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Strategic Philanthropists: Who Are They and Do They Matter?*

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Abstract

Anecdotal evidence suggests that charitable givers – particularly those with the financial means and inclination to make substantial donations – are increasingly strategic in their philanthropic behavior. This study is the first econometric investigation of individual strategic giving, that is giving which is planned, concentrated, and where the donor is also involved as a volunteer. Approximately 3% of the total giver population gives strategically in Canada. We find that the propensity to give strategically is strongly and positively correlated with the level of education and youth experiences, and that strategic givers are substantially more generous than non-strategic givers, particularly after controlling for endogeneity. Strategic giving has a large positive impact on the amount donated to secular organisations, but has no effect whatsoever on the level of religious giving, supporting the view that religious gifts should be modelled differently from non-religious gifts.

Key words: *Strategic giving; philanthropy; charitable donations.*

> We must always remember that there is not enough money for the work of human uplift and that there never can be. How vitally important it is, therefore, that the expenditure should go as far as possible and be used with the greatest intelligence! *John D. Rockerfeller (1908)*

> The best uses to which surplus wealth can be put have already been indicated. Those who would administer wisely must, indeed, be wise; for one of the serious obstacles to the improvement of our race is indiscriminate charity. *Andrew Carnegie (1889)*

1 Introduction

The most generous philanthropists in the United States in 2016 were Phil and Penny Knight who donated $500 million to the University of Oregon to fund the creation of a new research center, and a further $400 million to Stanford to provide funding for the Knight-Hennesy Scholars program; three years earlier, in 2013, they gave $500 million to the Oregon Health and Science University (Di Mento & Linday, 2017). The Knights are not alone in engaging in this sort of transformative giving: in 2016 there were eighteen ultra-high net worth individuals who made individual gifts of $100 million or more – twice as many as in 2015 (Di Mento, 2017). Moreover, it has been claimed that what used to be the 80-20 rule has now become the 90 -10 rule (Worth, 2016) – that 90% of funds raised from a campaign now come from only 10% of the donors – which suggests that individuals engaged in charitable giving may increasingly be choosing to focus their giving on a smaller number of recipients, rather than spreading contributions across a larger number of organizations.

Other indicators suggest that donors are increasingly selective about the causes to which they contribute. The 2014 US Trust Study of High Net Worth Philanthopy reports that 72.5% of wealthy households have a giving *strategy* (Lilly Family School of Philanthropy, 2014, p. 8). An increasing number of organizations and websites focus on assisting donors in assessing the efficacy of the organizations to which they might contribute. *The Life You Can Save* helps

individuals to select charities which are effective in the struggle against extreme poverty. The *Charity Navigator* evaluates charities with respect to financial health, accountability, and transparency, and publishes these evaluations on the web, with the explicit goal of encouraging donors to make more informed giving decisions; similar services are provided by *Charity Watch* and *Give Well*, and comparable organizations exist in many other countries. A number of major foundations – such as the Gates Foundation, and the William and Flora Hewlett Foundation – have become outspoken proponents of the importance of using evidence-based decision making criteria when engaging in charitable giving, and a number of prominent individual philanthropists, including Charles Bronfman, Laura Arillaga-Andreesen, and Thomas Tierney, have published books encouraging donors in general – and not merely the uber-wealthy, or foundations with substantial endowments – to take a head-driven approach to philanthropic decision-making.

Philanthropy professionals claim that many donors are in fact changing their approach to giving, and are embracing strategic, or outcome-oriented philanthropy, which Brest (2012, p. 42) describes as involving "donors [who] seek to achieve clearly defined goals; where they and [the organizations they support] pursue evidence-based strategies for achieving those goals; and where both parties monitor progress toward outcomes and assess their success in achieving them". The puzzle to researchers is to discern what, if anything, differentiates this allegedly new approach to giving from the way in which individuals have traditionally taken philanthropic decisions.

Our paper is the first rigorous investigation of strategic giving, subjecting the claims of philanthropy professionals to the scrutiny of econometric analysis. Although a number of foundations and corporations also claim to practice strategic philanthropy, our analysis is limited

to individual donors. The first hurdle to overcome is to delineate strategic philanthropists from the broader donor population. This requires that we determine what giving practices are characteristic of strategic giving as distinct from traditional philanthropy. To this end, we draw on descriptions of strategic versus non-strategic philanthropy disseminated on philanthropy blogs, by philanthropic advisors, and by self-proclaimed practitioners of this approach to giving. We conclude that strategic philanthropy requires that donors plan their giving; that they concentrate most of their giving on a relatively small number of recipients; and that they typically volunteer their expertise to the major recipients of their philanthropic generosity. Although many donors engage in one or more of these behaviors, we identify as potential strategic philanthropists those donors who do all three.

We use three cycles (2004, 2007, and 2010) of the Canadian Survey of Giving, Volunteering and Participation (CSGVP) to investigate the prevalence and impact of strategic philanthropy in the general donor population. Overall, we find evidence that a major determinant of strategic giving behavior is the level of education. This type of giving behavior has a large impact on giving, increasing donations to secular organisations by 132% on average (although only by 60% for the top 25% of givers). Clearly, strategic giving matters a lot. Strikingly – but perhaps not surprisingly – it does not affect donations to religious organisations. This may perhaps be due to the fact that religious giving is guided by different principles from secular giving.

A major challenge is the potential for endogeneity – strategic behavior may both affect the amount the individual decides to donate and be affected by the amount donated. The scale of an individual's giving can affect how strategically the donor approaches their philanthropic endeavours. We employ an instrumental variable approach to deal with this problem; the

instruments include a measure of completed education at the individual level; average income at the census metropolitan area (CMA) in which the donor resides; and information on past youth experiences. Whereas it is well-established in the literature that more highly-educated individuals give more generously, our results provide additional insight into the underlying mechanism by which education is linked to philanthropic decision-making.

2. Strategic Philanthropy

There are rich theoretical and empirical literatures on charitable giving; excellent surveys are provided by Andreoni (2006), Bekkers and Wiepkin (2011) and Andreoni & Payne (2013). The canonical theoretical treatments of Warr (1983) and Bergstrom, Blume & Varian (1986) study private giving when individual utility depends on just two goods: a private good and a pure public good. As non-contributors cannot be excluded from consuming the services of the public good means, free-riding is pervasive and consequently the public good is underprovided at the Nash equilibrium of the contributions game. Andreoni (1988, 1990) formalized the notion that contributors would also derive a 'warm glow' from giving, leading to an increased predicted level of giving. More recently, Duncan (2004) has proposed an impact model of philanthropic giving, which captures the notion that individuals are motivated to give because they want to "personally make a difference"'. In particular, individuals gain utility from the size of their gift relative to that of other donors. Crucially, this means that an impact philanthropist's giving falls when others increase their charitable gifts.

