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How Close to Home Does Charity Begin?

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ABSTRACT

This paper uses a field experiment to analyse the extent to which people are more inclined to support a charity focused on people or causes in their own region, compared to regions in other parts of the country. New Zealand landowners were incentivised to take part in an online survey by being told they could choose a charity from a list of four that would receive a $10 donation if they completed the survey. Importantly, the charities are based in different regions of the country. We find evidence of a significant declining radius of altruism: not only do people prefer to support charities in their own area, the further away a charity is located, the less likely people are to support it. These findings highlight the importance of geographic distance (independent of social distance) in charitable giving.

JEL Classification: D64; C93

Keywords: charitable giving, declining radius of altruism, field experiment

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1. Introduction

The majority of people living in developed countries prefer to donate to charities with a domestic focus (e.g. helping families in need in their own country) rather than to charities based in their own country, but with an international focus (e.g. international development charities helping families in need in developing countries overseas). This finding is evident in observational, survey and experimental data, implying domestic favouritism in charitable giving. Numerous explanations for this locational preference have been posited in the literature, including social distance and geographic distance. In this paper, we analyse whether geographic distance matters for charitable giving within a country while controlling for social distance, and, in contrast to previous studies, we assess the geographic radius of altruism. Whereas existing studies are binary (e.g. comparing giving to domestic or international causes) we include four different geographic categories, allowing us to analyse the radius of altruism in more detail than in the existing literature.

Specifically, we conduct a field experiment in which New Zealand rural landowners taking part in a biannual survey are asked to select a charity, from a list of four, to which a $10 donation will be made to thank them for completing the survey. Two of these charities are based in the Otago region in the South Island of New Zealand, and two are based in the Bay of Plenty region in the North Island of New Zealand. For groups that do tend to move around a lot, defining what they consider to be their home region would be problematic, so rural landowners are a convenient sample on which to test our hypotheses as being tied to the land, they are less mobile than other groups. We find that there is a significant declining radius of altruism for our sample. Not only do people prefer to donate to charities based in their own region, but they also have strong preferences to support people in neighbouring regions rather than regions further away. The implications are considerable for charities with a national focus, who may strategically advertise that charitable contributions will be spent locally.

The remainder of the paper is structured as follows. Section 2 of the paper reviews the existing literature that has analysed whether there is a declining radius of altruism with respect to charitable giving. Section 3 provides details of our experimental design. The results are presented and discussed in Section 4, with Section 5 concluding.

2. Literature Review

Evidence from observational and survey data show that many people living in developed countries have a preference for supporting charities with a domestic focus rather than supporting charities helping people overseas (e.g. international development charities). For example, in the US only 5.7% of personal donations go to international causes (Giving USA Foundation, 2017), with Casale and Baumann's (2015) survey data showing only 7.2% of US households had donated to international causes in the previous year. In New Zealand, the country where we conduct our field experiment, 8.7% of private donations go to international causes (Cox et al., 2015). The share going to international causes is higher in the UK, ranging from 20% to 40% for the period 1978 to 2004, with donations peaking around the time of the 1985 Ethiopian famine and the Live Aid fundraising efforts to support the famine victims (Atkinson et al., 2012). By contrast, Micklewright and Schnepf (2009) find that five times as many people report having donated to a domestic charity than to an international development charity in their UK survey. Rajan et al.'s (2009) survey data for Canada show that 6.4% of Canadians donated both to international causes and to domestic causes, with 81.3% giving to domestic causes only.

Further evidence of locational preference in charitable giving is Genç et al. (2019) who conduct a discrete choice experiment to analyse the relative influence of (i) the effectiveness of a donation, (ii) the need of recipients and (iii) whether the donation will be spent in the home country (New Zealand), in a country close to New Zealand or a country far away from New Zealand. For nearly half of the participants, where the donation is spent was the most important attribute, with participants preferring the money be spent in their own country.[4]

One reason for this locational preference could be that within a given country, there are more charities based in that country with a domestic focus than there are domestically based international development charities. In other words, potential donors have more charities with a local focus to choose from, meaning a small share goes to international causes. To evaluate what would happen if the choice of charities was limited to one charity with a domestic focus and one with an international focus, Knowles and Sullivan (2017) conduct a field experiment

[4] Other results are nevertheless evident in the literature. For example, Jones (2017) finds that Australian university students invited to play a dictator game are equally likely to give to needy people overseas as needy Australians. Schons et al. (2017) find that the majority of participants in a field experiment split donations between domestic and international charities when offered that option, which could be due to participants wanting to be seen to act fairly.

