Politics* is coded in four categories from the question, 'How interested would you say you are in politics?' and has the largest effect size among this set of variables. An increase in a respondent's interest in politics from the lowest level (not at all interested) to the highest level (very interested) would increase his or her support for foreign aid by .36, or approximately $\frac{1}{2}$ a standard deviation. *Television Consumption* has a significant but small effect on support for foreign aid, at least in the range considered in the WVS. Individuals who increase their television watching by an hour per day increase their support for foreign aid by .04. Finally, professional workers including *Lawyers and Teachers* are more likely to support foreign aid than individuals in other occupations while those who are *Born in Country* are less likely to support foreign aid than those born outside the country. The other variables intended to measure attention outside to events an individual's country, *National Pride* and *Armed Forces* do not significantly impact attitudes toward aid.

Left/Right Position has a significant effect on support for foreign aid. A one standard deviation change toward the right (approximately two units on the 1 to 10 scale) decreases support for foreign aid by approximately .08.¹⁶ The three other variables assessing left/right position have very similar effect sizes although only *Poor Are Lazy* and *Poor Can Escape Poverty* have statistically significant effects. For example, agreement with the statement that others 'are poor because of laziness and lack of will power' reduces support for foreign aid by .12.

Of the three psychological characteristics assessed in the final model, *Trust* has the largest effect size. Individuals who trust support foreign aid more than individuals who do not trust others. The effect size is approximately $\frac{1}{4}$ of a standard deviation on the dependent variable. *Satisfaction with Financial Situation* also has a statistically significant effect, but a smaller effect size. It would take movement from the bottom of the scale of satisfaction (1) to the top of the scale (10) to reach an equivalently sized effect. The psychological characteristics we consider are somewhat limited. Other psychological characteristics such as value priorities (Schwartz, 1992) may also matter to support for foreign aid. This is a potentially fruitful area for future research.

Finally, the demographic variables indicate differences in support for foreign aid by gender and age. Women support foreign aid more strongly than men, although the effect size (.06) is small. Increasing age decreases support for foreign aid, but again the effect size is quite small – a ten-year increase in age would only lead to a .02 decrease in support. *Income* also predicts support in four of five models. Once *Satisfaction with Financial Situation* and the other psychological characteristics are included in the model, however, the effect size of income is approximately halved and it loses statistical significance. Having children is unrelated to support for aid.¹⁷

The more limited individual-level Gallup International results are generally consistent with the level-1 findings from the WVS. For example, Table 5 reveals that women are more supportive of wealthier nations giving more financial help to poorer nations. Remembering that the dependent variable in the GI analysis is a dichotomous variable ('should give more'/'giving enough'), interpretation of effect sizes requires transformation of the estimated coefficient. For example, in model 5, compared with being a man, being a woman is expected to increase the odds of favoring more aid by 35% ($(\text{EXP}[\cdot30 \times 1] - 1) \times 100$). An alternative interpretation focuses on the change in

the predicted probability of favoring more aid. An unemployed male, who has never contacted a public official, does not trust NGOs, and has average education, age, etc. has a predicted probability of favoring aid of .72 (calculated by: $1/(1 + \text{EXP}[-.95])$). For a female with the same characteristics, the predicted probability is .78 – a fairly sizeable difference of .06.

Although the GI survey has fewer individual-level variables in general, it does have an expanded set of questions on trust. As in the WVS analysis, *Trust* has a positive and significant effect on support for more foreign aid. Declaring trust in others increases the odds of favoring aid by approximately 50%. Models 3–5 show substantial differences in the effect of trusting particular institutions – *Government, the United Nations and the World Bank*, and *NGOs*. Trust in one’s own government does not significantly increase an individual’s support for aid. Contrast the lack of effect of trust in one’s own government to the significant, but small, effect of trust in international donor institutions (the UN and World Bank) and the significant and large coefficient for trust in NGOs. Each one-unit increase in expressed trust in international donors leads to a 7% increase in the odds of favoring more aid to poor countries. Each one-unit increase in trust in NGOs, however, leads to a 57% increase in the odds of favoring more aid to poor countries.

