Putting our money where our mouths are? Donations to NGOs and support for ODA in Australia

Terence Wood, Alexandra Humphrey Cifuentes and Jonathan Pryke

Abstract

This paper examines support for aid amongst the Australian public. It draws on two new datasets – one based on surveyed support for government aid (ODA), and one based on actual private donations to non-governmental aid organisations (NGOs). In the paper these data are combined with census information and election results to isolate factors associated with differing levels of support for aid. Our analysis shows that parts of Australia where surveyed support for ODA are highest are also, on average, the parts of the countries which have the highest proportion of the population who give to NGOs. Findings also show tertiary education to be the strongest positive socio-economic correlate of both support for ODA and NGO donations. Income, on the other hand is actually negatively correlated with support for aid (although the relationship is not statistically significant for NGO donations). We also find more religious parts of the country to be less supportive of ODA and also home to lower proportions of NGO donors. Politically, we find Green party voting to be strongly correlated with both support for government ODA and private donations. There is also a positive association between Labor voting (and a commensurate negative relationship for Coalition voting) and support for ODA. However, in the case of the major parties, there appears to be no relationship between their support and NGO donations.
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1 Introduction

When surveyed Australians appear to be supportive of aid work. A poll from 2009 found, for example, that 86 per cent were in favour of the Australian government giving Official Development Assistance (ODA) (World Vision 2009, p. 27) and other polls have reported similar findings (Newspoll 2001; Otter 2003; Newspoll 2005). Yet beyond the presence of nominal, high-level support, little is known about the nature of support for aid, or the types of Australian that are most favourable to aid giving. Are aid’s supporters predominantly wealthy? Or religious? Or educated? Or young? And is support coupled with particular political or ideological beliefs? In other donor countries there have been some scholarly attempts at answering these questions, although the relevant literature is still sparse (Hudson and van Heerde-Hudson 2012; Henson and Lindstrom 2013; Milner and Tingley 2013). In Australia recent academic work aimed at answering these questions is lacking.

Even less is known on the depth of the Australian public’s commitments to aid giving — the extent to which people are actually willing to support aid work when it comes at a cost. This is the case not only in Australia and but also for other OECD donor countries (Hudson and van Heerde-Hudson 2012). Part of the challenge in this stems from the survey questions that have generated the data used in most existing analyses of support for ODA. Survey questions asked about ODA are usually abstract and very rarely discuss the price that comes with giving (Hudson and van Heerde-Hudson 2012). And affirmative answers to these types of question cannot necessarily be taken to mean the public are actually willing, in practice, to sacrifice displaced domestic government spending from other areas, or an increased slice of their private income through raised taxes, to provide for an ODA budget (Hudson and van Heerde-Hudson 2012). It is possible they are, but it is also plausible that support for aid is “a mile wide” but only “an inch deep” as some observers have suggested (Smillie 1998, p. 23).

One means of gaining some insight into the public’s willingness to make sacrifices in support of aid work is to look at private donations to Non-Governmental Organisations (NGOs). Unlike the answers to survey questions, personal donations do bring a cost in forgone spending, and as such may offer a better gauge of people’s commitment to aid. And it follows that if private donations are strongly correlated with support for ODA we would have at least some reason to believe professed public support for ODA has a basis in a willingness to sacrifice other spending.

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2 Throughout this paper the term ODA is used to refer to Official Development Assistance given by the Australian government, the term NGO donations is used to refer to private donations to Non-Governmental Organisations doing aid work, and the term aid is used to refer to giving of both types.

3 Some findings exist, such as those reported on page 11 in the Newspoll (2001) report commissioned by AusAID as well as in a similar Newspoll report from 2005, but as discussed below, the analysis, while interesting, wants methodologically, and its findings can, at best, only be treated as suggestive. There is also one, much older, academic survey-based study of support for aid, produced 25 years ago (Kelley 1989).
Beyond what private donations might signal about public commitment to aid work, there are also interesting questions to be asked about the attributes associated with NGO giving, just as there are with ODA. Are private donors usually wealthy? Better educated? More religious? Of certain ideological persuasions? While some research has been undertaken internationally attempting to answer these sorts of questions about the supporters of ODA, to date no research (either within Australia or internationally) has attempted to answer these types of questions about the givers of private aid donations.

In this discussion paper we combine two new datasets to learn more about Australians’ support for ODA alongside their actual private donations.

The first dataset is based on data from the Vote Compass survey run in conjunction with the 2013 Australian elections, which asked respondents about support for ODA. We combine these survey data with census data and election results themselves to provide a picture, at the electorate level, of the parts of Australia that are most supportive of ODA, and the traits of the people who live in these areas.

The second dataset comprises of information on the number of people within each electorate who have made donations to Australian aid NGOs. These data were gathered from the website of the Australian Council for International Development (ACFID), a peak body which represents almost all of Australia’s development NGOs. From this second dataset we determine the parts of Australia home to the greatest number of private aid donors — people who have gone beyond simply expressing support for government aid, and actually sacrificed their own private resources to support aid work. Once again we use census and election results data to determine the socio-economic and political traits that come coupled with private NGO support.

Separately, the two datasets provide insight into the socio-economic and political attributes which are associated with support for ODA, and giving to NGOs. Combined, the data sets enable us to establish whether there is a relationship at the electorate level between support for ODA as reported in surveys, and actual donors to aid NGOs.

Using regression analysis we find that there is a strong, but not perfect, correlation at the electorate level between support for ODA and private donations: to an extent Australian’s do put their money where their mouths are when it comes to development aid.

Using multiple regression to control for confounding factors, we also find that at the electorate level the key socio-economic determinant of support for ODA as well as of private support for NGOs, is not, as might have been expected, income. Rather, it is the proportion of an electorate’s population in possession of tertiary education, which is very strongly correlated with both forms of support. When tertiary education is controlled for, the correlation between wealth and support for NGOs, as well as support
for ODA, is actually negative (although the relationship is not statistically significant for NGO donations). As is, surprisingly, the relationship between religiosity and aid support in most of our models.

Politically, controlling for socio-economic factors we find that support for the Greens party is strongly positively correlated with support for ODA, while there is a more modest, and contingent, positive association between support for Labor and support for ODA, and a corresponding (albeit once again modest and contingent) negative correlation between support for the Coalition and support for ODA. When it comes to donations to NGOs, once again there is a clear positive correlation between support for the Greens and giving, a relationship which survives a raft of control variables. On the other hand there is no apparent relationship between Labor support and private giving, nor is there any relationship between Coalition support and private giving.

These results are of obvious practical utility to NGOs, not only affording some insight into the most bountiful parts of the country, and attributes associated with financial support, but also suggesting where natural allies might most easily be found in their campaigns for more and better ODA. The results also suggest portions of the population who may be harder to muster support from, or who at the very least may need to be brought onside with different types of messages.