What is the difference, then, between the existing models of charitable giving and the giving practices described by philanthropic advisors as being reflective of strategic philanthropy? A careful reading of the grey literature on strategic philanthropy suggests that a number of key traits characterize strategic giving. Firstly, strategic philanthropy involves research and planning:

the donor articulates clear philanthropic objectives (Frumkin, 2006 p.140; Putnam, 2006; Remmer, 2012), researching the programs of charitable organisations to identify those that are most effective in producing the desired outcomes (Cole, 2008). As part of that process donors may consult professionals (Frumkin, 2006 p.141), and meet the staff or leaders of the organisations (Cole, 2008; Frumkin, 2006 p.141) as well as other funders of the program (Remmer, 2012). Secondly, strategic givers typically choose to concentrate their donations in only a few areas (Putnam, 2006; Remmer 2012). Thirdly, strategic giving involves not only giving money but also leveraging the giver's networks (Putnam, 2006) and volunteering relevant skills or expertise that help achieve intended results (Christensen, 2012; Putnam, 2006; Remmer, 2012). In a nutshell, strategic giving is planned, concentrated on a few organizations, and typically also involves the volunteering of expertise. Givers who are strategic can be expected to exhibit all three of these characteristics in their philanthropic activities. Notice that, in contrast to impact philanthropists who want their gifts to be large relative to those of other donors, a strategic philanthropist welcomes increased contributions by other donors as these contribute to achieving the desired outcome.

Two papers document the rise of strategic giving, although neither undertakes any econometric analysis. The Lilly Family School of Philanthropy at Indiana University and the United States Trust (2014) collaborated to undertake a survey of randomly-selected wealthy individuals. To be included in the survey, respondents had to have household income of above $200,000 or $1 million total net worth excluding the value of their house. Out of the total sample of 360 individuals that met the income requirements, 98% gave to charitable organisations. The survey revealed that most wealthy charitable donors had a strategy and a budget for their giving. They typically focused their giving in a few areas of particular interest and volunteered their time

as well. They were also more likely to consult professionals for philanthropic advice and evaluated the impacts of their gifts.

The Johnson Centre for Philanthropy at Grand Valley University, together with 21/64[1] (2013), conducted an online survey of 310 individuals and 30 personal interviews of next generation philanthropists aged 21 to 40 who come from families that give at least $250,000 per year to charities. It found that these next generation donors have a strategy for their philanthropic activities, partly influenced by family values but is also change-driven. Young philanthropists get involved in the organisations or causes to which they give in order to help achieve the outcomes they desire.

3. Theoretical Framework

As there is no well-developed theory of strategic philanthropy and the focus of this paper is on the empirical investigation of strategic giving, our goal here is to sketch out a theoretical framework to guide our empirical investigation. Specifically, we take as our starting point the classic Bergstrom, Blume and Varian (1986) model, in which individuals care about their consumption of a private good and a public good. Suppose, however, that the public good is a composite public good, the result of the efforts of J distinct charities. Suppose moreover that each of these charities is either of high quality – in which case it is successful in transforming donations into actual public good production – or of poor quality – in which case it collects donations, but there is no resultant production of the public good. Assume that all charities are equally likely to be of high quality, and that these are independent risks; there are therefore 2^J possible states of the world, s. In this setting, the decision problem of the charitable giver can be expressed as:

[1] 21/64 is a non-profit consulting practice specializing in next generation and multigenerational engagement in philanthropy and family enterprise.

$$max_{g_{js}^{i}, s=1,..S, j=1,..,J} \sum_{s=1}^{2J} \pi^{s}\, U(W^{i} - \sum_{j=1}^{J} g_{js}^{i}\,, \sum_{j=1}^{J} \theta_{js}\; G_{j}\left(g_{js}^{i} + g_{js}^{-i}\right))$$

where $g_{js}^{i}$is the amount given by individual *i* to charity *j* in state *s*, g_{js}^{-i} is the amount given by individuals other than individual *I* to charity *j* in state *s*, θ_{js} is the productivity parameter of charity *j* in state *s*, and is equal to 1 if the charity is of high-quality, and 0 if of low-quality, G_j is the production function for charity *j*. Let W^i denote the income of individual *I*, and π^s is the probability of state *s*. In such a setting, it is immediate that all individuals who make charitable gifts will give the same amount to each charity.

Now suppose, that for a fixed cost *e*, individuals can purchase a perfectly informative signal that allows them to discern the quality of each charity. The individual donor's decision now becomes:

$$max_{g_{js}^{i}, s=1,..S, j=1,..,J, \hat{e}} \sum_{s=1}^{2J} \pi^{s}\, U(W^{i} - \sum_{j=1}^{J} g_{js}^{i} - \hat{e}, \sum_{j=1}^{J} \theta_{js}\; G_{j}\left(g_{js}^{i} + g_{js}^{-i}\right))$$

where $\hat{e}_i$ = 1 if the donor purchases the signal at cost e_i, and 0 otherwise. One could interpret e_i as the cost of undertaking research and planning, and such costs would certainly be related to the level of education of the individual. Clearly, donors who are wealthier, or who have more education, will find it worthwhile to purchase such a signal, whereas those who are poorer, or who find it more costly to engage in research and planning, will choose to remain uninformed. Moreover, as informed individuals will only contribute to high quality charities, their giving will be more concentrated. Whether or not informed individuals would actually give more overall to charitable causes, however, is less straightforward to establish.

This framework points to discernible differences in the way in which wealthy and more educated donors practice philanthropy as compared to those who are less well off or less educated. These differences are explored in our econometric analysis.

4. Data and Descriptive Statistics

We use data from the 2004, 2007 and 2010 cycles of the Canadian Survey of Giving, Volunteering and Participation (CSGVP). The CSGVP is a randomly selected representative sample of the Canadian population, aged 15 years or over and includes questions about whether individuals plan their giving, how many organisations they give to, about the sorts of charitable activities they support through their gifts, and about volunteerism. It also collects information regarding giving and volunteering relative to 12 different charitable areas: culture and recreation, education and research, health, social services, environment, development and housing, law, advocacy and politics, philanthropic intermediaries and volunteerism, international, religion and business and professional associations and `not elsewhere classified'. Answers to a wide range of questions about socio-economic variables, including income, immigrant status, education, and religiosity are provided.

The 2010 cycle collected responses from 15,482 individuals, of which 13,544 are givers. The 2007 cycle found that out of 21,827 individuals surveyed, 19,299 were givers; and in 2004 there were 22,164 respondents and 19,495 givers. As the questions related to strategic giving were asked only when the respondent made a financial donation, non-givers are excluded from our sample. We also exclude residents of the Yukon and Northwest Territories leading to a loss of 964 givers for the 2010 wave, 959 for the 2007 wave and 988 for the 2004 wave. Additionally, we drop those individuals who gave only to unspecified charitable areas, reducing observations by 21, 13 and 27 for the 2010, 2007 and 2004 waves respectively. To control for the

province in which givers reside, we eliminate those who had recently moved to the province at the time of the interview; this led to a loss of 24, 26 and 0 individuals in the 2010, 2007 and 2004 waves; and we eliminate givers who reported zero household income, losing another 35, 34 and 13 observations for the 2010, 2007 and 2004 waves.