Table 6 introduces country-level effects on support for foreign aid as well as the individual-level effects. Theory suggests that existing levels of aid from donor countries may have differing effects in the WVS and GI analyses, in other words, the ODA coefficients may have opposite signs. The WVS question asks respondents whether they favor provision of economic aid to poor countries,

Table 5. Gallup Survey Individual-level Models

	Model 1	Model 2	Model 3	Model 4	Model 5
intercept	0.86 ***	0.86 ***	0.93 ***	0.93 ***	0.95 ***
<i>Demographic</i>	0.16	0.17	0.18	0.18	0.17
education	0.23 *	0.23 *	0.12	0.12	0.06
female	0.09	0.08	0.09	0.09	0.08
age	0.27 **	0.27 **	0.30 **	0.30 ***	0.30 **
employed	0.07	0.07	0.08	0.08	0.08
	-0.01 *	-0.01 *	-0.01 *	-0.01 *	-0.01
	0.00	0.00	0.00	0.00	0.00
	-0.24 **	-0.24 **	-0.28 **	-0.28 **	-0.28 **
	0.07	0.07	0.08	0.08	0.08
<i>Political Interest</i>					
contacted public officials		0.00	0.02	0.02	-0.04
		0.08	0.09	0.09	0.10
<i>Trust</i>					
trust			0.42 ***	0.42 ***	0.39 ***
			0.08	0.08	0.09
run by big interests			-0.16 t	-0.17 *	-0.16 t
			0.08	0.08	0.08
trust government			0.10		
			0.06		
trust UN and WB				0.07 **	
				0.02	
trust NGOs					0.45 ***
					0.06

t .10 two-tailed; * .05 two-tailed; ** .01 two-tailed; *** .001 two-tailed
 $N_i = 6,194$ $N_j = 17$

Table 6. Country-level Results, World Values Survey and Gallup Survey, coefficients and standard errors

	WVS	Gallup	WVS	Gallup	WVS	Gallup	WVS	Gallup	WVS	Gallup
ODA	0.073	-0.661 ^a								
	0.177	0.396								
GDP			-4E-05**	0.000						
			-4E-05*	0.000						
Military Spending					-0.150*** ^b	-0.090				
					0.047	0.138				
Population							-0.002*** ^c	-0.003 *** ^d		
							0.00	0.001		
Log Colonies									0.024	0.218*
									0.045	0.100

t: $p < .10$ two-tailed; *: $p < .05$ two-tailed; **: $p < .01$ two-tailed; ***: $p < .001$ two-tailed

^aCoefficient becomes significantly negative (-1.41, $p < .001$) if two outlying cases, the US and Japan, are removed from the analysis.

^bCoefficient is reduced and becomes nonsignificant if an outlying case, the US is removed from the analysis.

^cCoefficient is reduced and becomes nonsignificant if an outlying case, the US is removed from the analysis.

^dCoefficient is unchanged but reduces significance ($p < .1$) if an outlying case, the US is removed from the analysis.

Note: All WVS models include the 20 variables at level 1. All Gallup models include the 8 variables at level 1.

while the GI question asks whether wealthy nations should *increase* such aid. To the extent that policies reflect public preferences, existing ODA levels should be positively associated with support for aid in the WVS analysis, with causation going mostly from preferences (i.e. support for aid) to policy (i.e. levels of ODA). In the GI analysis, in contrast, high levels of existing aid may reduce support for further increases in it, producing a negative coefficient on ODA.¹⁸

Coefficients on ODA in Table 6 are consistent with these arguments. Although they are not significant at conventional levels, the ODA coefficient is positive in the WVS analysis and negative in the GI analysis. In the GI analyses it becomes highly significant if two outlying cases, the USA and Japan, are dropped (new coefficient = -1.41).¹⁹ Interpreting this effect size suggests that if a country were to increase from an average level of foreign aid, about 0.5% of GNP, to 0.75% of GNP, the odds of a citizen's support for foreign aid would decrease by 30%. So there is some evidence for the hypothesis that citizens in countries with high levels of existing aid express less support for *increasing* aid than citizens from other countries.²⁰

Across both surveys, the GDP of a society has a significantly negative effect on support for foreign aid. A US\$1000 increase in income per capita is expected to decrease the odds of individuals in that country supporting foreign aid by 4%. A one standard deviation change in income per capita (US\$6500 in GI) leads to a 23% decrease in the odds. Interestingly, therefore, in contrast to the generally positive effect of socio-economic status on support for foreign aid at the individual level, in the aggregate, richer countries do not exhibit greater support for foreign aid. Since we are controlling for respondents' own income levels and psychological sense of financial security, it could be that living in a wealthier country leads them to oppose aid in favor of domestic redistribution.