For those with a more academic interest in aid, this paper provides a starting point to better understanding who supports aid, both in the form of ODA and private donation-funded NGO aid, the depth of that support, and the types of traits and worldviews that are associated with such support.

The remainder of this paper is structured as follows. The first section provides a literature review of existing work on aid and donor country publics. The second section details our data sources. The third section covers our results, starting with the determinants of electorate level support for ODA, followed by the relationship between support for ODA and private donations, and subsequently the determinants of private donations. The final section discusses our findings and suggests areas for further study.

2 Existing literature on aid and public opinion

Although, as noted above, the nature of public support for ODA is an understudied area, internationally some academic work has begun to deliver insights. While not focused specifically on Australia, and while only covering ODA and not NGO giving, these studies still provide useful pointers: helping to identify the variables for our own analysis. In the section that follows we work through the key potential variables identified by international work. Having done this we discuss two available non-academic Australian studies, noting their limitations, while also detailing the insights they offer. At the end of this section we also discuss the one, much older, academic Australian study.
2.1 Income and Wealth

There are reasonable theoretical reasons to anticipate a positive correlation between income and support for ODA. As Paxton and Knack (2012, p. 173) note:

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...

Similarly, diminishing marginal utility of income associated with higher income levels (Kahneman and Deaton 2010) should mean that those earning higher incomes can sacrifice some income to ODA without experiencing negative welfare consequences (Milner and Tingley 2010).

The relationship between income (or a related measure of wealth) and favourable attitudes to ODA has been explicitly tested in several international studies. Using data from donor countries generated by a question in the World Values Survey about attitudes to ODA, and controlling for other influences, Chong and Gradstein (2008, p. 8) find a clear positive association between survey respondents’ income and support for ODA. Similarly, Paxton and Knack (2012, p. 181), who combine World Values Survey data with data from a 22 donor country Gallup survey, find a positive association. Also using World Values Survey data (this time restricted just to European countries and the United States) and working with a related measure, satisfaction with personal financial circumstances, Diven and Constantelos (2009, p. 128) find a similar positive relationship between material welfare and support for ODA.

While no similar work has been undertaken on private donations to NGOs it would seem reasonable to hypothesise an equivalent relationship between income and NGO donations. If either the ability to take greater risks or diminishing marginal utility makes individuals more amenable to giving aid via their taxes, it would seem equally likely to have them inclined to private giving. Also, the tax deductibility of donations in many donor countries might potentially make giving more appealing to more the wealthy.

2.2 Education

In addition to any influence on support for ODA it might have through its impact on income, there are also reasons to anticipate that educational attainment ought to directly influence support for ODA. Milner and Tingly (2010), for example, draw on trade models to argue that individuals with higher levels of human capital will be more likely to benefit from development in other countries, and therefore be more likely to support endeavours such as ODA designed to foster development. Alternately, other authors have suggested more educated individuals may be more inclined to support ODA simply because increased education brings with it an increased understanding of
global issues such as poverty, and therefore an elevated appreciation of the need for aid (McDonnell et al. 2003; Diven and Constantelos 2009).

In their empirical work Milner and Tingly (2010, p. 216) find that U.S. legislators from congressional districts which have more workers in high-skill occupations (a reflection of greater human as well as physical capital) are more inclined, everything else being equal, to vote in support of ODA, something the authors contend likely reflects the preferences’ of voters themselves.

Drawing directly on data on public opinion itself, Chong and Gradstein, in the study described above (2008, p. 8), find a positive correlation between educational attainment and surveyed support for ODA, as do Diven and Constantelos (Diven and Constantelos 2009, p. 128). And while they do not directly include education in their regressions, Paxton and Knack (2012, p. 181) find more support for ODA amongst professionals in careers (lawyers and teachers) that require tertiary education.

While the bulk of empirical work provides cause to anticipate a positive association between education and support for ODA, one recent study offers different results. In work based on surveys undertaken in the United Kingdom, Henson and Lindstrom (2013, p. 72) find no association between education and support for cutting ODA. And while survey questions about reducing ODA are different from those asking about support, one might reasonably assume any positive association between education and support for ODA would be reflected by a negative relationship between educational attainment and support for cutting ODA.

Although, once again, there has been no empirical research on the relationship between education and donations to NGOs, anticipating a positive association on the basis of similar arguments to those made for the relationship between education and support for ODA appears reasonable.

2.3 Religiosity

Religion is another trait we might expect to see positively associated with support for ODA. As Paxton and Knack (Paxton and Knack 2012, p. 173) contend:

[T]he 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... 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 [sic], and orphans.

Despite these theoretical reasons for anticipating a positive association between religiosity and support for ODA, available existing research on the impact of religion on
support for ODA returns mixed results. Henson and Lindstrom (2013, p. 72) fail to find the negative association between religiosity and support for cutting aid we would expect to see if religious beliefs were positively associated with support for aid. And Paxton and Knack themselves fail to find any association between the extent to which people profess religion to be important in their lives and their support for ODA. However, they do (p. 181) find a positive association between frequency of religious attendance and support for ODA, offering at least some empirical support for their theoretical arguments.

In the domain of private giving there are additional good reasons for anticipating that religion should be positively associated with NGO donations. In particular, in Australia, as in most OECD countries, a significant proportion of NGOs are church based or explicitly tie their work to a religious ethic, something that should presumably see them drawing more support from religious donors.

2.4 Age

Age is another variable we have reason to anticipate being associated with support for ODA on the basis of the existing literature. Although there are not necessarily any a priori reasons to believe the young will be more supportive of ODA, the results of most of the studies discussed above suggest we should anticipate such a finding.

In their UK study of attitudes to cutting ODA Henson and Lindstrom (2013, p. 72) find younger people are more likely to oppose cuts. In their study Chong and Gradstein (2008, p. 8) find younger people to be more supportive of ODA, as do Paxton and Knack (2012, p. 181), although in this instance the relationship is only weakly statistically significant.

In the case of propensity to give to NGOs it is possible that there could be a negative association between youth and giving, simply because younger people earn less. But once the effect of age on income is controlled for it seems plausible we should anticipate a positive relationship between youth and private giving, similar to that present for ODA.

2.5 Political beliefs

Given the association between left of centre political beliefs and support for domestic redistribution, as well as internationalist tendencies in some parts of the left, there are good reasons to expect higher levels of support for ODA amongst those with left wing political views. And, empirically, this relationship is present in all of those studies discussed above that include variables associated with political ideology (specifically: Chong and Gradstein 2008, p. 8; Diven and Constantelos 2009, p. 128; Milner and Tingley 2010, p. 216; Paxton and Knack 2012, p. 181).
The relationship we should anticipate between ideology and private giving is less clear. Presumably, the same factors listed above, associated with support for ODA on the left, could also lead to support for NGOs being most prevalent amongst people with left-wing political views. However, it is also possible that preferences for an activist state found in at least some left wing thought might lead to those on the left preferring aid to flow via ODA rather than private NGO work. Similarly, those on the right might oppose ODA because they view the state as an ineffective tool, but still give private donations in response to a perceived need for development assistance to be given in some form.