Religious giving is well understood to be intrinsically different from giving to secular causes. Consequently, we do not include individuals who give exclusively to religious organizations, reducing our sample by 495, 741 and 751 observations for the 2010, 2007 and 2004 waves. Because we hypothesize that access to higher education plays a key role in explaining strategic philanthropy, we eliminate givers younger than 20 years of age, reducing the number of observations by 470 for the 2010 wave, 818 for the 2007 wave and 969 for the 2004 wave. With the above-noted exceptions, records with missing values for any of the other control variables are included in the econometric analyses. The bootstrap weights provided by Statistics Canada are used for the regression analyses and to compute the various statistical means. All dollar amounts used in the estimation procedures are adjusted by the consumer price index (CPI) in order to account for inflation.

The CSGVP does not ask individuals to self-identify as strategic givers. A critical challenge is to pick out potential strategic donors from the overall donor pool. Key characteristics of strategic giving are that it is planned, concentrated and accompanied by the volunteering of additional contribution of skills and expertise. Our approach is to cull donors who are characterized by these behaviors from the overall donor set. To this end, we construct three indicator variables -- Planned, Focussed, and Involved – which are combined to construct a Strategic indicator variable.

The variable Planned captures differences in the extent to which individuals plan their giving, and is based on the responses to two questions: (1) in the past 12 months, did you make a charitable donation by approaching a charitable or non-profit organization on your own? (2) Do you decide in advance the total amount of money you would like to donate to charitable organization annually? The Planned variable is an indicator variable that takes the value 1 if a giver responds `yes' to at least one of these two questions, and is otherwise zero. Individuals who plan their giving may also give some money in an unplanned way.

To define the variable Focused, which captures the extent to which individuals concentrate their gifts, we follow Andreoni, Brown & Rischall (2003) and use the Herfindahl-Hirschman Index (HHI) of the concentration of giving. The index of concentration is defined as:

$$\text{HHIi} = \sum_{A=1}^{10} C_A^2 \qquad \forall\, A \in \{1,2,\ldots,10\} \tag{1}$$

where C_A is the share of total contributions donated by an individual to charitable area A. We exclude gifts to unclassified areas of charities, and also religious gifts, so the HHHi is calculated only for the ten areas of secular giving. HHI ranges in value from from 0.1 (when donations are spread evenly across all ten sectors) to 1 (when all donations are to one area). We set a HHI score of 0.4 as the threshold for identifying concentrated giving: the variable Focused is assigned a value of 1 if HHI exceeds 0.4, and zero otherwise.[2,3]

A technical problem encountered in calculating the HHI is that very small donors give to only one, or at most two, charitable areas, and therefore appear to be highly-concentrated givers even though this is not actually a deliberate choice. We deal with this problem by dropping

[2] The choice of 0.4 as a threshold for concentrated giving is inspired by the industrial organization literature, which generally takes the view that markets with HHI scores exceeding 0.4 are oligopolistic, whereas markets with HHI scores exceeding 0.7 are monopolistic.

[3] Ideally, HHI would be calculated based on the actual amounts contributed to each of the charities which the donor supports. However, the CGSVP reports amounts only by sector; this means that our HHI score is the same for a donor who contributes $100 to each of ten organizations in the same sector, or who contributes $1000 to a single organization in that sector.

those individuals who gave less than $5 to secular organisations. This reduces the sample size by 255 observations in 2004, 202 in 2007 and 185 in the 2010 cycle.

The third characteristic of strategic givers is their personal involvement in causes which they support. Although the CGSVP does not record whether an individual volunteered for the charitable organisations to which they gave, it does report volunteering by areas of charity. We define Involved as an indicator variable that takes the value 1 if an individual volunteered in the charitable area which gets the biggest share of his/her total contributions. To avoid capturing individuals who volunteer only for religious organisations, we excluded this charitable area in the definition of Involved.

The pooled dataset has a total of 43,464 givers: 11,383 givers from the 2010 cycle, 16,540 from the 2007 cycle and 16505 from the 2004 cycle. Table 1 lists and defines all the variables used in these analyses. Table 2 presents the weighted descriptive statistics for each variable for the entire sample and for each of the three waves of the CSGVP; note that differences across waves are very minor. More money is donated, on average, by Canadians to secular causes than to religious ones ($248.30 versus $173.05). Whereas 27% of Canadian donors plan their giving, a full 88% meet the criterion for concentrated giving, but only 13% are volunteers. This means that only 3% of the sample of all donors are deemed strategic. 48% of donors are male; 16% are single; 12% are separated, divorced or widowed; 71% are married or co-habiting (5% do not report their marital status). The average donor is 48 years old, and lives in a household of 2.83 persons with annual household income of $52,052. As the sample includes retirees, only 62% of respondents are employed; 17% are immigrants. Only 16% of the donor population meets the criterion for regular religious practice, that is, frequents a place of worship on a weekly basis. Donors are typically well-settled in their communities: a full 61%

have lived in their current community for at least 10 years, and 72% have been established in the community for at least 5 years. 28% have some university education, and 20% had past involvement in youth activities.

All of the estimations are undertaken for the entire sample of givers and for three subpopulations: (i) big givers, defined as those in the top 25% of donors in our sample, (ii) religious givers (attending a place of worship at least once a week), and (iii) non-religious givers. There is good reason to expect that individuals who donate larger amounts to charity are more likely to be strategic givers than are individuals who give more modestly. Indeed, table 2 indicates that 7% of big givers meet the criteria to be considered strategic philanthropists, making them more than twice as likely to give strategically as the average donor. For the purpose of our analysis, big givers are simply defined to be the top 25% of givers. In this data set, this corresponds to individuals whose total gifts exceed $1544 in the 2004 CGSVP, $1575 in 2007 and $1593 in the 2010. This is not a particularly large amount, in the sense that this does not reflect a scale of giving that would meet the criterion for a ‘major gift’; however, were we to use a higher threshold, our sample size would shrink precipitously.

Religious individuals gave more than non-religious individuals to both religious and secular causes across all surveys. Looking at the full sample, they gave an average of $698 to religious causes and $299 to secular ones, as opposed to $308 and $238 respectively by non-religious givers.

5. Empirical Strategy

To investigate the relationship between strategic behavior and the total amount donated, we define two dependent variables: the total amount donated to religious organisations and the total amount donated to secular organisation. The estimating equation for the amount donated is:

$$D_i = \omega' S_i + \alpha' X_i' + \mu_i \qquad (2)$$

where Di denotes the natural logarithm of the amount contributed by giver i (to religious or to secular causes), S is the Strategic variable, X is the vector of k explanatory variables presented in Table 1 (and includes the price of giving, which is computed as 1 minus the marginal tax rate for each Canadian province) and the error term $\mu_i|X,S$ which is normally distributed with mean of 0 and variance σ^2.