The results for military spending differ across the WVS and GI analyses. Military spending negatively affects support for foreign aid in the smaller WVS sample, but not in the larger GI sample. Even using the WVS, however, this finding is highly sensitive to inclusion of the United States. The coefficient on Military Spending is substantially reduced and becomes non-significant if the USA is removed from the analysis.

In support of a 'global awareness' perspective, citizens in countries with larger populations show reduced support for foreign aid. The WVS and GI samples both show a significant negative effect of population size on support for foreign aid. That is, in countries with larger populations citizens appear less willing to assist disadvantaged people across national boundaries. But the WVS result is again heavily influenced by the United States – the coefficient is approximately halved and loses significance if the USA is removed from the analysis. The GI analyses are also influenced by the USA, but to a lesser extent. There, the coefficient remains largely stable but loses significance, reaching only $p < .10$.

Finally, we see the more expansive colonial powers exhibit greater support for foreign aid. A 10% increase in number of former colonies is expected to increase the odds of individuals in that country supporting foreign aid by 2%. While this effect may seem small, the implications are substantial for the more active colonizers, namely the UK, France, and Spain. Increasing colonies by 50% is expected to increase the odds of individuals in that country supporting foreign aid by 12%.²¹

Overall, we see that both individual-level and contextual-level variables have effects on support for foreign aid. At the individual level, we find some support for a range of variables: demographic factors matter, as do religion, attention to events outside one's country, left/right position and attitudes toward poverty, and psychological characteristics. At the aggregate level, national aid disbursement impacts public opinion, as do GDP and links to former colonies.

Conclusion

In this paper, we investigated public attitudes toward foreign aid across 19 donor countries. We argued that both individual- and country-level factors contribute to support for foreign aid. Using data from two sources, the *World Values Survey*, and the *Gallup International Voice of the People Survey*, we tested a range of potential influences using multi-level models. Using two surveys allowed us to combine their distinct strengths and provide tests of our individual- and national-level hypotheses across disparate samples.

Two previous studies on this topic (Chong and Gradstein, 2008; Milner and Tingley, 2008) have already demonstrated that individual-level factors matter to support for foreign aid. Our paper goes beyond those by testing a larger set of hypotheses related to a respondent's religiosity, attitudes about poverty, attention to international affairs, and psychology. Models provide support for all proposed factors. For example, in the WVS, individuals who attend religious services, watch TV, believe the poor can escape poverty, and trust others are more likely to support foreign aid. Of note in the GI survey, individual trust in the United Nations and World Bank appears more important to support for foreign aid than trust in one's own government.

Apart from these individual-level effects, the paper highlights the contextual embeddedness of attitudes about foreign aid. The country-level results suggest that wealth and existing development support matter for individual support of aid. For example, citizens in countries with high levels of existing aid express less support for increasing aid. Citizens from countries with a history of colonization express more support for foreign aid on average. Of course, as in any cross-sectional analysis, readers are urged to use caution in interpreting these results as causal.

In many ways the United States appears exceptional in these analyses. It is also the most important donor to understand, as it has the largest economy but provides a relatively low level of aid as a share of national income. The United States spent about 0.16 percent of gross national income (GNI) on foreign aid in 2007, compared with the average of 0.45% among the 22 DAC members.²²

If US aid as a share of GNI had been equal to that of France – the median value among the other 21 DAC members – total DAC aid in 2007 would have been increased by nearly one-third, from US\$103.7 billion to about US\$136 billion. Increasing US aid is challenging in the face of low public support.²³ Only 55.5% of American respondents in the WVS favored providing aid to poorer countries. Support in the other 8 donor countries in the WVS ranged from 69.3% (New Zealand) to 88.5% (Japan). Despite its relatively low levels of aid-giving, support for increasing aid, as measured in the GI survey, was also lower in the USA (tied with Japan at 45%) than in any of the 17 donor countries included in that survey. Our results can partially explain low support for aid in the USA, but it remains somewhat of a mystery.²⁴

The United States is an influential case for some of our level-2 variables; it is responsible for the negative coefficients for military spending and population size in the *World Values Survey* analysis. Military spending as a share of national income for the USA is about three times as high as for the other DAC donors collectively. Many Americans may view their international policeman's role as a substitute for development aid.²⁵ The USA and Japan are easily the most populous donors, and one or the other has ranked first on aid volumes for a number of years, in absolute terms, as opposed to aid as a share of income. It is possible that in assessing how much aid is enough, many respondents in the USA and Japan (and perhaps in other donor countries) simply do not share the premise that a nation's fair share of contributions for international development increases proportionately with aggregate national income (McDonnell et al., 2003). This conjecture is supported by survey evidence from recipient nations. When asked which country is doing the most to help poor nations develop (or helping in response to national disasters), the USA is overwhelmingly the most frequent response (PEW Research Center, 2010).