where participants are asked whether the researchers should donate $10 to World Vision New Zealand (a charity based in New Zealand but assisting families in need in developing countries) or the Salvation Army (a charity helping families in need in New Zealand). They found 72% of participants chose the charity with a domestic focus.[5]

Another possible explanation for locational preference is limited moral expansiveness. Crimston et al. (2016) construct a scale comprising four moral circles: an inner circle (deserving the highest level of moral concern), outer circle (deserving moderate moral concern), fringes of moral concern (deserving minimal moral concern) and outside the moral boundary (deserving no moral concern). In this framing, those who favour domestic charities perhaps view people from their own country as belonging to their inner or outer circles and those living in far-away countries as being in the fringes of their moral concern. To that end, Zagefka (2018) demonstrates that people are more likely to donate to victims of a natural disaster when they can imagine themselves in the victims' shoes either due to physical proximity to the disaster or by having expressed a desire to visit the area when the disaster occurred (even if they had never visited before), suggesting that contributions disproportionately benefit those in the donor's inner and other circles.

Consistent with a limited moral expansiveness, beneficiaries in a donor's own country may be seen as part of the donor's in-group because they share a common language, culture, etc., whereas beneficiaries from other countries may be perceived as belonging to an out-group.[6] That is, people in other countries are not only geographically distant, but socially distant as well. For example, Levine and Thompson (2004) find that British subjects are more likely to report that they would donate in response to a natural disaster in Continental Europe compared to one in South America if they have been primed to make their European identity salient compared to a control group who have been primed to make their British identity salient. In a similar vein, Charnysh et al. (2015) find that priming participants to think about a shared national Indian identity increases donations by Hindus (the dominant group) to Muslims (a minority group).

[5] Conversely, Weipking (2010) find that Dutch donors favour international charities after controlling for other charity characteristics (e.g. whether the charity is faith based or whether it focuses on helping children). However, local charities with environmental emphases receive more than international charities.

[6] Navarrete et al. (2007) note that from an evolutionary perspective, people are more likely to favour their in-group at the expense of the out-group when they feel under threat.

The above studies analyse whether people prefer to donate to charities with a domestic rather than international focus. Herzenstein and Posavac (2019) investigate the role of geographic distance by holding social distance constant in comparing donations to charities located in different parts of the US. Specifically, they report that 105 undergraduates in a laboratory setting at an East Coast university allocate 61 percent of money earmarked for environmental charities to East Coast (as opposed to West Coast) charities, demonstrating geographically local favouritism. Similarly, but in the context of public goods, Gallier et al. (2017) find that students in a laboratory setting contribute more to the public good in their local neighbourhoods as opposed to different neighbourhoods in the same region.

These studies suggest that geographic distance matters in charitable giving and that social distance and moral expansiveness alone do not explain charitable behaviour. However, the aforementioned empirical studies generally treat distance in a binary manner, e.g. domestic and overseas or local and non-local. In contrast, we analyse the radius of altruism within a country by assessing the extent to which a given charity is supported by people from four different geographic groupings: (i) the same region (ii) neighbouring regions, (iii) non-neighbouring regions but in the same island and (iv) from the other island.

3. Experimental Design

Our field experiment was incorporated into the Survey of Rural Decision Makers, a large-scale, web-based survey of landowners across New Zealand. Conducted biannually since 2013, the Survey of Rural Decision Makers (Brown 2017) provides detailed information on land use, land-use change, and drivers and barriers of land-management practices (e.g. Brown and Roper 2017). The sample is drawn from official databases of rural landowners and from past participants, and the survey is widely promoted by industry bodies and central and regional government. To accommodate seasonal commitments for farmers in different sectors, the survey was open from 6 September until 7 November 2017. In addition to the initial invitation, each respondent received up to three reminder messages. The sample is representative of the broader New Zealand farming population in terms of geography and respondent demographics.

The survey has traditionally incentivised participation by both a charitable contribution and a prize draw. For the 2017 survey, a subset of participants were given the option of choosing

one of four charities which would receive a $10 donation, with two of these based in the Otago region in the South Island and two in the Bay of Plenty region in the North Island. For each region, one of the two charities was an environmental charity and the other a farmer welfare charity. The two Otago charities were the Yellow-Eyed Penguin Trust and the Rural Support Trust for flood relief in Otago. The two Bay of Plenty charities were the Kaharoa Kōkako Trust and the Bay of Plenty Rural Support Trust for flood relief in the Bay of Plenty. Participants were provided with a brief description of the charity and a link to the charities' web sites. An advantage of incorporating our experiment within an established survey is that although participants knew they were taking part in a research project, they were not aware of the specific hypothesis we were testing.