2.6 Other influences on support

In addition to the correlates of support for ODA identified in the literature discussed above, in our own tests we study one other factor we believe potentially important. This is to do with urbanisation. While this factor has not been tested in other studies, we think it possible that urban areas, being better connected to the global economy whilst also being more multicultural, might also be more sympathetic to aid work. What is more, the two non-academic studies of support for ODA in Australia (discussed below) both find an association between support for ODA in residence in Australian States’ capital cities (Newspoll 2001; Newspoll 2005).

There are also some factors found to be associated with support for ODA in other studies that, owing to the nature of the data we use, we cannot test for in this work. Primarily these are belief-based factors, such as beliefs about the causes of global poverty and trust in government, which are found associated with support for ODA in some other work (Chong and Gradstein 2008; Paxton and Knack 2012; Henson and Lindstrom 2013).

Inability to test for these beliefs in our work here is a limitation, although we would contend (and other studies suggest to a degree) that such beliefs will be covered in part by the political preferences we do test for in our study.

Also, because most Australian electorates have very similar gender balances we cannot use the data available to us to test if gender has an impact on attitudes to ODA or NGO giving despite at least one existing study (Paxton and Knack 2012) finding women to be more supportive of ODA.

2.7 Australia

Although no recent academic work has been undertaken attempting to determine the correlates of support for ODA or NGO giving within Australia, the Australian government aid programme has funded relatively recent survey work which provides some, qualified, insights in these areas (Newspoll 2001; Newspoll 2005). The 2005

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4 Vote Compass only provided us with data for the one aid-related question in their survey, and the census does not ask Australians about beliefs.

5 There appears to have also been an earlier study conducted in 1998, although we were not able to obtain the study report. Australia was one of the countries that provided data for several of the international studies discussed above. However, none of these studies analyse the Australian data on its own.
study offers (on page 8) a summary of the survey findings most relevant to our work here.

Overall, Australians who are currently most supportive of foreign aid (that is, strongly approve of it and believe we should be spending more), are reasonably representative of the population, though they do exhibit a skew towards capital city areas, white collar households and those with higher education and income.

These are all interesting findings. However, there is a major limitation in that the report’s conclusions appear to be based on simple bivariate relationships, with no attempts having been made to control for confounding factors born of associations between the independent variables themselves (i.e. people with higher education also having higher incomes). And while the 2001 study contains some more sophisticated analysis (factor analysis) in its latter portion (and while similar analysis is briefly mentioned in the 2005 study) it appears not to have made use of multiple regression, or any similar technique, to address issues born of correlations amongst the independent variables of interest.

Usefully, both of the Newspoll reports are based on surveys which also asked about NGO giving and also contain summarised responses to a question about NGO giving (see page 14 of the 2005 report, for example). As reported, the responses to this question suggest correlates of NGO giving are similar to those for ODA support (although no information is provided on education). Once again, however, the relationships presented are simple bivariate relationships, and suffer the same issues discussed above. Also, there are major limitations to survey data on private donations stemming from social desirability bias, a phenomenon in which respondents are likely to say they have made donations even when they have not because they believe confessing to not having given will lead to the surveyor thinking poorly of them (for a discussion of social desirability bias and survey data see: Gonzalez-Ocantos et al. 2012).

In addition to the Newspoll studies there is also one much older (a quarter of a century) academic study which does undertake more sophisticated analysis of survey data on Australian’s attitudes to ODA (Kelley 1989). Similar to international work this study found left of centre political views to be coupled with support for ODA. The study also found a positive association between religiosity and support for ODA. However, it found no relationship between either education or income and ODA, finding instead that a closely related measure ‘professional status’ to be a key determinant of support.

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6 In the Newspoll studies in question this issue is made more acute by the fact that (in 2001 at least) questions about private giving were asked after questions about support for ODA, which may have led to people responding affirmatively to the giving questions out of a desire to appear as if they personally act in a manner consistent with their support for ODA.

7 In additional regressions (not reported here) we also tried to test a measure of profession but were impeded by data issues as well as multicollinearity when the profession measure was included. As a result we excluded profession from our analysis. We chose to exclude it, rather than education (the measure it was most closely
3 Data

The four data sources we use in this study are described below. With each, the unit of analysis used is federal electoral districts (electorates — there are 150 in total). As a unit for study electorates bring one key challenge: that of ecological inference and the limitations faced by attempts to infer the attributes and actions of individuals from information aggregated at a higher level (King 1997). We cannot inevitably assume — for example — that just because there is a correlation between the proportion of the population in each electorate who votes for a particular political party and the level of support for ODA that, within electorates, individuals who support the party in question are actually the same individuals who support ODA. As discussed in the concluding section, this is a limitation we plan to address in future work. However, for the time being, the fact that our unit of analysis is the electorate, not the individual, means that, while some suggestive inferences can be made about individuals from our results, particularly given the strength of the associations we find, strictly speaking our analysis is of geographical areas, not people.

At the same time, working at the electorate level brings distinct advantages. In particular it enables us to combine the four datasets of interest. With two of these datasets (electoral data, and donations to NGOs) it also allows us to draw on measures of actual actions undertaken (voting and giving) in addition to survey responses.

3.1 Vote Compass Data

In the lead up to the 2013 elections, in association with the Australian Broadcasting Corporation (ABC), the Canadian academic survey organisation Vote Compass ran an online poll (hosted in the ABC’s website) which surveyed Australians on their political attitudes. Amongst other questions the survey asked respondents to indicate the extent to which they agreed or disagreed with the statement “Australia should spend more on...

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8 An example from a different field may help illustrate this. In the United States poorer constituencies are more likely to elect Republican legislators. However, this is not because poorer people themselves are more likely to vote Republican. In fact, across the U.S. poorer voters are more likely on average to vote for Democrats and the observed electorate level correlation is driven by the fact that in poorer electorates wealthier people, and the middle class, are more conservative than their equivalents are in wealthier electorates (Gelman 2010). While it is probably unlikely, it is possible to envisage an equivalent issue with aid support in Australia. Possibly, perhaps, a negative correlation between Coalition voting and support for aid is not a product of Coalition supporters being more anti-aid but rather that they come from electorates which are less internationalist more generally and where Labor and Green supporters are less supportive of aid thank they are elsewhere.

9 The survey website was <http://www.abc.net.au/votecompass/>. Vote Compass’s website is <http://votecompass.com/>.
foreign aid”. In addition to a ‘don’t know’ option respondents were given an ordered five category scale ranging from ‘strongly disagree’ to ‘strongly agree’ to express their position on the statement. The online Australian Vote Compass Survey received over 1,400,000 responses in total, and in our study we use data provided to us by Vote Compass containing a weighted average response to this question for each electorate.