The large size of the United States, both in population and in area, may also reduce its citizens' awareness of events and conditions in less developed countries, and cause a reduced sense of responsibility for the welfare of poor people abroad. Kull and Destler (1999) report that large percentages of Americans prefer to spend money combating poverty 'at home' before turning to foreign aid.

Another clue to US exceptionalism in aid giving may lie in the second question asked about aid in the GI survey. The United States reports the highest percentage of respondents who think no aid should be provided to countries with corruption problems. Indeed, the US population is unique among the donor countries in its attention to corruption; it is the only country where a higher percentage of respondents favor a more restrictive policy of giving only to non-corrupt countries. According to the OECD (2006) DAC's most recent peer review of US aid programs, Americans are relatively cynical over the way aid programs are implemented, and tend to believe aid is used for political objectives with most of it failing to reach the poor (see also Kull and Destler, 1999). Concerns about government corruption, along with stronger traditions of (and tax incentives for) private philanthropy, likely explain Americans' relatively high levels of private giving to charitable organizations providing non-official aid.²⁶

Numerous respondent-level attitudes and behaviors measured in the WVS were found to be associated with support for aid. Americans differ significantly from the other donor countries in the survey on several of these variables. However, the net effect of these differences in support for aid among Americans is very small. Only 36% of Americans agree that people can be trusted most of the time, lower than in 7 of the other 8 countries. The USA ranks first in agreement that poor people are lazy and lack willpower; it ranks third in agreement that poor people can escape poverty, and in right-of-center ideology. These variables are all associated with weaker support for providing aid. However, Americans also rank very high on other variables associated with *stronger* support for aid giving. The USA ranks at the top – by a wide margin – in church attendance, and ranks above the average on political interest and TV watching.

Satisfaction with one's financial situation in the WVS analysis, and trust in NGOs and international institutions in the GI analysis, are also associated with greater support for aid. The USA ranks in the middle among donor countries on these variables, so they cannot account for Americans' low support for aid. Did US support for foreign aid change after the events of 9/11/2001? September 2001 is widely perceived to have been a turning point for public attitudes toward foreign affairs. However, support for aid among Americans was low relative to that of citizens of other donors both before 9/11 (in the 1995 WVS survey) and after (in the 2002 GI survey).

The hypotheses addressed in this study were limited by cross-national data availability. Research on these issues would benefit if future cross-national surveys added questions on respondents' perceptions of their governments' commitment to foreign aid. These questions could be used to determine whether citizens' inflated perceptions of foreign aid outlays contribute to a lack of support for foreign aid. Other useful questions could ascertain respondents' attitudes regarding their country's 'fair share' of aid contributions, and how these attitudes relate to country size and activities that might be viewed as substituted for aid. For example, US respondents who believe military spending contributes to global security and wellbeing might be less favorable toward development aid, other things equal. Also useful would be questions about respondents' knowledge of specific humanitarian crises around the world, such as the 2004 tsunami in Indonesia.

Additional survey indicators on support for aid would also be useful, making it possible to test the measurement invariance of attitudes to foreign aid across countries. If questions are not interpreted in the same way across all countries, then we might see differences among countries in support for aid simply because questions are interpreted differently, and not because of actual differences (Adcock and Collier, 2001; Billiet, 2003; Steenkamp and Baumgartner, 1998). Assessing measurement invariance across countries requires multiple indicators of the concept of interest, something we do not have in this case (Bollen, 1989). However, a few recent studies provide evidence that individuals in different countries do interpret questions about several other attitudes in the *World Values Survey* (Paxton, 1999), the *ISSP* (Davidov, 2009; Cheung and Rensvold, 2000), and other surveys (Netemeyer et al., 1991) in similar ways.

Foreign aid helps recipient countries develop infrastructure, strengthen institutions, and address humanitarian crises while providing an important foreign policy tool for donor nations. Paul Collier has argued that improving the effectiveness of aid requires that donors be more willing to accept risks and hence a higher rate of failure. But, 'at present, the powerful force of public opinion is driving agencies in precisely the opposite direction. They cannot afford failure ... aid agencies are not run by fools; they are full of intelligent people severely constrained by what public opinion permits' (2007: 184). Where support for aid is shallow and citizens are ill-informed about foreign affairs and development issues, 'vociferous lobbies' may influence opinion and distort aid policies. Better understanding of the factors that influence public support for foreign aid can therefore only advance the quality of foreign aid in the future.