Figure 1 shows the location of Otago (which is in the South Island) and the Bay of Plenty (which is in the North Island). Although people in New Zealand identify to some extent with the region in which they live and which of the two main islands on which they live, rivalry between regions tends to be limited to the sporting arena.

The yellow-eyed penguin and the kōkako are both endangered birds, with the Yellow-Eyed Penguin and Kaharoa Kōkako trusts being involved in efforts to protect the birds from extinction. The North Island Kōkako is entirely restricted to New Zealand's North Island.[7] The yellow-eyed penguin breeds only as far north as the Banks Peninsula on New Zealand's South Island. As such, the two species are geographically distinct. Significant flooding had occurred in the both Otago and the Bay of Plenty in the weeks leading up to the survey, with the two Rural Support Trusts raising money for farmers affected by the floods in their local region.

4. Results

Table 1 presents summary statistics on the amount of money donated to each of the four charities. The Yellow-Eyed Penguin Trust was the most popular charity, receiving 48.6% of donations, with the other three charities all receiving a similar share: 19.6% for the Kaharoa Kōkako Trust, 16.1% for the Otago Rural Support Trust and 15.7% for the Bay of Plenty Rural Support Trust. Table 1 also shows the distribution of participants from different regions

[7] A related species, the South Island kōkako, was declared extinct by the Department of Conservation in 1967, although unconfirmed sightings have been reported since.

around the country. Participants from the Canterbury region, a large and significant farming area on New Zealand's South Island, make up 25.4% of responses.

Of most interest is the extent to which participants chose a charity nearest to where they live. Figure 1 depicts the share of survey respondents in each region who donated to one of the two Otago-based charities (the Yellow-Eyed Penguin Trust and the Rural Support Trust for flood relief in Otago). Notably, 96.7% of Otago-based respondents selected one of these two charities.[8] Survey respondents in neighbouring regions also favoured the two Otago-based charities, with 100% of respondents in Southland, 90.1% of respondents in Canterbury, and 62.5% of respondents in the West Coast doing so. Residents in the two remaining regions of the South Island also disproportionately earmarked charitable contributions to the two Otago-based charities. Respondents from the North Island (particularly those in the Bay of Plenty, neighbouring Gisborne, and Auckland) disproportionately favoured the two Bay of Plenty-based charities (the Rural Support Trust's flood relief in the Bay of Plenty and the Kaharoa Kōkako Trust). These results suggest strong proximity-based preferences in charitable giving, with participants most inclined to support the charity closest to where they live.

More formally, we use a logit framework to evaluate possible preferences in charitable giving. In particular, we regress an indicator variable for whether or not a survey respondent chooses one of the two Otago-based charities (and, analogously, one of the two Bay of Plenty-based charities) on a categorical variable that describes each respondent's residence. Specifically, our location measure accounts for respondents who live in the same region in which the charity is based, those who live in regions that border the region in which the charity is based, those who live elsewhere on the same island on which the charity is based, and those who live on the other island.[9] Standard errors are clustered at the regional level to account for potential heteroskedasticity in preferences by location, and point estimates are converted to odds ratios to facilitate interpretation.

The odds of earmarking a donation to an Otago-based charity among Otago residents are 51.6 times those of North Island residents (Table 2, column 1, $p < 0.01$). Similarly, the odds of

[8] The share going to the Bay of Plenty charities is equal to 100% minus the share going to the Otago charities.
[9] For the purposes of this analysis, respondents living on Waiheke, Great Barrier, Kawau, and Motiti Island are categorized as being "North Island". Those living on Matakana, Arapaoa, and Stewart Island are listed as being "South Island".

earmarking a donation to a Bay of Plenty charity among Bay of Plenty residents are 18.9 times those of South Island residents (column 2, $p < 0.01$). These results indicate strong locational preferences in charitable giving among residents who live in the same region in which a charity is based. Moreover, this effect persists to neighbouring regions and other regions on the same island. For example, the odds of Canterbury, West Coast, and Southland residents earmarking a donation to an Otago-based charity are 14.1 times those for a North Island resident ($p < 0.01$), and the odds of a respondent residing elsewhere on the South Island earmarking a donation to an Otago-based charity are 3.8 times those of a North Island resident ($p < 0.01$). Similarly, the odds of a Waikato, Gisborne, and Hawke's Bay resident earmarking a donation for a Bay of Plenty-based charity are 9.5 times those of a South Island resident ($p < 0.01$), and the odds of a respondent residing elsewhere on the North Island earmarking a donation to a Bay of Plenty-based charity are 8.9 times those of a South Island resident ($p < 0.01$).

