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Who gives? A literature review of predictors of charitable giving. Part Two: Gender, family composition and income

Pamala Wiepking¹ and René Bekkers

This is the second of two articles in which we present a comprehensive review of the multidisciplinary academic literature on philanthropy. In this article, we identify the following predictors of charitable giving by individuals and/or households: gender, family composition and income. For each predictor, we discuss the evidence for the mechanisms that may explain why the predictor is correlated with giving. We conclude with a brief agenda for future research.

Introduction

This is the second part of the article ‘Who gives? A literature review of predictors of charitable giving’ in which we aim to guide scholars as well as practitioners in the third sector through the available multidisciplinary knowledge on individual and household characteristics as predictors of charitable giving. In line with most of the literature, we define charitable giving as the voluntary donation of money to an organisation benefiting others beyond one’s own family. In the first part (Bekkers and Wiepking, 2011a), we presented the evidence on the relationships between giving and religion, education, age and socialisation. In this second part, we turn to gender, family composition and income. For each predictor, we discuss the evidence for the mechanisms that may explain why the predictor is correlated with giving. In earlier work, we categorised and described eight major theoretical mechanisms that drive charitable giving (Bekkers and Wiepking, 2007, 2011b). These mechanisms are:

- awareness of need
- solicitation
- costs and benefits
- altruism
- reputation
- psychological benefits
- values
- efficacy.

These mechanisms emerged consistently from about 550 empirical articles studying charitable giving. The eight mechanisms are intended as convenient summaries of the multidisciplinary literature regarding charitable giving, up and until 2007. We acknowledge that these mechanisms are broad and non-exhaustive. We emphasise that we perceive the eight mechanisms as a starting point for the discussion around theoretical mechanisms driving charitable giving, and not as an end goal in itself.

In this article we aim to facilitate understanding of the pathways linking individual and household characteristics to charitable giving through the eight mechanisms. In

Key words charitable giving • philanthropy • donations • motivation • mechanism

order to do so, we present the eight mechanisms as mediating variables, but at the same time we acknowledge the possibility that the mechanisms precede the individual or household characteristics in causal explanations of philanthropic behaviour. For example, values may have an influence on family composition, as people with more orthodox religious values will be more likely to be married and have larger families. For matters of simplicity, we do not discuss these relations in this article and instead focus on the mechanisms as mediators between household or individual characteristics and giving. Nevertheless, we ask the reader to keep in mind that arguments about causality are very difficult if not impossible to substantiate using cross-sectional data.

Methods

The present article and its twin sister are based on an extensive literature search using fairly narrow criteria through seven types of sources, which eventually yielded a set of about 550 publications for the review (Bekkers and Wiepking, 2007). We restricted our review to publications in English of empirical research on charitable giving by adults included in academic databases. For a more detailed description of the sources and criteria used, refer to the article categorising and describing the eight mechanisms (Bekkers and Wiepking, 2011b).

Results

Gender

In research on charitable giving, the influence of a donor's gender (or sex²) is receiving increasing attention. What type of relationship is found between gender and giving depends strongly on the other variables included in the empirical analyses. The more socioeconomic variables, such as age, income and educational level, that are included in the models examining charitable giving, the smaller the reported gender differences in giving are. It is thus no surprise that the findings on gender differences in giving vary between empirical studies. A group of survey studies conducted in Australia, the Netherlands, the United Kingdom (UK) and the United States (US) examining giving to all types of (both religious and secular) organisations found that while women were more likely to give, men gave higher amounts (Sokolowski, 1996; Andreoni et al, 2003; Bekkers, 2004; CAF, 2005; Lyons and Passey, 2005; Lyons and Nivison-Smith, 2006). Examining only the likelihood of giving, Reed and Selbee (2002) and Feldman (2007) found that women were more likely to donate than men. Bekkers (2006) found no gender difference in likelihood of giving, but his results did confirm larger donations by men compared to women. Conversely, Chang (2005b) found that women donated higher amounts than men in Taiwan.