Acknowledgments

The authors are grateful to four anonymous referees for helpful comments. Funding for this project was provided by the World Bank's *Knowledge for Change Program*.

Notes

1. See www.worldvaluessurvey.org and www.voice-of-the-people.net.
2. Individuals on the Left may also be more likely to view foreign investment and trade as exploitative, with foreign aid the only remaining tool for developed economies to help developing countries.

3. Individuals can trust organizations and institutions as well as generalized others (Barber, 1983; Brewer et al., 2004; Giddens, 1990; Paxton, 1999). Trust in the government, for example, has been defined as a 'general orientation toward the government predicated upon people's normative expectations of government operation' (Hetherington and Globetti, 2002: 254; Miller, 1974).
4. But constructive patriotism must be distinguished from 'blind patriotism', or nationalism (Adorno et al., 1950; Curti, 1946; Davidov, 2009). For example, nationalism is found to have a negative effect on tolerance toward outgroups, while patriotism has a positive effect on tolerance (Blank and Schmidt, 2003). When pride tips into nationalism in an individual, it could therefore have a negative effect on attitudes to foreign aid.
5. The standard data source on aid (the OECD-DAC) excludes military aid from its definition of official development assistance (ODA).
6. The countries included in the WVS analysis are Australia, Finland, Germany, Japan, New Zealand, Norway, Spain, Sweden, and the United States.
7. The countries included in the Gallup analysis are Austria, Canada, Denmark, Finland, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.
8. There is no response category for 'should give less', meaning a loss of information for analysis. The underlying continuous latent variable has been collapsed to only two categories and we must assume that those who favor reducing aid are captured in the 'giving enough' category.
9. Unlike the Gallup International analyses, education is not available for all countries in the WVS. Auxiliary analyses without Japan that include education are detailed below.
10. Our number of level-2 units is less than sometimes recommended (Meuleman and Billiet, 2009) meaning that we have less power than we might like to detect contextual effects. Nevertheless, the analyses remain the first investigation of contextual influences on attitudes to foreign aid.
11. Intuitively support for aid should increase less than linearly with the number of former colonies, so we take the log of $(1 + \text{former colonies})$.
12. With a four-category dependent variable, an ordinal specification could be statistically appropriate, although producing coefficients that are more difficult to interpret. However, the distributions of both the WVS dependent variable and the level-1 residuals are normal, and auxiliary analyses using an ordinal specification produce largely the same results. Combined, these results suggest that the linear specification employed here is appropriate.
13. For Gallup, an ICC approximation for binomial models is used (Snijders and Bosker, 1999).
14. Again, auxiliary analyses using an ordinal specification produced the same results.
15. Auxiliary models revealed no differences across denominations in support for foreign aid.
16. Milner and Tingley (2008) run separate tests for each of eight countries in the WVS, and find that self-placement toward the right ideologically is negatively related to support for aid in every case. The effect is statistically significant only in Finland, Germany and Sweden. They find *National Pride* positively related to support for aid in Finland, but negatively related in Germany and Norway, and insignificant in the other countries. The only other variable in their regressions is social class.
17. Information on education was not gathered in Japan, so that variable is not included in the main analyses. In auxiliary analyses, which only include 8 level-2 countries, education has a positive and significant effect on support for aid when it is included in model 1 with the other demographic variables. Its coefficient is sharply reduced, however, and it is no longer significant by model 5, with the inclusion of variables capturing an orientation to international affairs, or poverty. These results correspond to those from Gallup International.
18. If preferences over aid levels were a sufficiently important determinant of actual aid levels, variations in aid levels among donor countries could merely reflect variations in the preferences of their respective median voters. Under this strong assumption, we should observe, in each donor country in the GI survey, a roughly equal number of respondents favoring increases and decreases in aid. In most countries, however, far more respondents support increasing than decreasing aid.