Equation (2) treats the Strategic variable as exogenous to the determination of the amount given. But it is likely that the propensity to give strategically is influenced by how much one wants to donate. If a donor is considering making a substantial gift – for example, one that might meaningfully affect the capacity of the recipient organization to discharge its mission - then there is a natural incentive to give in a more sophisticated way than for a small donation. We employ an instrumental variable (IV) approach to deal with this problem of endogeneity.

Successful IV estimation requires the careful selection of instruments. Good instruments must be correlated with the endogenous variable (here, strategic giving behavior) but not with any unobserved factors that affect how much is donated (the error term). The first condition can be tested directly using the overall significance of the instrument(s). The Hansen J statistic requires that the estimating equation include more instruments than the number of endogenous variables and provides an indirect indicator of the second condition. If the J statistic is identically zero the equation is exactly identified, and is positive when the equation is over-identified; when

the J statistic is too high there is serious doubt regarding the validity of the instruments. Note that the test does not identify *which* instruments are valid, merely that there are enough valid instruments to estimate the model.

Giving strategically requires donors to research and plan their giving in pursuit of objectives. It seems reasonable that these strategic activities are easier for individuals with more education. Indeed, the literature already links education directly to giving: Brown & Ferris, (2007) explain that education enlarges one's information set, and may perhaps affect how much one gives through social capital, Andreoni, Brown & Rischall, (2003) find that education helps determine who should be the primary decision maker when it comes to charitable giving. These facts suggest that an individual with a high level of education is more likely to give strategically which will, in turn, affect the amount given. Of course, income, an important determinant of giving, is highly correlated with education. By including income in our regressions, we net out the direct effect of income on giving. We can then use 'education' as an instrument for our strategic giving variable because of its effect on giving behaviour.

Rather than use an individual's level of education as an instrument, an alternative strategy employs the average income in the giver's neighbourhood (here, their census metropolitan area (CMA)). Given that income is correlated with education, the average income at the CMA level also reflects the proportion of individuals in the CMA with higher education. A less-educated giver in a wealthy CMA is likely to network with highly-educated individuals who are more likely to give differently. A drawback with this approach, however, is that the average income at the CMA level cannot be used as an instrument for strategic behavior if actual levels of education are also included in the equation for the determination of strategic behavior: one or both education levels become irrelevant. We also note that some CMA codes were missing,

specifically 222 in the 2010 cycle and 1122 in the 2007 cycle (none in the 2004 cycle). We took two approaches to dealing with this. First, we used average income at the provincial level in the place of the missing CMA level income, second, we eliminated these observations from the sample. Our results were robust to either approach. We report the results from the first approach.

Education is not the only variable which affects the scope of a donor's network. In particular, early experiences such as involvement in youth groups or teams or whether one was active in high school government, can influence the social networks of donors (Apinunmahakul & Devlin, 2008), and may consequently influence the likelihood that they choose to give strategically. For example, an individual who has a strong social network is more likely to be aware of pressing community needs, and wish to concentrate philanthropic giving to alleviate specific problems rather than distributing contributions more broadly. We use respondent involvement in student government during grade school or high school as an additional instrument. (Note that the 2007 and 2010 cycles specifically collect information regarding participation in student government; the 2004 CSGVP asks only whether a respondent belonged to a school council or alumni association, or to neighbourhood civic or community association such as block parent or neighbourhood watch.) We use two sets of instruments (education or average income and youth experiences) to estimate the reduced form equation for each giver i as follows:

$$S_i = 1\{\beta' X_i' + \gamma' E_i + \varphi' Z_i + \varepsilon_i \geq 0\} \qquad (4)$$

where $1(.)$ is an indicator function and S_i is a binary variable that takes the value 1 if i gives strategically, Z_i is i's youth experiences and the error term ε_i is normally distributed with mean o 0 and variance 1. We then re-estimate a structural form of equation (2):

$$D_i^* = \theta' \hat{S}_{ji} + \tau_j' X_i' + \eta_{ji} \qquad (5)$$

The highest level of education of a giver can be considered as an exogenous variable in equation (5) because the decision regarding how much education to pursue was taken in the past. Youth experiences also reflect past actions which cannot be changed as a result of present day decision-making.

To investigate how strategic giving behavior has evolved over time, we add year dummies to the control variables, scale the total amount donated by the various consumer price indices for each province and scale the weights for each year before estimating equations (4) and (5). Additionally, the year variables are interacted with the strategic variables in both equations (2) and (4) to see if strategic giving has changed over the sample. The instrument used for each of the interaction variables is the interaction of the year variables and the original instruments.

6. Results

Table 3 provides the estimated coefficients for our strategic variable, including when it is interacted with year dummy variables, but not accounting for endogeneity. The estimated coefficients of all other variables are suppressed for brevity. The main finding is that only secular giving responds to being strategic, religious giving does not. Moreover, the estimated effects of Strategic are large. Given that our dependent variable is in natural logarithms, the estimated impact of 0.608 implies a percentage increase in giving for strategic individuals of 84% ($(e^{0.608} -1)*100\%$). For the top 25% of givers, the estimated coefficient on Strategic is 0.463 implying a 59% increase in donations associated with being strategic. From the last two columns we see that people who are religious and strategic give 65% higher donations relative to their religious and non-strategic counterparts, whereas for the non-religious group, being strategic increases the amount donated by 90% relative to non-religious non-strategic individuals.

When we control for endogeneity, the findings are even starker. Before discussing them, we turn first to an examination of the power and validity of our instruments. Table 4 provides the first stage regression results for four samples (full sample, big givers, religious and non-religious givers) and the two sets of instruments: some university education and youth experience (first four columns) and average income in the respondent's CMA and youth experience (last four columns). We report only the estimated marginal effect of the instruments in this table. The instruments exert a positive and statistical significant impact on the decision to be strategic in all eight regressions. At the bottom of table 4 the Cragg-Donald F-statistics all exceed the standard threshold of 10, implying that our instruments are sufficiently correlated with the endogenous variable. From the Hansen J test, we see that the model is over-identified: there are enough valid instruments to estimate the model.

The IV results when we used individual education and youth experience as instruments for the full sample, big giver, religious and non-religious sub-samples, are provided in table 5 for both gifts to religious organizations (first four columns) and for secular gifts (last four columns). Being strategic only matters for secular gifts – and the effect is very large. If we compare the estimate impact of being strategic on the amount given, we see that it is larger in the IV model than in the OLS one. For the full sample, the estimated coefficient on Strategic is 1.114 which, using the anti-logarithmic transformation, implies an increase of 205% in donations arising from being strategic: strategic givers donate twice as much as their non-strategic counterparts. For the big-givers sample this effect is 0.494 or a 64% increase in donations associated with being strategic. Even when we control for the top quartile of the giving population, we are picking up a large effect from the Strategic variable: not all 'big' givers are strategic. Finally, it is interesting to see what happens when we look at 'religious' and 'non-religious' donors. The secular giving

of both groups is highly responsive to being strategic: strategic religious individuals give, on average, 230% more than their non-stategic counterparts, and for non-religious, this number is even higher at 260%.