Types of organisations

Many studies examine donations to specific types of organisations, including religious and secular organisations. In some cases, the relationship between gender and giving

is of key interest, but more often gender is only included as a control variable. In one of the studies specifically investigating the relationship between gender and giving to particular types of organisations, Andreoni et al (2003) showed that married couples in which wives decided on giving were more likely to give to health and education than were couples in which the husband decided. Couples in which the husband decided, on the other hand, were more likely to give to recreation. When it came to amounts donated, couples in which wives decided donated significantly higher amounts to health and human services compared to couples deciding jointly on giving (Andreoni et al, 2003). In a dictator game experiment with 10 different charities identified as recipients, Eckel et al (2005) found that US female students donated more than male students to two of these organisations (their local YMCA and Doctors without Borders USA), while there was no gender difference in incidence and level of giving to the other eight organisations (which were international, national and local charitable organisations covering health, environmental and social services). In a natural field experiment testing effects of anonymity, reciprocity and conformity, Alpizar et al (2008) found that men were more likely to contribute to a natural park in Costa Rica, but did not give higher amounts than women. They argued that this might be because four out of five of those soliciting donations in the experiment were females, and in another field experiment Landry et al (2006) showed that males were more likely to donate to a natural hazard risks research centre when solicited (in door-to-door fundraising) by attractive females. To rate the attractiveness of people soliciting donations in this study, undergraduate students from an introductory-level economics course evaluated their pictures on a scale of (1) homely, extremely unattractive, to (10) model beautiful or handsome. However, two other experimental studies (using door-to-door and telephone solicitation) failed to support a positive female-asks-male effect (Weyant, 1984; Bekkers, 2010).

Using a modification of the dictator game in a large random sample survey in the Netherlands, Bekkers (2007) found that men were more likely to give to health charities, but did not give higher amounts than women. Jackson and Latané (1981) did not find a difference between men and women in the likelihood of making a donation to the Leukemia Society of America, but they did find that men gave higher amounts in a door-to-door solicitation. Weyant (1984) found that women were more likely to give in a door-to-door solicitation for the American Cancer Society when successfully testing the 'every-penny helps' condition.³

Using a censored system of donation equations,⁴ Yen (2002) found that women donated more to religious causes in the US than men, but found no relationship between gender and total (religious and secular) amount donated, or amount donated to secular organisations. In separate analyses of amount donated to religious and secular organisations, Bekkers and Schuyt (2008) found no gender difference in amount donated to secular organisations, but they did find that men tended to give more to religious organisations.

Carman (2006) found that female employees were more likely to give to their local United Way (United Way is a national system of volunteers, contributors, and local charities helping people in their own communities) in a workplace giving programme, but she found no gender difference in the amount donated. In bivariate analyses, Keyt

et al (2002) found that females were more likely to be current donors to the American Lung Association. Regnerus et al (1998) found that females were more likely to donate to organisations that helped the poor and needy. In an experimental study examining the effect of pregnant and non-pregnant women soliciting donations to a fund for children with birth defects, Midlarsky and Hannah (1989) found that women were more likely to donate than men. In a study on giving to human services, women were more likely to give than men (Marx, 2000). Using Tobit regression analyses, Chang (2005b) found that women displayed higher giving to religious, charitable and medical organisations in Taiwan. Men on the other hand displayed higher giving to political organisations. Chang (2005b) did not find a gender difference in giving to academic organisations.

Frey and Meier (2005) found that male students gave more to social funds of their university in Switzerland. Belfield and Beney (2000) showed that while female alumni were more likely to give to public sector universities in the UK, male alumni tended to give higher amounts. Okunade (1996) found that male alumni gave more than female alumni in the US, a result supported for occasional alumni donors by Wunnava and Lauze (2001). Wunnava and Lauze (2001) did not find a gender difference in giving by alumni who donated to their alma mater in each of the 23 years proceeding their study. In the Netherlands, in an experiment testing gender differences in the name letter effect and similarity principle,⁵ Bekkers (2010) found that female alumni were more likely to give when solicited by a student with the same first name initial and when solicited by a student from the same field of study in which they graduated. Male alumni were more likely to give when solicited by a student from a field of study sounding similar to their own first name (eg, George gave to a geology student). The results of the gender difference in giving to different types of organisations are summarised in Table 1.