19. Outliers were identified in aggregate models using a range of diagnostics (e.g. Cook's D) and were removed from the analysis to assess whether they were influential.
20. Surveys in Sweden conducted every few years between 1975 and 1999 found that in years when aid was higher, support for maintaining or increasing aid levels was lower (McDonnell et al., 2003).
21. Auxiliary analyses considered other country-level variables, including income growth rates, income inequality, foreign-born, exports, unemployment, and tax revenue. In some cases the variable was not significant in either survey, for example, exports measured as a share of GDP. Other variables were significant in one survey and not another. For example, the percentage foreign born (including refugees) was negative and significant in GI and non-significant in the WVS. In some cases, results for these variables were significant but with differing signs in the two surveys. For example, the average growth rate for the preceding five years has a positive effect in the GI sample, but negative in the WVS sample. Similarly, income inequality (measured by the Gini coefficient) was positive for the GI countries, but negative for the WVS sample. Chong and Gradstein (2008) obtained a similar negative effect of inequality using the WVS, but it is contradicted by findings from the larger GI sample.
22. See DAC data on ODA for 2007 at <http://www.oecd.org/dataoecd/27/55/40381862.pdf>.
23. And further complicated by the fact that the American public believes the USA spends far more on foreign aid than is the reality (Kull and Destler, 1999).
24. Surveys that highlight international need do produce more American support for foreign aid. Kull and Destler (1999: 117) report, 'Eighty percent of those polled for PIPA's January 1995 study agreed that the United States should be willing to share at least a small portion of its wealth with those in the world who are in great need ... A September 1997 Pew poll found that 86 percent favored giving foreign aid for "food and medical assistance to people in needy countries" and 76 percent favored "aid that helps needy countries develop their economies".'
25. In a recent 22-country survey, Americans were the most likely to agree with the statement 'sometimes military force is necessary to maintain order in the world' (PEW Research Center, 2010).
26. Americans' aid giving remains low by DAC standards even when private giving is included. Americans give about 2% of their incomes to charities, and only about 2% of that amount goes to international charities, or .04% of income. Adding this amount to US ODA would not close most of the gap between US and other donors' aid/GNI levels, even if private giving in other donors is ignored. Moreover, while private charitable giving is lower in other donor countries, a higher percentage of their charitable giving goes to international charities (Roodman and Standley, 2006).

References

- Adcock R and Collier D (2001) Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review* 95(3): 529–46.
- Adorno TW, Frenkel-Brunswick E, Levinson DJ and Nevitt Sanford R (1950) *The Authoritarian Personality*. New York: Harper & Row.
- Barber B (1983) *The Logic and Limits of Trust*. New Brunswick, NJ: Rutgers University Press.
- Billiet J (2003) Cross-cultural equivalence with structural equation modeling. In: Harkness JA, Van de Vijver FJ and Mohler PP (eds) *Cross-cultural Survey Methods*, pp. 247–64. New York: John Wiley.
- Blank T and Schmidt P (2003) National identity in a united Germany: nationalism or patriotism? An empirical test with representative data. *Political Psychology* 24: 289–311.
- Bollen KA (1989) *Structural Equations with Latent Variables*. New York: Wiley.
- Bowles TS (1978) *Survey of Attitudes Towards Overseas Development*. London: HMSO.
- Brewer PR and Steenbergen MR (2002) All against all: How beliefs about human nature shape foreign policy opinions. *Political Psychology* 23: 39–58.
- Brewer PR, Gross K, Aday S and Willnat L (2004) International trust and public opinion about world affairs. *American Journal of Political Science* 48: 93–109.
- Bryk A and Raudenbush SW (1992) *Hierarchical Linear Models for Social and Behavioral Research: Applications and Data Analysis Methods*. Newbury Park, CA: Sage.