As an online survey the Vote Compass survey involved self (rather than random) selection, which potentially introduces considerable bias to the data. However, taking advantage of the large sample size, Vote Compass have addressed this issue as best possible through weighting to make data representative of the population it was drawn from. Such corrections do not completely eliminate the risk of bias, and are not an ideal substitute for probability sampling, yet they nevertheless reduce some of the concerns associated with self-selection, and online surveys are an increasingly used method in social science research (Baker et al. 2013, p. 97).

As an instrument for measuring the absolute level of support for ODA the Vote Compass question, because it focuses on whether Australia should increase aid, is also not ideal. The issue being that, as a question about a potential change in level, to be an accurate gauge of overall support for ODA it requires respondents to actually know the size of the current aid budget, whereas available evidence (Newspoll 2001, p. 23; Otter 2003, p. 50) suggests most Australians do not, typically believing that Australia gives much more aid than it does. However, because our interest is in relative levels of support for ODA and their variation across electorates, this issue is not a major concern for our work. While it is likely the Vote Compass study understates support for ODA across Australia as a whole, we have no reason to believe the survey instrument will have introduced any bias into our estimates of between electorate variance.

3.2 ACFID NGO Donations Data

ACFID is an Australian peak body tasked with representing the interests of Australian NGOs working in international development. The organisation has over 100 member organisations, and its members include almost all of Australia’s major aid NGOs. In 2013 ACFID drew upon 2012 data gathered from their members to report, on an electorate by electorate basis, on the number of Australians who had made donations to their member NGOs. These data can be found on ACFID’s website <http://www.acfid.asn.au/resources-publications/publications/community-support>
There are three key limitations to the ACFID data.

First, they provide no detail on volumes donated, meaning we are restricted to simply analysing the proportion of each electorate’s population who donated over the year covered.

Second, as noted, the dataset does not cover all Australian aid NGOs. However, as also noted, it does cover almost all of the largest NGOs, who gather the lion’s share of Australian aid donations.\(^\text{13}\) What is more, although the exclusion of (mostly) smaller NGOs no doubt reduces to some degree the absolute number of donors per electorate, we think it unlikely to bias the measure of most interest to us: relative differences in donor numbers between electorates.

Third, data were provided to ACFID by individual NGOs and the numbers of each NGO’s individual donors were then added together for each electorate. No effort was made to ascertain if individuals have donated to more than one NGO over the time period covered. Potentially, to the extent that individuals donate to more than one NGO in a year, this means the total absolute numbers of donors per electorate could be overstated. However, once again, this only a minor issue for our analysis, which focuses on variation between electorates, something that is unlikely to be biased by individuals donating to more than one NGO.

From the ACFID NGO donor data we calculated the proportion of the total population (from 2011 census data) of each electorate which had donated to NGOs, and this proportionate variable is the one we use in our analysis.

3.3 Election results data

Our third dataset is a list of first preference votes cast in the 2013 general election for the three main Australian political groupings. These are the left-leaning Greens Party of Australia (or its equivalent in each state), the centre-left Australian Labor Party (or its equivalent in each state), and the Coalition (the two major centre right political parties, the Liberals and the Nationals, or their state level equivalents, who coordinate electorally).\(^\text{14}\)

\(^{13}\) Two major exclusions are Compassion International, a church-based NGO, and Médecins Sans Frontières a non-religious NGO. Usefully, both NGOs are almost identical in terms of Australian generated revenue. A feature which likely offsets any bias associated with their exclusion, at least in the area of the impact of religiosity. And outside this area, there is no reason to believe they are so untypical as to skew results.

\(^{14}\) Results were taken from the Australian Electoral Commission’s website <http://results.aec.gov.au/17496/Website/Downloads/HouseDopByDivisionDownload-17496.csv>
3.4 Census data

Our final dataset is information from the 2011 census on a series of socio-economic and demographic variables for each Australian electorate. Specifically, for each electorate we compiled the following information from census data:

- Whether the electorate covered a predominantly rural or urban area. A dummy variable coded one for urban.
- The proportion of the electorate’s total population aged under 35 years in age.
- The proportion of the electorate’s total population who told census enumerators they were religious.
- The proportion of the electorate’s total population with a tertiary education.
- The proportion of individuals of a working age in each electorate earning over AU$52,000 / year. We used $52,000 as this was the closest census band to Australia’s median income in 2011, which was AU$46,800.

To add to the robustness of our findings we also gathered census data for several closely related variables, which we substituted into addition tests (not reported on here). Specifically, we gathered information on the proportion of each electorate’s population born overseas, a measure we used as a substitute for our urban dummy variable. We also calculated the proportion of each electorate who were Christian (as opposed to religious more generally) and used this variable instead of religion. And we compiled an alternate measure of proportion earning over the median income based on the next lowest census band (AU$41,600). Except in one minor instance (noted in footnote 24) use of these alternate measures did not significantly change our results.

Table 1 below provides descriptive statistics on each of the variables gathered from our various datasets.

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15 Data were taken from the Australian Bureau of Statistics’ Table Builder application <https://www.censusdata.abs.gov.au/webapi/jsf/login.xhtml>. More information on the data we extracted via Table Builder can be provided on request.
Table 1  Variables, sources and descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source</th>
<th>Mean</th>
<th>Std. Dev.</th>
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<tr>
<td>Income</td>
<td>Proportion of an electorate's working popn earning over AU$52,000/year</td>
<td>Census 2011</td>
<td>0.281</td>
<td>0.081</td>
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<tr>
<td>Education</td>
<td>Proportion of an electorate's population with tertiary education</td>
<td>Census 2011</td>
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<td>0.067</td>
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<td>Religiosity</td>
<td>Proportion of an electorate's population identifying as religious</td>
<td>Census 2011</td>
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<td>0.067</td>
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<tr>
<td>Age</td>
<td>Proportion of an electorate's population below the age of 35</td>
<td>Census 2011</td>
<td>0.461</td>
<td>0.044</td>
</tr>
<tr>
<td>Urbanisation</td>
<td>Whether electorate is primarily urban or rural</td>
<td>Census 2011, dummy variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greens Support</td>
<td>Proportion total first preference votes for the Greens Party</td>
<td>General election 2013</td>
<td>0.086</td>
<td>0.052</td>
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<tr>
<td>Labor Support</td>
<td>Proportion total first preference votes for Labor</td>
<td>General election 2013</td>
<td>0.334</td>
<td>0.104</td>
</tr>
<tr>
<td>Coalition Support</td>
<td>Proportion total first preference votes for the Coalition</td>
<td>General election 2013</td>
<td>0.455</td>
<td>0.103</td>
</tr>
<tr>
<td>NGO support</td>
<td>Proportion of an electorate's population who gave to NGOs.</td>
<td>ACFID 2012</td>
<td>0.143</td>
<td>0.078</td>
</tr>
<tr>
<td>ODA Support</td>
<td>Electorate's weighted average score (1-5) on Vote Compass aid question</td>
<td>Vote Compass Survey 2013</td>
<td>2.788</td>
<td>0.240</td>
</tr>
</tbody>
</table>

Figures 1 and 2 chart scores on our two dependent variables for selected electorates, providing values for the lowest and highest ranking electorates, as well as for each of the quartiles. Appendix 1 contains maps of Australia which show variation in the scores on the two dependent variables across all electorates.