Explanations for the relationship between gender and giving

Brown and Ferris (2007) found that while men gave more to religious causes, women gave more to secular organisations. Their analyses show that the relationship between gender and religious giving is partly mediated by social capital. When measures of social capital in the form of stronger involvement in formal associations and higher levels of social and interracial trust were included in the analyses, the difference in level of religious giving between men and women decreased, but remained significant favouring men. On the other hand, the relationship between gender and secular giving was suppressed by the same measures of social capital: it was only after inclusion of social capital in the analyses that women were found to donate significantly more to secular organisations. In the Netherlands, using a Heckman two-stage regression analysis of total (religious and secular) giving, Bekkers (2004) found that in the first stage of the analysis the higher likelihood of giving by women was fully mediated by personality characteristics, including social value orientation, the ability to take another person's perspective and empathic concern. In the second stage, Bekkers (2004) found that the initially negative relationship between female gender and the total amount donated became non-significant when indicators for social and

Table 1: Gender difference in giving to different types of organisations

	Men	Women
Health	LG Bekkers (2007) € Jackson and Latané (1981)	LG Andreoni et al (2003) LG Keyt et al (2002) LG Midlarsky and Hannah (1989) LG Weyant (1984) € Andreoni et al (2003) € Chang (2005b) € Eckel et al (2005)
Human services		LG Carman (2006) LG Marx (2000) LG Regnerus et al (1998) € Andreoni et al (2003) € Chang (2005b) € Eckel et al (2005)
Nature	LG Alpizar et al (2008) LG Landry et al (2006)	
Religion	LG Bekkers and Schyt (2008) € Brown and Ferris (2007)	€ Chang (2005b) LG Yen (2002)
Education	€ Belfield and Beney (2000) € Frey and Meier (2004) € Okunade (1996) € Wunnava and Lauze (2001)	€ Andreoni et al (2003) LG Andreoni et al (2003) LG Belfield and Beney (2000)
Recreation	LG Andreoni et al (2003)	€ Andreoni et al (2003)
Secular organisations		LG Brown and Ferris (2007) LG Carman (2006)

Notes: LG indicates a gender difference in likelihood of giving; € indicates a gender difference in amount donated; both to the particular type of organisation specified, in favour of the specified gender.

human capital (working hours, income, religious attendance, level of urbanisation and educational level) were included in the analyses. This finding suggests that indicators for social and human capital suppress gender differences in the Netherlands.

In another analysis of data from the Netherlands, using an ordinary least squares (OLS) regression analysis of the total amount donated, Wiepking and Maas (2009) showed that women donated lower amounts to charitable organisations only after empathic concern and social resources had been taken into account (in the form of requests for donations and religious service attendance). In analyses not including social resources, Wiepking and Maas (2009) found no gender difference in amount donated. A similar effect occurred in analyses of the relationship between gender and total amount donated in the US. Only after the inclusion of measures of religious attendance, organisational membership and requests for donations did Sokolowski (1996) find that women gave lower amounts. Without these measures of social capital, Sokolowski (1996) found no significant relationship between gender and amount donated. Again, these results suggest that indicators of social resources suppress the gender difference.

Testing the effect of different analytical models when analysing charitable giving, Rooney et al (2001) reported higher donations by women than men in a tobit regression, but no gender difference in giving when using OLS regression analyses (analysing full sample and donors only separately) and a Heckman two-stage regression analysis.⁶ All models included measures of age, income, itemiser status, minority ethnic status, marital status, educational level and control variables for the method of data collection.