These findings of location-based preferences in charitable giving (i.e. a declining radius of altruism) are robust to the inclusion of demographic characteristics such as age, sex, and education, and including these factors has only a modest impact on the estimated odds ratio. Moreover, the effects of demographic factors are without exception indistinguishable from 1.0, indicating that location (and not demographics) drive overall preferences in charitable giving.[10]

It is conceivable that charismatic birds associated with each island (i.e. the North Island kōkako for residents of the North Island and the yellow-eyed penguin for residents of the South Island) underlie apparent locational preferences. To test this hypothesis, we restrict the sample to 89 survey respondents who earmarked charitable donations to the Rural Support Trust's flood relief efforts in either Otago or the Bay of Plenty. Figure 2 depicts the share of respondents in each region who donated to the Otago Rural Support Trust. It is clear from Figure 2 that respondents from the South Island are much more likely to choose the Otago Rural Support Trust than are respondents from the North Island.

The odds of earmarking a donation to flood relief in Otago among Otago residents are 108.0 times those of North Island residents (column 3, $p < 0.01$). Analogously, *all* of the survey

[10] Results with a full set of controls are available in Brown, Grimson, and Knowles (2019).

respondents who reside in the Bay of Plenty and who earmarked charitable donations to flood relief specified flood relief in the Bay of Plenty (column 4).[11] Residents of neighbouring regions and others on the same island in which the charity operates show similar locational preferences. For example, the odds of earmarking charitable donations to flood relief in Otago are 60.0 times higher among survey respondents who reside in regions that border Otago and 52.0 times higher among survey respondents from elsewhere on the South Island than among survey respondents on the North Island, respectively (both $p < 0.01$). Similarly, the odds of earmarking charitable donations to flood relief in the Bay of Plenty are 57.8 times higher among survey respondents who reside in regions that border the Bay of Plenty and 52.5 times higher among survey respondents from elsewhere on the North Island than among survey respondents on the South Island, respectively (both $p < 0.01$).

For completeness, we also restrict the sample to the 191 survey respondents who earmarked their donations to one of the two conservation charities, the Yellow-Eyed Penguin Trust and the Kaharoa Kōkako Trust. Figure 3 depicts the share of respondents in each region who chose to support the Yellow-Eyed Penguin Trust and shows that those living closer to Otago are more likely to support the Yellow-Eyed Penguin Trust than are those living further away.

Every Otago-based respondent who earmarked charitable donations to a conservation charity selected the Yellow-Eyed Penguin Trust (column 5). The odds of earmarking a donation to the Bay of Plenty-based Kaharoa Kōkako Trust among Bay of Plenty residents are 5.4 times those of South Island Residents (column 6, $p < 0.01$). The odds of earmarking donations to the nearest conservation charity are similarly high for survey respondents who reside in regions that border the charity's home location than on the other island ($p < 0.01$). In addition, the odds of North Island residents selecting the Kaharoa Kōkako Trust are 5.2 times those of South Island residents, although the odds of South Islanders who reside outside Otago and neighbouring regions are not statistically higher than those of North Island residents, a further indication of the prominence of the Yellow-Eyed Penguin Trust among conservation charities.

[11] As such, odds ratios cannot be calculated.

All three sets of results are replicated in Table 3, replacing locational dummies with the log of the Euclidean distance from the centre of each respondent's territorial authority[12] to Rotorua, where the Kaharoa Kōkako Trust is based, for Otago-based charities or Dunedin, where the Yellow-Eyed Penguin Trust is based, for Bay of Plenty-based charities. Greater distances to the non-local charities are associated with greater odds of donating to the local charity ($p < 0.01$ in all six cases), bolstering evidence that location is the principle criterion in charitable giving.