- Burnside C and Dollar D (2000) Aid, policies, and growth. *American Economic Review* 90: 847–868.
- Burstein P (1998) Bringing the public back in: Should sociologists consider the impact of public opinion on public policy? *Social Forces* 77: 27–62.
- Chanley VA (1999) US public views of international involvement from 1964 to 1993: Time-series analyses of general and militant internationalism. *Journal of Conflict Resolution* 43: 23–44.
- Cheung GW and Rensvold RB (2000) Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. *Journal of Cross-Cultural Psychology* 31: 187–212.
- Chong A and Gradstein M (2008) What determines foreign aid? The donor's perspective. *Journal of Development Economics* 87: 1–13.
- Collier P (2007) *The Bottom Billion*. New York: Oxford University Press.
- Conover PJ and Sapiro V (1993) Gender, feminist consciousness, and war. *American Journal of Political Science* 37: 1079–99.
- Curti M (1946) *The Roots of American Loyalty*. New York: Columbia University Press.
- Davidov E (2009) Measurement equivalence of nationalism and constructive patriotism in the ISSP: 34 Countries in a comparative perspective. *Political Analysis* 17: 64–82.
- Delhey J and Newton K (2005) Predicting cross-national levels of social trust: global pattern or Nordic exceptionalism? *European Sociological Review* 21: 311–27.
- Dudley L and Montmarquette C (1976) A model of the supply of bilateral foreign aid. *American Economic Review* 66: 132–142.
- European Values Study Foundation and World Values Survey Association (2006) *European and world values surveys four-wave integrated data file, 1981–2004*. Madrid and Tilburg: ASEP/JDS/Tilburg University.
- Feldman S (1983) Economic individualism and mass belief systems. *American Politics Quarterly* 11: 3–29.
- Finkel SE, Pérez-Liñán A and Seligson MA (2007) The effects of US foreign assistance on democracy building, 1990–2003. *World Politics* 59(3): 404–39.
- Fisman R and Khanna T (1999) Is trust a historical residue? Information flows and trust levels. *Journal of Economic Behavior and Organization* 38: 79–92.
- Fiske ST and Taylor SE (1984) *Social Cognition*. New York: Random House.
- Flanagan CA, Bowes JM, Jonsson B, Csapo B and Sheblanova E (1998) Ties that bind: Correlates of adolescents' civic commitments in seven countries. *Journal of Social Issues* 54: 457–75.
- Giddens A (1990) *The Consequences of Modernity*. Stanford, CA: Stanford University Press.
- Greeno C and Maccoby E (1993) How different is the different voice? In: Larrabee MJ (ed.) *An Ethic of Care*, pp. 193–8. New York: Routledge.
- Guiso LP and Zingales L (2003) People's opium? Religion and economic attitudes. *Journal of Monetary Economics* 50: 225–82.
- Hamill R, Lodge M and Blake F (1985) The breadth, depth, and utility of class, partisan, and ideological schemata. *American Journal of Political Science* 29: 850–70.
- Hatzipanayotou P and Michael MS (1995) Foreign aid and public goods. *Journal of Development Economics* 47: 455–67.
- Hetherington MJ and Globetti S (2002) Political trust and racial policy preferences. *American Journal of Political Science* 46: 253–75.
- Holsti R (2004) *Public Opinion and American Foreign Policy*. Ann Arbor, MI: University of Michigan Press.
- Hurwitz J and Peffley M (1987) How are foreign policy attitudes structured? A hierarchical model. *American Political Science Review* 81: 1099–120.
- Jencks C (1985) Methodological problems in studying 'military Keynesianism'. *American Journal of Sociology* 91: 373–9.
- Kaufmann KM (2006) The gender gap. *PS: Political Science and Politics* 39(3): 447–53.
- Kull S (2001) *Americans on Foreign Aid and World Hunger*. Report for Program on International Policy Attitudes (PIPA), University of Maryland College Park.
- Kull S and Destler M (1999) *Misreading the Public: The Myth of a New Isolationism*. Washington, DC: Brookings.