When we use average CMA income and youth experiences as instruments, it is, once again, only secular gifts that are affected by our Strategic variable. Table 6 provides the estimated effects of the strategic variables for this specification. These effects are large and similar in size than found in table 5, but with some differences in magnitude especially for the religious and non-religious givers. Using these alternative instruments, religious strategic givers give 144% more than religious non-strategic givers as opposed to the 230% effect found when individual education was used as an instrument, and non-religious strategic givers give 192% more relative to their non-strategic counterparts, less than the 260% found previously. The message here is that the choice of instruments certainly plays a role – but the result that being strategic matters and matters in a big way to the amount donated persists.

Individuals identified as being strategic give much more money to secular causes than their non-strategic counterparts, ceteris paribus – a result which is independent of the sub-sample under investigation. Looking at the interaction between being strategic, however, and the year of the survey, no statistical impact is revealed, suggesting that there is no difference in the impact of being strategic over the three data cycles employed here (2003, 2007 and 2010). It is unfortunate that we do not have a longer time span to investigate further this question, we leave this for future work.

The impact of the other control variables on charitable giving is mostly consistent with past findings (see for e.g. Brown & Ferris, 2007; Apinunmahakul & Devlin, 2008). We find that the tax price, age, marital status, household size, household income, employment status, and

whether or not the donor lives in the Atlantic, Quebec or Prairie provinces are all statistically-significant determinants of the total amount donated. Not surprisingly, when the tax price of giving rises, the amount donated falls; older individuals give more than younger ones; a married individual gives less than their single counterparts; larger households give less than smaller ones; richer households give more than those with more modest means; employed individuals are more generous than those who are not. Residents in Atlantic Canada, Quebec, and the Prairie provinces donate smaller amounts than those who live in Ontario. The only surprise is that being resident in a community for 5-10 years is positively correlated with the amount given (at a 10% significance level), whereas longer attachment to the community does not have a statistically-significant impact on donations.

With a small number of exceptions, essentially the same variables have a statistically-significant impact on the amount given to religious causes. Gender matters for religious giving – males give more than females – whereas household size does not. Somewhat reassuringly, being religious has a large, positive, and highly statistically-significant effect on the amount given to religious causes. As for secular gifts, these relationships are robust to the particular IV strategy employed, that is, whether or not we use university-level education plus youth experiences, or average income at the CMA level plus youth experiences, as our instruments.

Overall, our results show clearly that strategic behavior increases the amount donated to secular organisations, but not to religious ones. Moreover, if endogeneity is not accounted for, the impact of strategic behavior on how much is donated to secular organisations is underestimated. Our results support the view of researchers that religious gifts should be modelled differently from non-religious gifts (Hrung, 2004; Brown & Ferris, 2007; Graddy & Wang, 2008). Interestingly, the results also show that the impact of strategic behavior on the

amount donated does not depend on how religious givers are, the crucial factors are whether the gift is going to a religious or a secular cause and the size of the gift.

7. Conclusions

Philanthropy professionals claim that strategic behaviour affects philanthropic activities but no one has investigated this claim empirically. To study this assertion requires a clear understanding of what strategic philanthropy entails as distinct from traditional philanthropic practices. To this end, we have distilled philanthropic advisors' descriptions of strategic behavior and have observed that it has three main features: it is planned, concentrated giving and strategic givers are also actively involved as volunteers in the organizations they choose to support.

This study is the first econometric investigation of individual strategic giving. Using the Canadian Survey for Giving, Volunteering and Participation (CSGVP), we find that about 3% of the giving population exhibits all of the behaviors associated with strategic giving. A key econometric challenge is to account for the endogeneity of strategic behaviour. To this end, we estimate our empirical model using both OLS and IV procedures; youth experiences and either the level of education of the giver or the average income at the CMA level are used as instruments to identify strategic behavior in the IV procedure.

We provide strong statistical evidence that strategic givers contribute substantially more to charitable causes than do their non-strategic counterparts, particularly after controlling for endogeneity. Our identification strategy relies partially on the well-documented correlation between level of education and philanthropic giving, arguing that having some higher (tertiary) education is key for engaging in strategic activities.

The giver population is also parsed into three subsamples: big givers (the top 25% of donations), religious givers, and non-religious givers. Strategic giving behaviour is observed more frequently amongst big givers (approximately 7%) and amongst religious givers (approximately 5%) than in the overall giver population. Our results show, however, that whereas strategic behaviour increases the amount donated by religious individuals to secular causes, it does not change the amount of religious giving by these individuals. Not surprisingly, contributions to secular causes by non-religious strategic givers are higher than those of non-religious, non-strategic donors, and religious giving by non-religious donors does not depend upon whether or not the donor exhibits strategic giving behaviors.

There are three main take-home messages from this paper. We find that university education is an important driver of strategic giving, suggesting that one mechanism through which education affects giving is via its influence on behaving strategically. This insight may help explain, for instance, why others have found both education level and income to be statistically important factors determining the amount donated.

Our results confirm that strategic givers donate substantially more than non-strategic givers once we control for all the usual determinants – but this is not only because they have higher earnings. While income is clearly important, it alone does not explain the decision to become a strategic donor. Again, the importance of education in this regard cannot be overlooked. Indeed, the fact that access to university-level education has expanded tremendously over the past 20 or so years may provide one explanation for the apparent growth in strategically-motivated giving.

Finally, we find clear and robust evidence that it is only donations to secular organizations that are affected by strategic behavior, religious donations are not. This finding

means that it is important to distinguish between secular and religious organizations when examining the factors influencing giving. It also means that donations to religious organizations will not benefit from the rise in strategic behavior in the same way as will secular charities.

These findings will be of interest to those concerned by the future of the charitable sector. As the population becomes better educated, the higher the likelihood that donors become strategic and altering, potentially, the way in which their giving decisions are made. For charitable organisations, our results suggest ways to evolve best practices to increase donations. Soliciting donations from big givers when they do not have time to plan ahead may increase the total number of gifts but may results in smaller contributions than when they are encouraged to plan. Charitable organisations need to create opportunities for major donors to become involved in their work, to set out their goals clearly and to provide information about the impact of their programs. These results also underscore the fact that charities cannot merely craft a strong case for support, and expect contributions to then be forthcoming: if strategic donors do not give out of a sense of duty, but because their personal theory of change is well-aligned with the work of the charity, then what matters is the quality of the information provided about what the organization is actually doing.