5. Summary and Conclusion

Several explanations for local preferences in charitable giving have been posited in the literature, including the distribution of charities on offer (Knowles and Sullivan, 2017) and limited moral expansiveness (e.g. Crimston et al., 2016; Herzenstein and Posovac, 2019). Much of the existing evidence is based on laboratory experiments with students, and all empirical studies of which we are aware rely on a dichotomous measure of location, apart from one (Genç et al., 2019) that includes three different locations. We add to this literature by comparing charities with similar scope (specifically, a charity offering flood relief and another supporting conservation in each of two distinct locations) in a small country with limited social distance (New Zealand) and clear geographic boundaries (North Island and South Island) using data from a field experiment and multiple measures of location (including both categorical measures and Euclidean distance). This approach allows us to test the hypothesis of a declining radius of altruism while accounting for these other factors.

Our results show considerable parochialism in charitable giving. Not only do people prefer to donate to charities in their own area, but we find strong evidence of a declining radius of altruism. For example, people living in Otago on New Zealand's South Island are 50 times more likely to choose the Otago-based charity than are North Island based residents. Further, those living in regions bordering Otago are 14 times more likely to choose the Otago charity than are North Island based residents and those living elsewhere in the South Island are three times as likely as a North Island resident to support the Otago-based charity. Similar results are found for North Island-based charities, and all results hold for both the subset of

[12] A territorial authority is an administrative unit below that of the region.

respondents who donated for flood relief and the subset who donated to support conservation. Analogous results based on Euclidean distance are equally strong.

These results have interesting and potentially important implications for charities. First, domestic charities with local beneficiaries can expect to raise more funds than domestic charities with more distant beneficiaries; notably, this result holds whether beneficiaries are human or avian. Second, national charities with local branches would likely raise more funds if they are able to earmark donations according to the location of the donor and to make it known that they do so.

Many New Zealand charities already engage in such practices. For example, the Cancer Society New Zealand advertises that all money raised during its annual Daffodil Day fundraiser will be spent on programmes in the region in which a donation is made. In addition, those making online donations to the Cancer Society have the option of choosing the region to which the donation will be earmarked (Cancer Society New Zealand 2019). In contrast, the New Zealand Society for the Prevention of Cruelty to Animals (SPCA) clearly states that it redistributes funding collected in wealthy areas to centres in need (SPCA, 2019); this strategy may meet the immediate needs of underfunded centres but may ultimately reduce total donations, especially given the number of competing animal welfare charities operating in New Zealand, most of which have strictly local focuses. There are 1,811 registered charities in the Bay of Plenty and 1,773 registered charities in Otago. In such a crowded market, charities who do not support donors' preferences for supporting local causes stand to lose out.

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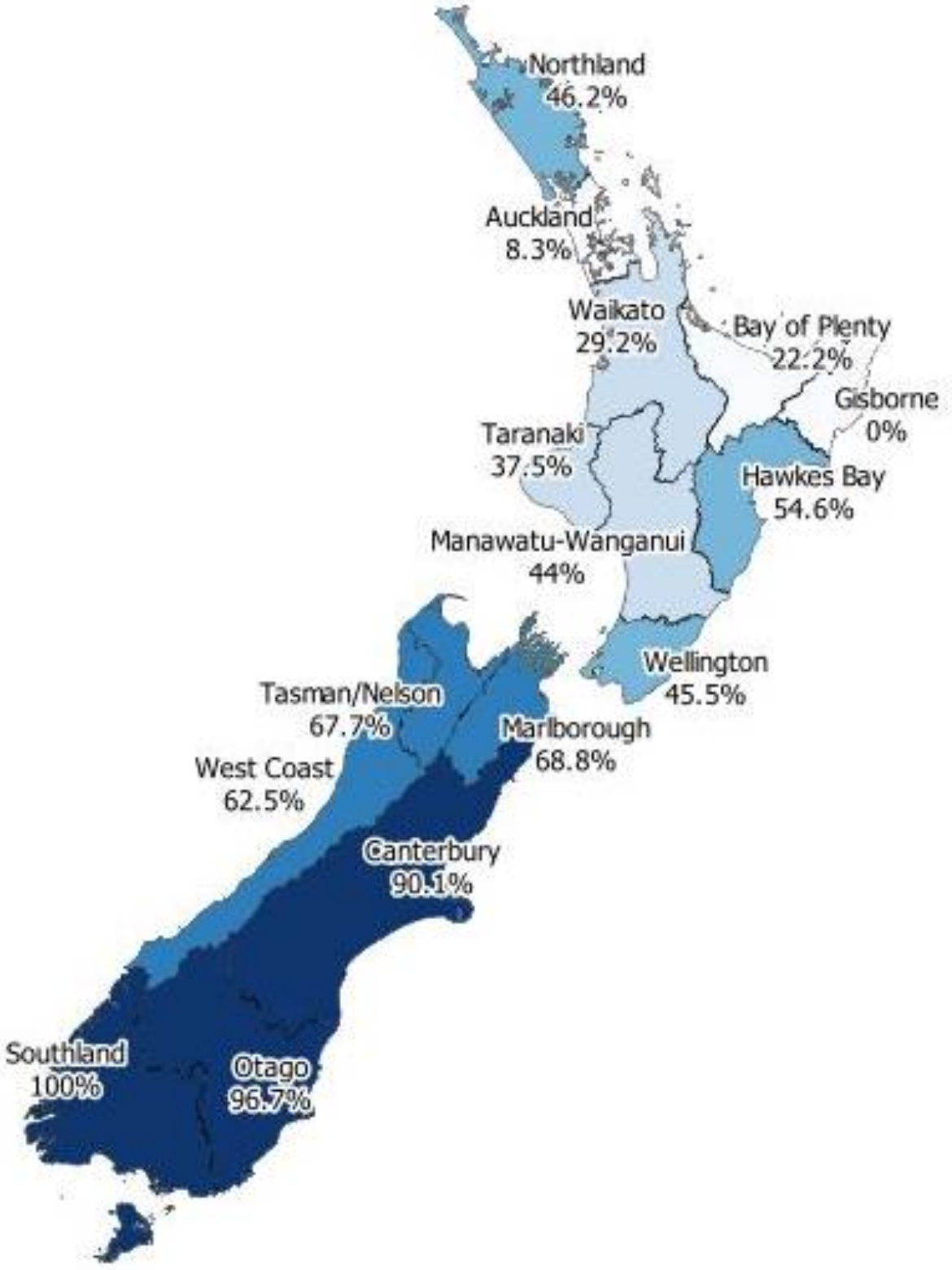