---

16 An interesting contrast is to note that Newspoll (2001, p. 6) summarises their survey question on donations to aid NGOs stating that: “Fifty percent (50%) [of survey respondents] claimed to have contributed money or time to an overseas aid agency in the past 12 months. This is up from 47% in 1998 (13).” This is substantially higher than the proportion of givers in our median electorate (11.5%). The most likely cause of this difference, we think, is social desirability bias – respondents providing interviewers with answers they think are more normatively appropriate. Also contributing, to a lesser degree, to the discrepancy will be the fact that, as discussed above, our own data come from a subset of all aid NGOs. Also, issues of recall may have led to respondents including giving from a longer timeframe than 12 months.
Figure 1  Weighted Average Support for Increased ODA (1-5), Selected Electorates

Figure 2  Percentage of Population Donating to NGOs, Selected Electorates
4 Hypotheses

On the basis of the reviewed literature we formulated the following hypotheses for testing:

1a. Electorates with higher proportions of their population earning over the median income will be more supportive of ODA.

1b. NGO donors will form a higher proportion of the population in electorates with higher proportions of their population earning over the median income.

2a. Electorates where a greater proportion of the population has a tertiary education will have higher levels of support for ODA.

2b. NGO donors will form a higher proportion of the population in electorates where larger shares of the population have received a tertiary education.

3a. Electorates where a greater proportion of the population are religious will also be electorates where higher levels of support for ODA are recorded.

3b. NGO donors will form a higher proportion of the population in electorates with larger shares of their population who are religious.

4a. Electorates with a larger share of the population aged less than 35 will be more supportive of ODA.

4b. (More tentatively) Electorates with a larger share of the population aged less than 35 will have a higher proportion of their population who donate to aid NGOs.

5a. Electorates where the Greens party won a higher share of first preference votes will be more supportive of ODA.

5b. Electorates where the Greens party won a higher share of first preference votes will have higher population shares of NGO donors.

6a. Electorates where the Labor party won a higher share of first preference votes will be more supportive of ODA.

6b. Electorates where the Labor party won a higher share of first preference votes will have higher population shares of NGO donors.

7a. Electorates where the parties of the Coalition won a higher share of first preference votes will be less supportive of ODA.

7b. (More tentatively) Electorates where the parties of the Coalition won a higher share of first preference votes will have lower population shares of NGO donors.

8. Electorates where support for ODA is higher will also have higher proportions of their populations giving to NGOs.
5 Results

In the following section we present the results of regressions designed to test the above hypotheses. We report first on the tests where the dependent variable is the Vote Compass score, by electorate, for support of increases in ODA. We then report on a test of the correlation across electorates between the Vote Compass surveyed support for ODA and private aid NGO donors. Finally we report on the results of regressions testing potential determinants, across electorates, of NGO donors.

5.1 Support for ODA

Figure 3 below is a scatter plot showing the simple bivariate association between the proportion of each electorate’s population earning over the median income and each electorate’s weighted score from the support for ODA question from Vote Compass.

Figure 3 – Support for ODA versus income

Chart notes: each point on the chart is an electorate; a key of electorate codes and names can be downloaded at http://wp.me/aSqRs-A0

Figure 3 appears to provide confirmation for our first hypothesis, that support for ODA rises with income. There is a clear bivariate relationship visible in the chart: absent consideration of any other variables, wealthier electorates are more supportive of ODA. However, as can be seen Table 2 below, the positive bivariate correlation not only ceases to be positive but actually becomes negative once the variable capturing tertiary
education (which is also strongly correlated with support for ODA as shown in Model 2) is introduced to the analysis in Model 3. Wealthier electorates are only more supportive of ODA on average because they are also home to more educated people. Once this is taken into account the direct impact of wealth on support for ODA is downwards.

Model 4 contains the full model. Once again the association between income and support for ODA is negative and statistically significant. Similarly, tertiary education remains strongly positively correlated with support for ODA.

These effects are not only statistically significant but of meaningful magnitude. Holding other variables constant, a shift from an electorate where the proportion of its population earning over the median income is equal to that of the lowest electorate in our sample to one where the value is equal to that of the highest earning electorate in Australia is associated with a 0.5 point decrease in the electorate’s weighted average response to the Vote Compass question on increasing ODA. The equivalent shift in education is associated with a 1.11 point increase.

Table 2 – Support for ODA from Vote Compass: Socio-Economic Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>1.421***</td>
<td>-0.990***</td>
<td>-1.326***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.176)</td>
<td>(0.254)</td>
<td>(0.256)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>2.763***</td>
<td>3.719***</td>
<td>3.591***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.315)</td>
<td>(0.319)</td>
<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td>-0.577***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.172)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population &lt;35</td>
<td>0.436</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.326)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urbanisation</td>
<td>0.057</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>2.389***</td>
<td>1.787***</td>
<td>1.719***</td>
<td>2.060***</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td>(0.061)</td>
<td>(0.064)</td>
<td>(0.234)</td>
</tr>
<tr>
<td>r-squared</td>
<td>0.232</td>
<td>0.590</td>
<td>0.632</td>
<td>0.661</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

Huber-White robust standard errors in parentheses; ***significant at the 1% level; ** significant at 5% level; * significant at 10% level.

Model 4 has one additional surprise: religiosity is also negatively correlated with support for ODA. The finding is statistically significant, although the magnitude of the negative effect is less than half that of income. Meanwhile, the signs on the coefficients for youth and urbanisation are as we would expect them to be (both associated with increased support for ODA) but neither coefficient is statistically significant at conventional levels (although the coefficient for urbanisation is very close to being

17 This result was substantively the same when we replaced our measure of religion with a measure of Christianity.
significant at the 10 percent level; and it becomes statistically significant in instances when modified versions of the model are run). The other point that bears noting is the r-squared values of the models. From the moment education is included, they become high, ranging from 0.59 in Model 2 to 0.66 in Model 4. The value of 0.66 in Model 4 suggests the combination of independent variables we have used explains 66 per cent of the variation in support for ODA across Australian electorates, a result which suggests our model has good predictive power.\textsuperscript{18}

Table 3 below reports on the addition of the key political variables to the regressions. Models 1, 2 and 3 report bivariate results of the association between support for ODA and the proportion of the population in each electorate who cast first preference votes for the Greens, Labor and the Coalition. In models 4, 5 and 6, each of the party vote variables are separately inserted into a model containing all of the socio-economic variables from the previous regressions.\textsuperscript{19}