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Table 1: Variable Names and Definitions

Variables	Definitions
Dependent variables	
Religious Gifts	Total amount donated to religious organisations (*in logarithms*)
Secular Gifts	Total amount donated to non-religious organisations (*in logarithms*)
Strategic Variables	
Planned	=1 if giving is planned, 0 otherwise
Focused	=1 if giving is concentrated defined as an HHI-index value of 0.4 or greater, 0 otherwise (see discussion in text).
Involved	=1 if volunteered in the charitable sector that received the largest share of total amount donated
Strategic	=1 if giving is planned, giving is concentrated and got involved
Control Variables	
Price	One minus the marginal tax rate for the first dollar given; tax rates available at: https://www.canada.ca/en/revenue-agency/services/charities-giving/giving-charity-information-donors/claiming-charitable-tax-credits/charitable-donation-tax-credit-rates.html.
Male	=1 if male, 0 otherwise
Age	Age
Age2	Age squared
Single	=1 if single, widow, separated or divorced, 0 otherwise
Separated	=1 if widow, separated or divorced, 0 otherwise
Married	=1 if married, 0 otherwise: **reference group**
HH Size	Number of individuals in household
Immigrant	=1 if born outside of Canada; 0 otherwise
Religious	=1 if attends religious services or meeting at least once a week, 0 otherwise
HH Income	Household income (*in logarithms*)
Employed	=1 if employed, 0 otherwise
Ontario	=1 if lives in Ontario, 0 otherwise: **reference group**
Atlantic	=1 if lives in Newfoundland, Prince Edward Island, Nova Scotia or New Brunswick, 0 otherwise
Quebec	=1 if lives in Quebec, 0 otherwise
Prairies	=1 if lives in Alberta, Manitoba, Saskatchewan, 0 otherwise
British Columbia	=1 if lives in British Columbia, 0 otherwise
Lived <5yrs	= 1 if lived in current abode for less than 5 years, 0 otherwise
Lived 5_10yrs	= 1 if lived in current abode from 5 to less than 10 years, 0 otherwise
Lived >10yrs	= 1 if lived in current abode 10 years or more, 0 otherwise: **reference group**
Year 2010	=1 if year is 2010, 0 otherwise
Year 2007	=1 if year is 2007, 0 otherwise
Year 2004	=1 if year is 2004, 0 otherwise: **reference group**
Instrumental Variables	

Some University	=1 if has some university education or more, 0 otherwise
Youth Activities	=1 if was active in student government, 0 otherwise
Income at CMA	Average income at the census metropolitan area from Census data: CSGVP 2004 is attached to 2001 Census and CSGVP 2007 and 2010 use 2006 Census data.

Table 2: Sample Means

Variables	Cycle 2004	Cycle 2007	Cycle 2010	Full Sample	Subsamples		
					Big Givers	Religious	Non-Religious
Total Gifts	421	426	417	421	1,571	997	308
Secular Gifts	241	242	261	248	827	299	238
Religious Gifts	180	184	156	173	744	698	70
Planned	0.26	0.28	0.28	0.27	0.46	0.37	0.25
Focused	0.86	0.89	0.87	0.88	0.81	0.87	0.88
Involved	0.13	0.12	0.13	0.13	0.18	0.15	0.13
Strategic	0.03	0.03	0.04	0.03	0.07	0.05	0.03
Price	0.88	0.89	0.88	0.88	0.81	0.83	0.89
Male	0.47	0.47	0.48	0.48	0.50	0.42	0.49
Age	47.25	47.95	48.65	47.96	53.05	53.94	46.79
Single	0.17	0.17	0.15	0.16	0.11	0.11	0.18
Separated	0.13	0.13	0.12	0.12	0.14	0.14	0.12
Married	0.69	0.70	0.73	0.71	0.76	0.75	0.70
Immigrant	0.17	0.17	0.17	0.17	0.21	0.28	0.15
Religious	0.18	0.16	0.15	0.16	0.39	1.00	0.00
HH Income	67,503	75,040	85,752	76,263	99,392	66,791	78,126
HH Size	2.78	2.84	2.88	2.83	2.78	2.88	2.82
Employed	0.63	0.61	0.61	0.62	0.61	0.54	0.63
Atlantic	0.08	0.08	0.08	0.08	0.07	0.11	0.07
Quebec	0.23	0.23	0.23	0.23	0.10	0.14	0.25
Prairies	0.16	0.17	0.17	0.17	0.20	0.19	0.16
British Columbia	0.12	0.13	0.13	0.13	0.14	0.11	0.13
Ontario	0.41	0.40	0.39	0.40	0.48	0.45	0.39
Lived <5yrs	0.22	0.18	0.17	0.19	0.15	0.18	0.19
Lived 5_10yrs	0.11	0.12	0.11	0.11	0.11	0.12	0.11
Lived >10yrs	0.59	0.60	0.63	0.61	0.64	0.70	0.59
Year 2010				0.34	0.33	0.31	0.35
Year 2007				0.33	0.33	0.33	0.33
Year 2004				0.33	0.33	0.36	0.32
Some University	0.28	0.27	0.30	0.28	0.41	0.30	0.28

Table 2 (continued)

Variables	Cycle 2004	Cycle 2007	Cycle 2010	Full Sample	Subsamples		
					Big Givers	Religious	Non-Religious
Income at CMA	34,707	42,672	42,641	39,593	40,129	39,543	39,603
Youth Activities	0.22	0.19	0.18	0.20	0.28	0.24	0.19
Obs.	16,505	16,540	11,383	44,428	11,061	9,572	34,856

Table 3: Average Marginal Effects of Instruments from First Stage Regressions of Strategic Giving Behavior

	Using Individual Level Education and Youth Experiences as Instruments				*Using Income at CMA and Youth Experiences as Instruments*			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Some University	0.011***	0.022***	0.025***	0.008***				
	(4.36)	(3.16)	(3.81)	(2.98)				
Income at CMA					0.002**	0.006**	0.004**	0.002**
					(2.58)	(2.20)	(1.99)	(2.18)
Youth Activities	0.017***	0.028***	0.032***	0.014***	0.017***	0.029***	0.035***	0.014***
	(7.09)	(4.27)	(5.14)	(5.26)	(7.17)	(4.22)	(5.51)	(5.03)
Predicted Probabilities	0.03	0.06	0.5	0.03	0.03	0.06	0.5	0.03
Tests for Instruments								
Cragg-Donald F-Statistic	37.30	14.74	27.10	17.46	55.28	21.76	14.69	30.33
Hansen J Stat	0.02	0.07	0.40	0.08	0.002	1.00	1.42	0.19
P-value	0.893	0.799	0.527	0.783	0.961	0.316	0.233	0.665
Observations	44,428	11,061	9,572	34,856	44,428	11,061	9,572	34,856

Note: z statistics in parentheses, * p<.10, ** p<.05, *** p<0.01. (1), (2), (3) and (4) represents regression results for full sample, top 25% of givers, religious and non-religious individuals respectively. All other estimated coefficients suppressed for brevity.