Figure 1. Proportion of charitable donations earmarked to Otago-based charities, by region

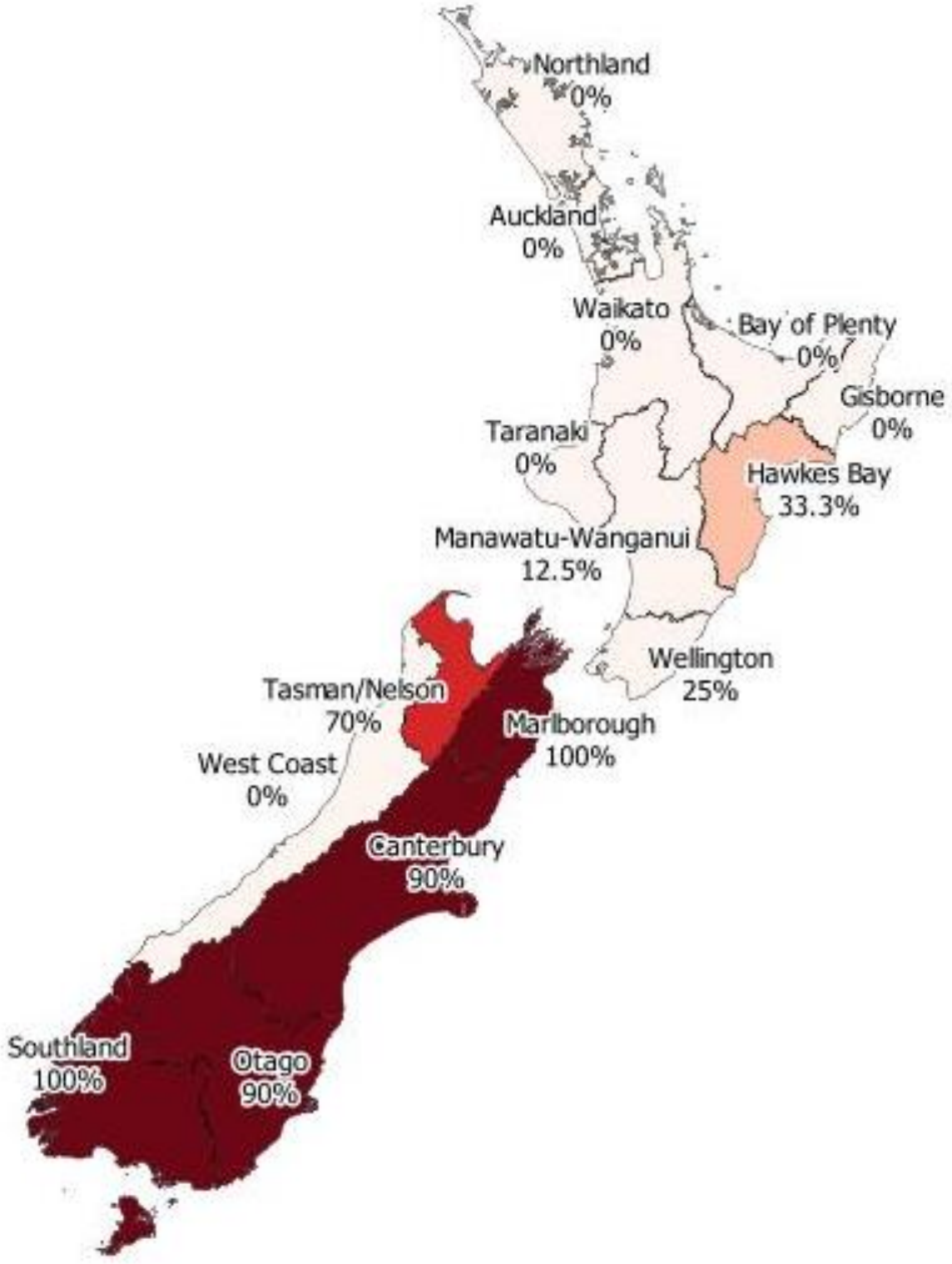

Figure 2. Proportion of charitable donations to flood-relief charities earmarked to Otago-based charities, by region