When the vote shares of the three different political parties are regressed on their own (Models 1 – 3) against support for ODA only the Greens party produces a statistically significant result, showing a very strong positive correlation with support for aid (the highest magnitude seen thus far). The coefficients for Labor and the Coalition show the expected signs (Labor associated with more support and the Coalition less); however, neither is statistically significant (although the Coalition is close to statistically significant at the 10 per cent level). However, once the socioeconomic variables are added in as controls this changes. There remains a strong positive correlation between support for the Greens and support for ODA, albeit of somewhat lesser magnitude. There is also now a statistically significant positive correlation between support for Labor and support for ODA, and a similar sized negative correlation between support for the Coalition and ODA.\textsuperscript{20}

Taken together the absence of bivariate relationships between Labor and Coalition support and support for ODA, and the presence of relationships once socio-economic

\textsuperscript{18} All regressions were run using Huber-Wight robust standard errors. As robustness tests regressions were also run using log transformations of those variables that showed significant skew. This did not change results substantially except that age became statistically significant at the 5 per cent level in Model 4. Also, regressions were re-run using an iterative least squares model to down-weight any outliers. Doing this results were almost identical except that the coefficient for urbanisation became statistically significant at the 5 per cent level in Model 4. Tests for multicollinearity run on Model 4 show that it was not high enough to be of concern.

\textsuperscript{19} In this set of regressions, as well as those on NGO donations in Table 6, rather than run separate models for the three parties, we could have included Greens and Labor support as separate variables in the same model (but not Greens, Labor and the Coalition, owing to multicollinearity), and arguably should have to reduce the risk of omitted variable bias. However, as, in practice, including the two together caused only minor changes in results, we opted to keep the regression models separate for ease of interpretation and explanation.

\textsuperscript{20} Regressions were run using Huber-Wight robust standard errors. As robustness tests regressions were also run using log transformations of those variables that showed significant skew. This did not change results for the political variables. Also, regressions were re-run using an iterative least squares model to down-weight any outliers. Once again this had no significant effect on the political variables of interest. Tests for multicollinearity show that it was not high enough to be of concern in the combined model.
controls are added can be interpreted in the following way: were we to contrast a randomly chosen Labor supporting electorate with a randomly chosen Coalition supporting electorate, we would likely not see any substantial difference in support for ODA because other socioeconomic factors associated with support for Labor tend to offset the direct association between Labor-supporting world views and support for ODA. However, were we to compare two electorates that were similar socio-economically, we would expect the electorate with higher levels of Labor support to be more supportive of ODA.

The magnitude of these political effects is non-trivial (particularly in the case of support for the Greens, although in the full model it is less than the impact of the most important socio-economic variable: tertiary education). Figure 4 below affords a sense the magnitude of the association between support for ODA and support for the various political parties once socio-economic variables have been controlled for. Each chart in the figure shows, for the three parties of interest, the modelled value of support for ODA in an electorate, where all the socioeconomic variables have their mean value, associated with the party in question having a 0 per cent vote share, a 25 per cent vote share, and a 50 per cent vote share.

Table 3 – Support for ODA from Vote Compass: Political, and Socio-economic Models

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens party</td>
<td>3.573***</td>
<td>3.573***</td>
<td>3.573***</td>
<td>3.573***</td>
<td>3.573***</td>
<td>3.573***</td>
</tr>
<tr>
<td></td>
<td>(0.576)</td>
<td>(0.576)</td>
<td>(0.576)</td>
<td>(0.576)</td>
<td>(0.576)</td>
<td>(0.576)</td>
</tr>
<tr>
<td>Labor</td>
<td>0.193</td>
<td>0.193</td>
<td>0.193</td>
<td>0.193</td>
<td>0.193</td>
<td>0.193</td>
</tr>
<tr>
<td></td>
<td>(0.195)</td>
<td>(0.195)</td>
<td>(0.195)</td>
<td>(0.195)</td>
<td>(0.195)</td>
<td>(0.195)</td>
</tr>
<tr>
<td>Coalition</td>
<td>-0.346</td>
<td>-0.346</td>
<td>-0.346</td>
<td>-0.346</td>
<td>-0.346</td>
<td>-0.346</td>
</tr>
<tr>
<td></td>
<td>(0.226)</td>
<td>(0.226)</td>
<td>(0.226)</td>
<td>(0.226)</td>
<td>(0.226)</td>
<td>(0.226)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.993***</td>
<td>-0.993***</td>
<td>-0.993***</td>
<td>-0.993***</td>
<td>-0.993***</td>
<td>-0.993***</td>
</tr>
<tr>
<td></td>
<td>(0.250)</td>
<td>(0.250)</td>
<td>(0.250)</td>
<td>(0.250)</td>
<td>(0.250)</td>
<td>(0.250)</td>
</tr>
<tr>
<td>Education</td>
<td>2.400***</td>
<td>2.400***</td>
<td>2.400***</td>
<td>2.400***</td>
<td>2.400***</td>
<td>2.400***</td>
</tr>
<tr>
<td></td>
<td>(0.319)</td>
<td>(0.319)</td>
<td>(0.319)</td>
<td>(0.319)</td>
<td>(0.319)</td>
<td>(0.319)</td>
</tr>
<tr>
<td>Religiosity</td>
<td>-0.034</td>
<td>-0.034</td>
<td>-0.034</td>
<td>-0.034</td>
<td>-0.034</td>
<td>-0.034</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
<td>(0.197)</td>
<td>(0.197)</td>
<td>(0.197)</td>
<td>(0.197)</td>
<td>(0.197)</td>
</tr>
<tr>
<td>Population &lt;35</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(0.355)</td>
<td>(0.355)</td>
<td>(0.355)</td>
<td>(0.355)</td>
<td>(0.355)</td>
<td>(0.355)</td>
</tr>
<tr>
<td>Urbanisation</td>
<td>0.058*</td>
<td>0.058*</td>
<td>0.058*</td>
<td>0.058*</td>
<td>0.058*</td>
<td>0.058*</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Intercept</td>
<td>2.482***</td>
<td>2.723***</td>
<td>2.945***</td>
<td>2.024***</td>
<td>2.117***</td>
<td>2.493***</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.070)</td>
<td>(0.107)</td>
<td>(0.236)</td>
<td>(0.236)</td>
<td>(0.260)</td>
</tr>
<tr>
<td>r-squared</td>
<td>0.593</td>
<td>0.007</td>
<td>0.021</td>
<td>0.740</td>
<td>0.696</td>
<td>0.696</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

Huber-White robust standard errors in parentheses; ***significant at the 1% level; ** significant at 5% level; * significant at 10% level.
Figure 4 – Variation in Party Support and Associated Support for ODA
5.2 Support for ODA and donations to NGOs

Next we turn to the question of whether support for ODA is also associated with private giving to NGOs. Figure 5 below shows a scatterplot of the relationship across electorates between surveyed support for ODA and the proportions of each electorate donating to NGOs.