Table 4: Effects of Strategic Behavior on Religious and Secular Gifts - OLS estimates

	Religious Gifts				Secular Gifts			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Strategic	0.120	-0.103	0.194	0.068	0.608***	0.463***	0.502***	0.643***
	(1.21)	(-0.74)	(1.06)	(0.61)	(9.59)	(4.51)	(3.49)	(9.12)
Strategic * Year 2010	0.045	-0.064	0.026	0.163	0.034	0.055	0.146	-0.001
	(0.23)	(-0.30)	(0.09)	(0.85)	(0.32)	(0.39)	(0.62)	(-0.01)
Strategic * Year 2007	0.033	0.182	-0.233	0.194	-0.020	0.083	0.144	-0.068
	(0.20)	(0.90)	(-0.89)	(0.90)	(-0.19)	(0.54)	(0.66)	(-0.60)
Observations	19,093	8,125	8,263	10,830	44,428	11,061	9,572	34,856

Note: t statistics in parentheses, * p<.10, ** p<.05, *** p<0.01. (1), (2), (3) and (4) represents regression results for full sample, top 25% of givers, religious and non-religious individuals respectively. All other estimated coefficients suppressed for brevity.

Table 5: Effects of Strategic Behavior on Religious and Secular Gifts after controlling for the endogeneity problem using individual level education and youth experiences as instruments - IV estimates

	Religious Gifts				Secular Gifts			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Price	-2.416***	-0.871***	-3.533***	-1.947***	-2.855***	-0.441**	-2.605***	-2.805***
	(-18.84)	(-3.49)	(-14.23)	(-12.49)	(-17.25)	(-2.41)	(-12.90)	(-14.90)
Male	0.103***	-0.009	0.048	0.139***	-0.012	0.011	-0.071	0.004
	(3.22)	(-0.21)	(0.84)	(3.14)	(-0.63)	(0.30)	(-1.42)	(0.19)
Age	0.002	-0.029***	-0.002	0.003	0.032***	0.028***	0.022***	0.034***
	(0.37)	(-3.20)	(-0.21)	(0.34)	(8.89)	(3.54)	(2.60)	(7.56)
Age2	$1.4e^{-4}$**	$3.4e^{-4}$***	$1.3e^{-4}$	$1.8e^{-4}$**	$-1.6e^{-4}$***	$-2.3e^{-4}$***	$-5.4e^{-5}$	$-2.0e^{-4}$***
	(2.28)	(4.35)	(1.26)	(2.27)	(-4.45)	(-3.13)	(-0.62)	(-3.99)
Single	0.035	-0.089	0.058	0.022	0.158***	0.293***	0.141*	0.155***
	(0.61)	(-0.90)	(0.52)	(0.31)	(5.41)	(4.59)	(1.73)	(4.80)
Separated	0.226***	0.083	0.274***	0.205***	0.219***	0.255***	0.239***	0.211***
	(5.11)	(1.45)	(3.69)	(3.84)	(7.99)	(4.99)	(3.83)	(6.82)
HH Size	0.010	0.017	-0.026	0.028	-0.057***	-0.062***	-0.023	-0.063***
	(0.62)	(0.90)	(-1.03)	(1.38)	(-5.88)	(-3.99)	(-1.28)	(-5.98)
Immigrant	0.025	0.004	-0.059	0.143**	-0.034	-0.044	-0.164***	0.005
	(0.53)	(0.07)	(-0.84)	(2.03)	(-1.24)	(-1.03)	(-3.14)	(0.16)
Religious	1.187***	1.030***			-0.019	-0.858***		
	(33.01)	(21.13)			(-0.57)	(-22.16)		
HH income	0.266***	0.080**	0.365***	0.222***	0.498***	0.436***	0.528***	0.483***
	(10.70)	(2.22)	(10.54)	(7.00)	(20.48)	(14.33)	(14.33)	(17.00)
Employed	0.075*	0.088	0.146**	-0.003	0.167***	-0.024	0.171***	0.171***
	(1.81)	(1.45)	(2.07)	(-0.05)	(7.05)	(-0.45)	(3.23)	(6.80)
Atlantic	-0.085**	-0.012	-0.093	-0.073	-0.332***	-0.368***	-0.305***	-0.335***
	(-2.40)	(-0.28)	(-1.57)	(-1.47)	(-13.55)	(-8.22)	(-6.00)	(-12.31)
Quebec	-0.891***	-0.837***	-0.896***	-0.872***	-0.518***	0.055	-0.473***	-0.520***
	(-22.42)	(-10.79)	(-11.64)	(-17.04)	(-17.61)	(0.88)	(-7.44)	(-16.41)
Prairies	0.181***	0.137***	0.227***	0.124**	-0.185***	-0.161***	-0.139**	-0.199***
	(4.64)	(2.78)	(3.55)	(2.21)	(-6.83)	(-3.61)	(-2.54)	(-7.10)

Table 5 (continued)

	Religious Gifts				Secular Gifts			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
British Columbia	0.278***	0.210***	0.359***	0.192**	-0.009	0.101**	0.140**	-0.039
	(4.82)	(3.35)	(4.18)	(2.25)	(-0.33)	(2.02)	(2.10)	(-1.32)
Lived <5yrs	0.072	0.186***	0.094	0.073	-0.012	-0.168***	0.017	-0.016
	(1.42)	(2.74)	(1.22)	(1.04)	(-0.52)	(-3.74)	(0.31)	(-0.62)
Lived 5_10yrs	0.115**	0.070	0.027	0.171**	0.048*	-0.064	0.028	0.055*
	(2.24)	(1.04)	(0.29)	(2.23)	(1.66)	(-1.17)	(0.39)	(1.70)
Year 2010	-0.124***	-0.013	-0.182**	-0.089	0.018	0.146***	0.057	0.019
	(-2.95)	(-0.22)	(-2.55)	(-1.50)	(0.53)	(3.15)	(0.76)	(0.69)
Year 2007	0.065	0.131**	0.090	0.001	0.001	-0.016	-0.071	0.019
	(1.64)	(2.53)	(1.62)	(0.01)	(0.01)	(-0.38)	(-1.50)	(0.60)
Strategic	0.306	-0.101	0.238	-0.254	1.114***	0.494***	1.195**	1.281***
	(1.60)	(-0.71)	(0.83)	(-0.29)	(17.31)	(4.84)	(2.53)	(9.28)
Strategic * Year 2010	0.090	-0.067	0.037	0.440	-0.064	0.054	-0.282	-0.287
	(0.32)	(-0.30)	(0.09)	(0.55)	(-0.11)	(0.37)	(-0.26)	(-0.61)
Strategic * Year 2007	0.154	0.191	-0.200	1.849	-0.095	0.093	0.165	-0.356
	(0.48)	(0.89)	(-0.53)	(0.37)	(-0.10)	(0.58)	(0.43)	(-0.51)
Constant	2.906***	5.802***	4.377***	2.852***	0.571**	1.150***	0.116	0.633**
	(8.34)	(10.54)	(8.10)	(6.19)	(2.16)	(2.64)	(0.21)	(2.12)
Exogenous Test	-0.062	-0.001	-0.015	0.112	-0.188***	-0.020***	-0.266*	-0.593***
	(-1.28)	(-0.12)	(-0.23)	(0.40)	(-4.86)	(-3.57)	(-1.68)	(-3.76)
Observations	19,093	8,125	8,263	10,830	44,428	11,061	9,572	34,856

Note: t statistics in parentheses, * p<.10, ** p<.05, *** p<0.01. (1), (2), (3) and (4) represents regression results for full sample, top 25% of givers, religious and non-religious individuals respectively.