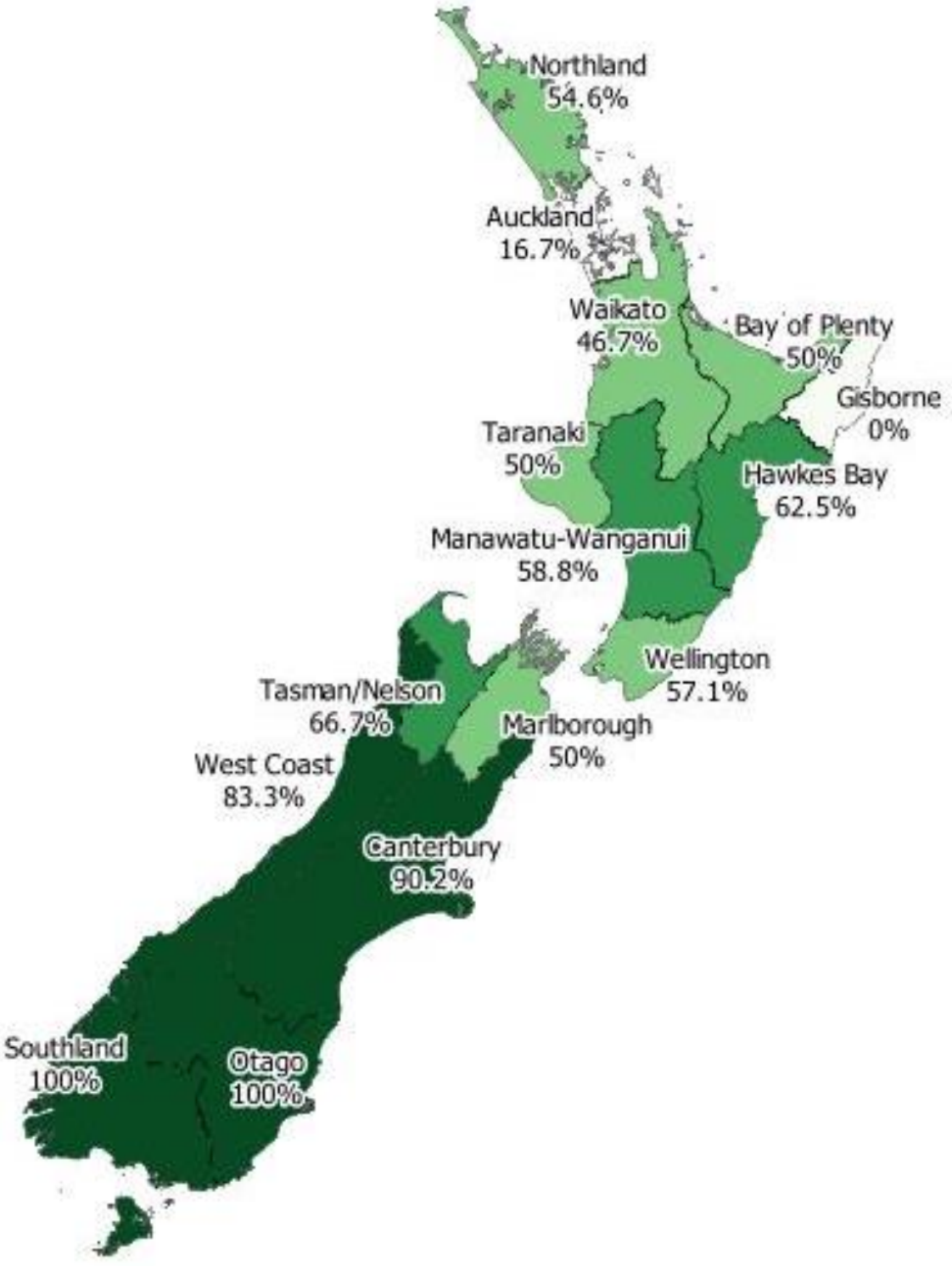

Figure 3. Proportion of charitable donations to environmental charities earmarked to Otago-based charities, by region

Table 1. Summary statistics – Charities earmarked for donations and respondent residence

CHARITY	n	percent
Kaharoa Kōkako Trust	55	19.6%
Rural Support Trust - Bay of Plenty	44	15.7%
Rural Support Trust - Otago	45	16.1%
Yellow-Eyed Penguin Trust	136	48.6%

RESPONDENT RESIDENCE	n	percent
Northland	13	4.6%
Auckland	12	4.3%
Waikato	24	8.6%
Bay of Plenty	9	3.2%
Gisborne	1	0.4%
Hawke's Bay	11	3.9%
Taranaki	8	2.9%
Manawatu-Wanganui	25	8.9%
Wellington	11	3.9%
Tasman/Nelson	31	11.1%
Marlborough	16	5.7%
West Coast	8	2.9%
Canterbury	71	25.4%
Otago	30	10.7%

Table 2. Determinants of giving to a regional charity (columns 1-2), flood relief in a specific region (columns 3-4), and conservation in a specific region (columns 5-6)

	(1)	(2)	(3)	(4)	(5)	(6)
	Otago-based charity	Bay of Plenty-based charity	RST flooding Otago	RST flooding Bay of Plenty	YE Penguin Otago	Kōkako Bay of Plenty
VARIABLES	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios
Location:	51.63***	18.85***	108.0***	∞^1	∞^2	5.444***
Same region	(0.000)	(0.000)	(0.000)			(0.000)
Location:	14.07***	9.527***	60.00***	57.75***	9.575***	5.444***
Bordering region	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.001)
Location:	3.798***	8.905***	52.00***	52.50***	1.542	5.218***
Same island	(0.000)	(0.000)	(0.000)	(0.000)	(0.115)	(0.001)