Figure 5 Support for ODA and Donations to NGOs

Chart notes: each point on the chart is an electorate; a key mapping electorate codes to names can be downloaded at http://wp.me/aSqRs-A0

Table 4 shows the results of a bivariate regression run on the same two variables. There is a clear and substantial relationship between the two. Electorates which survey data suggest have higher levels of support for ODA also have higher proportions of their populations who donate privately to aid NGOs. A one point increase in an electorate’s survey-derived score of support for ODA is associated with an increase in the proportion of the population donating to NGOs of nearly a 26 percentage points.21

---

21 Results were almost identical when an iterative least squares procedure was used to calculate the relationship with outliers down-weighted.
Table 4 – Support for ODA and Donations to NGOs

<table>
<thead>
<tr>
<th></th>
<th>Proportion donating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for ODA</td>
<td>0.256***</td>
</tr>
<tr>
<td>(0.019)</td>
<td></td>
</tr>
<tr>
<td>intercept</td>
<td>-0.572***</td>
</tr>
<tr>
<td>(0.051)</td>
<td></td>
</tr>
<tr>
<td>r-squared</td>
<td>0.618</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
</tr>
</tbody>
</table>

Huber-White robust standard errors in parentheses; ***significant at the 1% level; ** significant at 5% level; * significant at 10% level.

5.3 Support for ODA and Donations to NGOs

Finally we turn to the determinants of giving to NGOs. Table 5 below reports on the results of models using the same socio-economic variables shown in Table 2, but where the dependent variable is the proportion of each electorate that has donated to aid NGOs (from the ACFID data).

Table 5 Socio-economic Variables and Donations to NGOs

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>0.612***</td>
<td>-0.084</td>
<td>-0.066</td>
<td></td>
</tr>
<tr>
<td>(0.067)</td>
<td>(0.072)</td>
<td>(0.084)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.992***</td>
<td>1.072***</td>
<td>0.958***</td>
<td></td>
</tr>
<tr>
<td>(0.051)</td>
<td>(0.086)</td>
<td>(0.101)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td></td>
<td></td>
<td>-0.146**</td>
<td></td>
</tr>
<tr>
<td>(0.063)</td>
<td></td>
<td></td>
<td>(0.063)</td>
<td></td>
</tr>
<tr>
<td>Population &lt;35</td>
<td></td>
<td>-0.098</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.101)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urbanisation</td>
<td></td>
<td>0.012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.008)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.029*</td>
<td>-0.217***</td>
<td>-0.222***</td>
<td></td>
</tr>
<tr>
<td>(0.017)</td>
<td>(0.018)</td>
<td>(0.018)</td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td>r-squared</td>
<td>0.405</td>
<td>0.714</td>
<td>0.717</td>
<td>0.731</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

Huber-White robust standard errors in parentheses; ***significant at the 1% level; ** significant at 5% level; * significant at 10% level.

Once again, tertiary education is the key determinant, and when it is added to the models the relationship between income and donations becomes negative, although in these models the negative association is not statistically significant. Once again, once tertiary education is added to the model the predictive power of the regressions (as reflected in the r-squared) becomes high, greater than 0.7.\(^{22}\)

\(^{22}\) As in previous tables, all regressions were run using Huber-White robust standard errors. Once again similar results were obtained when regressions were re-run using an iterative least squares model to down-weight
In the full model, Model 4, tertiary education is clearly the strongest determinant, possessing an almost one to one relationship with donating (that is, with all other variables held constant, a 10 percentage point increase in the percentage of an electorate’s population possessing a tertiary degree will come coupled with a 9.6 percentage point increase in the proportion of the electorate giving to NGOs.)

Once again, surprisingly, there is also a negative association between religiosity and donations. The negative relationship is statistically significant, although of much lesser magnitude than the positive relationship between education and giving. For both urbanisation and age, the relationship with donations, once all other variables are controlled for, is not statistically different from zero.

Table 6 below shows the results of our three political party variables and their relationship to NGO donations, both on their own, and then each individually included in the full socio-economic model.

Table 6  
Political and Socio-economic Variables, and Donations to NGOs

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens party</td>
<td>1.045***</td>
<td></td>
<td>0.269**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td></td>
<td>(0.108)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>-0.090</td>
<td>0.043</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.063)</td>
<td>(0.038)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coalition</td>
<td>0.053</td>
<td>0.043</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
<td>(0.041)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-0.022</td>
<td>-0.032</td>
<td>-0.022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.089)</td>
<td>(0.090)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.801***</td>
<td>0.949***</td>
<td>0.938***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.118)</td>
<td>(0.102)</td>
<td>(0.101)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td>-0.074</td>
<td>-0.148**</td>
<td>-0.131**</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.064)</td>
<td>(0.064)</td>
<td>(0.063)</td>
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<tr>
<td>Population &lt;35</td>
<td>-0.158</td>
<td>-0.146</td>
<td>-0.161</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(0.102)</td>
<td>(0.108)</td>
<td>(0.110)</td>
<td></td>
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<tr>
<td>Urbanisation</td>
<td>0.012</td>
<td>0.009</td>
<td>0.010</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.053***</td>
<td>0.173***</td>
<td>0.118***</td>
<td>-0.043</td>
<td>-0.033</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.023)</td>
<td>(0.037)</td>
<td>(0.078)</td>
<td>(0.082)</td>
<td>(0.087)</td>
</tr>
<tr>
<td>r-squared</td>
<td>0.478</td>
<td>0.014</td>
<td>0.005</td>
<td>0.744</td>
<td>0.733</td>
<td>0.733</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
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</tr>
</tbody>
</table>

Huber-White robust standard errors in parentheses; ***significant at the 1% level; ** significant at 5% level; * significant at 10% level.

Outliers and also when regressions were re-run using natural logs of any variables that were non-normally distributed. Tests for multicollinearity show that multicollinearity was not high enough to be of concern.
While models focused on support for ODA (Table 2 above) and models focused on donations to NGOs (Table 5 above) produce very similar results for the socio-economic variables of interest, there are interesting differences in the political variables.

Although Greens support is consistently positively associated with the proportion of electorates donating to NGOs, there is no clear relationship between either support for Labor or support for the Coalition and donations to NGOs. This is true both when these two political variables are tested on their own, and when they are included in regressions with the socio-economic variables.23

Looking solely at the bivariate relationship, the association between Greens Party voting and donors to aid NGOs is effectively one to one.24 Once socio-economic variables (and particularly tertiary education) are included the magnitude of this effect diminishes considerably. Nevertheless, as Model 6 shows, independent of socio-economic factors associated with voting Greens and giving to NGOs, there is still a clear additional association apparently born entirely of the realm of political belief.

Figure 6 below affords a sense the magnitude of the association between support for the Greens and the proportion of the population giving to aid NGOs, once socio-economic variables have been controlled for. It shows the modelled proportion of an electorate’s population who give to aid NGOs, once all the socioeconomic variables have their mean value, associated with the Greens having a 0 per cent vote share, a 25 per cent vote share, and a 50 per cent vote share.