Table 6: Effects of Strategic Behavior on Religious and Secular Gifts after addressing the endogeneity problem using average income at CMA and youth experiences as instruments - IV estimates

	Religious Gifts				Secular Gifts			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Price	-2.440***	-0.871***	-3.545***	-1.951***	-2.834***	-0.441**	-2.636***	-2.903***
	(-19.16)	(-3.49)	(-14.24)	(-12.17)	(-34.19)	(-2.41)	(-13.12)	(-12.16)
Male	0.102***	-0.009	0.049	0.134***	-0.011	0.011	-0.068	-0.002
	(3.20)	(-0.21)	(0.86)	(3.27)	(-0.60)	(0.30)	(-1.37)	(-0.10)
Age	0.003	-0.029***	-0.002	0.003	0.032***	0.028***	0.023***	0.035***
	(0.39)	(-3.20)	(-0.19)	(0.36)	(9.08)	(3.54)	(2.68)	(7.56)
Age2	$1.4e^{-4}$**	$3.4e^{-4}$***	$1.2e^{-4}$	$1.7e^{-4}$**	$-1.6e^{-4}$***	$-2.3e^{-4}$***	$-5.4e^{-5}$	$-2e^{-4}$***
	(2.26)	(4.35)	(1.23)	(2.25)	(-4.66)	(-3.13)	(-0.70)	(-4.11)
Single	0.036	-0.089	0.059	0.023	0.158***	0.293***	0.138*	0.158***
	(0.63)	(-0.90)	(0.52)	(0.33)	(5.37)	(4.59)	(1.69)	(4.98)
Separated	0.226***	0.083	0.274***	0.202***	0.220***	0.255***	0.239***	0.212***
	(5.09)	(1.45)	(3.69)	(3.77)	(8.05)	(4.99)	(3.82)	(6.90)
HH Size	0.009	0.017	-0.027	0.030	-0.057***	-0.062***	-0.024	-0.065***
	(0.57)	(0.90)	(-1.06)	(1.54)	(-6.51)	(-3.99)	(-1.38)	(-5.97)
Immigrant	0.025	0.004	-0.060	0.134**	-0.035	-0.044	-0.168***	0.011
	(0.53)	(0.07)	(-0.85)	(2.04)	(-1.29)	(-1.02)	(-3.23)	(0.31)
Religious	1.190***	1.030***			-0.022	-0.858***		
	(33.29)	(21.13)			(-0.94)	(-22.16)		
HH income	0.267***	0.080**	0.366***	0.220***	0.496***	0.436***	0.530***	0.491***
	(10.74)	(2.22)	(10.54)	(7.19)	(23.57)	(14.34)	(14.32)	(15.87)
Employed	0.074*	0.088	0.143**	-0.003	0.168***	-0.024	0.166***	0.170***
	(1.78)	(1.45)	(2.01)	(-0.06)	(7.32)	(-0.45)	(3.18)	(6.69)
Atlantic	-0.088**	-0.012	-0.094	-0.074	-0.331***	-0.368***	-0.308***	-0.339***
	(-2.48)	(-0.28)	(-1.58)	(-1.48)	(-14.26)	(-8.22)	(-6.17)	(-12.28)
Quebec	-0.894***	-0.837***	-0.898***	-0.873***	-0.516***	0.056	-0.480***	-0.527***
	(-22.38)	(-10.79)	(-11.62)	(-17.19)	(-19.19)	(0.88)	(-7.62)	(-15.86)
Prairies	0.182***	0.137***	0.228***	0.126**	-0.187***	-0.161***	-0.136**	-0.195***
	(4.65)	(2.78)	(3.57)	(2.26)	(-7.38)	(-3.60)	(-2.49)	(-6.69)

Table 6 (continued)

	Religious Gifts				Secular Gifts			
	Full Sample	Big Givers	Religious	Non-Religious	Full Sample	Big Givers	Religious	Non-Religious
Control Variables	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
British Columbia	0.280***	0.210***	0.360***	0.200**	-0.011	0.101**	0.143**	-0.035
	(4.85)	(3.35)	(4.18)	(2.51)	(-0.41)	(2.02)	(2.15)	(-1.11)
Lived <5yrs	0.070	0.186***	0.094	0.068	-0.011	-0.168***	0.018	-0.020
	(1.37)	(2.74)	(1.23)	(1.02)	(-0.50)	(-3.74)	(0.32)	(-0.72)
Lived 5_10yrs	0.112**	0.070	0.027	0.162**	0.048*	-0.064	0.029	0.050
	(2.17)	(1.04)	(0.29)	(2.26)	(1.76)	(-1.16)	(0.41)	(1.47)
Year 2010	-0.122***	-0.013	-0.180**	-0.093	0.008	0.146***	0.052	0.017
	(-2.92)	(-0.23)	(-2.52)	(-1.60)	(0.38)	(3.16)	(0.92)	(0.46)
Year 2007	0.070*	0.131**	0.089	0.037	-0.010	-0.016	-0.066	0.016
	(1.80)	(2.54)	(1.60)	(0.47)	(-0.43)	(-0.38)	(-1.44)	(0.31)
Strategic	0.083	-0.102	0.107	-0.129	1.182***	0.486***	0.890***	1.017***
	(0.48)	(-0.73)	(0.40)	(-0.30)	(5.46)	(4.77)	(3.72)	(14.60)
Strategic * Year 2010	0.076	-0.057	0.010	0.564	0.180	0.049	-0.147	-0.137
	(0.28)	(-0.26)	(0.03)	(0.92)	(1.14)	(0.34)	(-0.30)	(-0.19)
Strategic * Year 2007	0.029	0.173	-0.161	0.753	0.201	0.093	0.103	-0.224
	(0.12)	(0.81)	(-0.45)	(0.33)	(1.09)	(0.58)	(0.39)	(-0.16)
Constant	2.926***	5.802***	4.384***	2.867***	0.572**	1.150***	0.137	0.658**
	(8.41)	(10.54)	(8.10)	(6.24)	(2.18)	(2.64)	(0.24)	(2.20)
Exogenous Test	0.012	-0.001	0.029	0.068	-0.213***	-0.010**	-0.147**	-0.136***
	(0.28)	(-0.19)	(0.44)	(0.48)	(-2.73)	(-2.32)	(-2.14)	(-3.24)
Observations	19,093	8,125	8,263	10,830	44,428	11,061	9,572	34,856

Note: t statistics in parentheses, * p<.10, ** p<.05, *** p<0.01. (1), (2), (3) and (4) represents regression results for full sample, top 25% of givers, religious and non-religious individuals respectively.