Constant	0.562***	0.186***	0.0833***	0.190***	1.027	0.184***
	(0.004)	(0.000)	(0.000)	(0.000)	(0.865)	(0.000)
Observations	280	280	89	89	191	191
Pseudo R^2	0.233	0.197	0.475	0.446	0.137	0.110

p-values clustered by region in parentheses. *** p<0.01, ** p<0.05, * p<0.10. ∞^1 indicates that all Bay of Plenty residents who earmarked charitable donations to flood relief selected flood relief in the Bay of Plenty. ∞^2 indicates that all Otago residents who earmarked charitable donations to a conservation charity selected the Yellow-Eyed Penguin Trust. The number of observations has been adjusted accordingly.

Table 3. Determinants of giving to an Otago-based charity (columns 1-3) and a Bay of Plenty-based charity (columns 4-6) using log distance

	(1)	(2)	(3)	(4)	(5)	(6)
	Otago-based charity	Bay of Plenty-based charity	RST flooding Otago	RST flooding Bay of Plenty	YE Penguin Otago	Kōkako Bay of Plenty
VARIABLES	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios
Distance to Rotorua	4.411***		20.26***		2.998***	
	(0.000)		(0.000)		(0.000)	
Distance to Dunedin		9.790***		30.13***		6.678***
		(0.000)		(0.001)		(0.000)
Constant	0.000306***	3.17e-07***	1.68e-08***	5.29e-10***	0.00391***	2.63e-06***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.002)	(0.000)
Observations	280	280	89	89	191	191
Pseudo R^2	0.214	0.240	0.459	0.408	0.130	0.181

p-values clustered by region in parentheses. *** p<0.01, ** p<0.05, * p<0.10