- La Porta R, Lopez-de-Silanes F, Shleifer A and Vishny RW (1997) Trust in large organizations. *American Economic Review Papers and Proceedings of the 104th Meeting of the American Economic Association* 87: 333–8.
- McDonnell I, Lecomte H and Wegimont L (2003) *Public Opinion and the Fight Against Poverty*. Paris: OECD Development Center.
- Mayda AM and Rodrik D (2005) Why are some people (and countries) more protectionist than others? *European Economic Review* 49: 1393–430.
- Meuleman B and Billiet J (2009) A Monte Carlo sample size study: how many countries are needed for accurate multilevel SEM? *Survey Research Methods* 3: 45–58.
- Miller AH (1974) Political issues and trust in government, 1964–1970. *American Political Science Review* 68: 951–72.
- Milner HV and Tingley D (2008) Class, ideology and national identity: the correlates of public opinion on foreign trade, aid and immigration. Paper presented at International Studies Association annual meeting, San Francisco, 15 March.
- Mosley P (1985) The political economy of foreign aid: a model of the market for a public good. *Economic Development and Cultural Change* 33: 373–94.
- Musick MA and Wilson J (2008) *Volunteers: A Social Profile*. Bloomington, IN: Indiana University Press.
- Netemeyer RG, Durvasula S and Lichtenstein DR (1991) A cross-national assessment of the reliability and validity of the CETSCALE. *Journal of Marketing Research* 28: 320–7.
- OECD (2006) *Peer Review of United States Development Assistance Programs*. Paris: OECD Development Assistance Committee.
- Olson M (1965) *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.
- Olson M and Zeckhauser R (1966) An economic theory of alliances. *Review of Economics and Statistics* 47(Aug.): 266–79.
- Page BI and Shapiro RY (1992) *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*. Chicago, IL: University of Chicago Press.
- Paxton P (1999) Is social capital declining in the United States? A multiple indicator assessment. *American Journal of Sociology* 105(1): 88–127.
- PEW Research Center (2010) Obama more popular abroad than at home. Global Attitudes Project, Washington DC, 17 June.
- Pfeffermann D, Skinner CJ, Holmes DJ, Goldstein, H and Rasbash J (1998) Weighting for unequal selection probabilities in multilevel models. *Journal of the Royal Statistical Society, Series B* 60: 123–40.
- Popkin SL and Dimock MA (2000) Knowledge, trust, and international reasoning. In: Lupia A, McCubbins MD and Popkin SL (eds) *Elements of Reason: Cognition, Choice, and the Bounds of Rationality*, pp. 214–38. Cambridge: Cambridge University Press.
- Raudenbush SW, Bryk AS, Cheong YF and Congdon R (2001) *HLM 5: Hierarchical Linear and Nonlinear Modeling*. Lincolnwood, IL: Scientific Software International.
- Roodman D (2007) The anarchy of numbers: aid, development and cross-country empirics. *World Bank Economic Review* 21(2): 255–77.
- Roodman D and Standley S (2006) Tax policies to promote private charitable giving in DAC Countries. Center for Global Development Working Paper 82.
- Schwartz S (1992) Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology* 24: 1–65.
- Shapiro RY and Jacobs LR (2000) Who leads and who follows? US presidents, public opinion, and foreign policy. In: Nacos BL, Shapiro RY and Isernia P (eds) *Decisionmaking in a Glass House; Mass Media, Public Opinion, and American and European Foreign Policy in the 21st Century*, pp. 223–46. Lanham, MD: Rowman & Littlefield.
- Shapiro RY and Page BI (1988) Foreign policy and the rational public. *Journal of Conflict Resolution* 32: 211–47.
- Sniderman PM and Citrin J (1971) Psychological sources of political belief, self-esteem and isolationist attitudes. *American Political Science Review* 65: 401–17.

- Snijders TA and Bosker RJ (1999) *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. Thousand Oaks, CA: Sage.
- Steenkamp J-B and Baumgartner H (1998) Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research* 25: 78–90.
- Stern M (1998) *Development Aid: What the Public Thinks*. New York: UNDP Office of Development Studies.
- US Agency for International Development (2011) *USAID History*. Available at: http://www.usaid.gov/about_usaid/usaidhist.html
- Uslaner E (2002) *The Moral Foundations of Trust*. Cambridge: Cambridge University Press.
- Witkopf ER (1990) *Faces of Internationalism; Public Opinion and American Foreign Policy*. Durham, NC: Duke University Press.
- World Bank (2005) *World Development Report 2005: A Better Investment Climate for Everyone*. Washington, DC: World Bank.
- World Bank (2007) *Global Monitoring Report 2007*. Washington, DC: World Bank.
- Wuthnow R and Hodgkinson VA (eds) (1990) *Faith and Philanthropy in America; Exploring the Role of Religion in America's Voluntary Sector*. San Francisco, CA: Jossey-Bass.

Pamela Paxton is Professor of Sociology and Christine and Stanley E. Adams, Jr. Centennial Professor in the Liberal Arts, The University of Texas at Austin. Her research on social capital, women in politics, and quantitative methodology has appeared in a variety of journals, including the *American Sociological Review*, the *American Journal of Sociology*, *Social Forces*, *Comparative Politics*, *Sociological Methods and Research*, and *Structural Equation Modeling*. She is the author of *Women, Politics and Power: A Global Perspective* (2007), co-authored with Melanie Hughes and of *Nonrecursive Models: Endogeneity, Reciprocal Relationships, and Feedback Loops* (2011), coauthored with John Hipp and Sandra Marquart-Pyatt.

Stephen Knack is a Lead Economist in the World Bank's Research Department. His research on development aid has been published in *International Studies Quarterly*, *Journal of Development Economics*, *Economica*, *Economic Development and Cultural Change*, and *Southern Economic Journal*. His research using cross-country opinion surveys has been published in *Quarterly Journal of Economics*, *Economic Journal*, and *Journal of Development Economics*.