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23 All regressions run using Huber-White robust standard errors, and similar results were obtained when down-weighting outliers and using natural-log transformed variables. Tests for multicollinearity suggest multicollinearity was not high enough to be of concern.

24 One way of thinking about this is that if you wanted to predict the proportion of the population who gave to aid NGOs in Australian electorates, and knew nothing else about Australian electorates other than the proportion of people who voted for the Greens in each electorate, you could – with a degree of confidence – assume your proportion of donors would be roughly the same as your proportion of Greens Voters.
6 Conclusions

The above analysis suggests that to some extent Australians do put their money with their mouths are in support of aid. Parts of the country where support for ODA are strongest are also, generally, the parts of the country where the most people make donations to aid NGOs, suggesting that for a significant proportion of aid’s supporters’ support does run deeper than simply answering yes to questions about ODA in surveys.

Regarding whether there are actually as many private donors in Australia as there are supporters of ODA, owing to the nature of the Vote Compass data which was provided to us as a weighted average score rather than a population proportion, we cannot give an exact answer. However, given that surveyed support for ODA in other sources is, on average very high (recall the 86 per cent figure given in the first paragraph) while in the mean electorate we calculate that slightly less than 15 per cent of the population actually donated to the NGOs who provided data to ACFID, it would seem that actual NGO donation givers are less numerous than supporters of ODA, even as both co-vary around the country. This difference would, however, likely reduce if NGO data were aggregated from across longer time periods than one year, and if all aid NGOs were included, although by how much is something we can only speculate on.

Studying the socio-economic determinants of both private donations and support for NGOs, our analysis isolates one key factor coupled with support: tertiary education. In both sets of regressions, tertiary education was easily the strongest predictor of
support. What is more, from our inclusion of control variables, we know this effect is not simply a product of people with tertiary education earning more. Rather the effect appears to be directly related to education itself. Our finding here accords with both theoretical expectations and empirical work on ODA undertaken elsewhere.

On the other hand, contrary to what we anticipated on the basis of theory and other work, while wealthier parts of Australia are, on average, home to higher levels of support for ODA and to higher population shares giving to aid NGOs, this apparent relationship is driven by the association between tertiary education and wealth. The direct impact of wealth, independent on its association with education, is actually negative, although not in a statistically significant sense in the case of NGO support.

Also contrary to what we had anticipated on the basis of theory and other studies, the impact of religion on support for ODA and private donations is negative, although interestingly this negative relationship ceased to be statistically significant once Greens party support was added into our regressions (both for ODA and NGO donations). A fact which suggests, possibly, that it is not religion per se that is the source of the decreased aid support, but rather a form of conservative belief associated with some religious groups, which also negatively correlated with Greens voting, and offset when Green support is included in regressions.25 Another possibility is that religious Australians may give primarily through tithes (or the equivalent of tithes in other religions) and that the observed negative relationship is driven by the fact this form of donation is not captured in our NGO data, although this cannot explain the negative relationship in surveyed support for ODA. Similarly, although we think it unlikely for reasons discussed in the methods section, and because the negative relationship can also be found in surveyed support for ODA too, there remains a small possibility that the absence of some large religious NGOs from the ACFID data is the cause of the negative association seen between religion and private donations.

Once again at odds with our expectations, regression results provided little support for the hypotheses that youth or urbanisation are associated with more support for ODA or increased NGO donations. Urban areas of Australia are, on average, home to higher levels of support for ODA and NGO donations (a result we found in bivariate tests not reported on here). However, once other factors were controlled for, a statistically significant relationship between support for aid and urbanisation was only present once in the regressions reported on here (Model 4 in Table 3). And the observed bivariate relationship appears foremost to be the product of the correlation between urban areas and education, rather than the direct urban effect on aid support we had hypothesised. In the case of age no there was no relationship in any of the regressions reported on in this paper. For both urbanisation and age, in regressions not reported on here, when we

25 Intriguingly, while including Greens’ support removes the negative relationship between the proportion of an electorate’s population who are religious and support for aid, in additional regressions, not reported in this study, where we substituted proportion religion with proportion Christian, the same initial negative relationship existed and adding support for the Greens did not eliminate it.
used different specifications (different types of standard errors, and transformations of some variables) we did intermittently find relationships between the two variables and aid support but they were not consistently or robustly associated with support for aid.

Politically, Greens party voting was, as anticipated, unambiguously associated with higher support for ODA and NGO donations. What is more, this relationship which was not just the product of Greens voters being wealthier or better educated but appears, at least in part, to stem directly from political belief.

Once socio-economic factors were controlled for we also found the anticipated positive relationship between Labor support and support for ODA, as well as a commensurate negative relationship associated with Coalition support. However, the same relationships were not present in NGO giving, possibly suggesting that differing degrees of support for ODA are driven more by differing ideological beliefs about the role of the state than by beliefs about the merits of development work more generally.

While these findings are useful there is also still much more to be done in studying public support for aid. In our own work we plan to attempt to tackle the problem of ecological inference by using survey data and other tools to test whether the findings we have at the electorate level also hold true for individuals. We believe it likely they will, but testing is needed before we can be certain.

There is also interesting work to be done to tease out the causal pathways that lead to the relationships we have observed. Why, for example, is tertiary education associated with more support for aid? And why is political conservatism associated with opposition to ODA and yet apparent indifference (on average) to NGOs. In these areas in particular qualitative interview or focus group based research could offer useful insights.

Also of considerable use would be work attempting to determine whether different types of NGOs see differing degrees of support associated with different traits. We know, for example, that religion is negatively associated with giving on average, but is this also the case for religious NGOs, or is it something that has its effects only via donations to secular groups? In addition, if data on volumes of NGO donations could be obtained, useful work could be undertaken to determine what parts of Australia, and what traits, are associated with actually giving more money, as opposed to simply giving more often (which is all we could assess with our data). One interesting possibility we would like to test for in future work is whether wealth, although it does not lead to more giving, still leads to giving more.

Perhaps most importantly for supporters of aid work, further work needs to undertaken to ascertain what, if anything, can change people’s attitudes to aid. Possibly different messages or means of discussing aid might lead to differing levels of support, or possibly differing types of messages might have differing degrees of resonance with
different sub-sections of the population. Here experimental research could be fruitfully used to learn more on individuals’ attitudes to aid and different framings of aid work.

Work in any of these areas would do much to complement what we have learnt from this study, and to further deepen our understanding of Australians’ attitudes to aid.
References


Appendix 1 – Support for ODA and NGO Donations Mapped

Dynamic versions of these maps, which allow zooming, can be accessed at: http://bit.ly/1rvX52G

Support for increased ODA Across Australian Electorates (weighted average electorate score of 1-5 from Vote Compass Survey)

Percentage of Electorate Population who Donated to Australian Aid NGOs (ACFID Data)