Mechanisms

The empirical results discussed in the previous paragraphs suggest that mechanisms influence the relationship between gender and giving in two different ways: by mediating the relationship or by moderating it. Mediating mechanisms are those that explain the gender differences in giving, and include the solicitation mechanism and the value mechanism. In contrast, the reputation mechanism and the cost mechanism work differently for men and women. These two mechanisms thus moderate the relationship between gender and philanthropic behaviour.

The solicitation mechanism (the likelihood of being asked to donate) partly mediates the difference in philanthropic behaviour by men and women. Sokolowski (1996), Brown and Ferris (2007) and Wiepking and Maas (2009) all found that measures of social networks positively related to the amount donated. Through their larger social networks, women were more often solicited to make donations, and consequently donated higher amounts in total than men.

Results from both experimental and survey studies showed that women have stronger prosocial values than men, including concern and responsibility for the wellbeing of others (Beutel and Marini, 1995), religious values (DeVaus and McAllister, 1987; Miller and Hofman, 1995) and empathic concern (Eisenberg and Lennon, 1983; Davis, 1994; Einolf, 2011). According to primatologist Frans de Waal (2009), empathic concern can be traced back to early primate evolution and was developed simultaneously with parental care. Females that expressed empathic concern for their offspring had greater reproductive success than their counterparts without this prosocial trait. These results indicate that the value mechanism (the ideals that people would like to see realised through their donation) also mediates the relationship between gender and giving.

Croson and Gneezy (2009) showed that women were more susceptible to the social context of an experiment. When the conditions or social cues of an experiment changed, women's behaviour changed accordingly. The authors explained the stronger sensitivity to experimental conditions with research from psychology. Gilligan (1982) suggests that women are more sensitive to social cues that determine 'appropriate' social behaviour than men are. These results thus suggest that gender is moderating the effect of the reputation mechanism. According to Eagly et al, women live up to gender-specific role stereotypes and hence display higher levels of prosocial behaviour, including charitable giving (Eagly and Wood, 1991; Eagly and Koenig, 2006; Eagly, 2009).

The cost mechanism (lower material costs) appears to have a stronger effect on men than on women. Andreoni et al (2003) found that when the price of giving was 0.69, married men were more likely to give higher amounts, while at a price of unity, married women were more likely to give more. In an experimental study, Andreoni and Vesterlund (2001: 306) drew a similar conclusion: 'When the price of giving is low, men appear more altruistic, and when the price is high, women are more generous'. Gender differences in price effects are also supported in a seminal overview of the literature on gender differences in economic experiments by Croson and Gneezy (2009). Figure 1 displays the mechanisms that are emerging from the literature as explanations for gender differences in giving.

Figure 1: Mechanisms explaining the relationship between charitable giving and gender

Note: All displayed relationships are positive unless noted otherwise.

Giving is household behaviour

The relationship between gender and giving is complicated by the fact that in many cases, charitable giving is not decided by one man or woman, but by all adult members of a household. In a focus group study in Britain, Burgoyne et al (2005) found that whether partners in a couple household decided individually or jointly on charitable giving depended largely on the system of financial organisation used in the household. Most households tended to organise their finances according to a so-called pooling system, in which both partners more or less equally had access to and decided over the household's money (Burgoyne et al, 2005; see also Pahl, 1995). In these households, both partners decided on charitable giving. In addition, Burgoyne et al found that decisions on more structured and larger charitable donations were made by both

partners in the household, while the more spontaneous and smaller donations – such as, for example, donations made in a street collection – were typically decided on separately, a finding confirmed in the Netherlands by Wiepking and Bekkers (2010).

Survey data are usually based on only one respondent per household. As a result, gender differences in reported household contributions can, for example, reflect gender differences in recalling donations or in socially desirable responding (Bekkers and Wiepking, 2006). There are only a few papers distinguishing actual differences in giving between male and female giving, taking into account that charitable gifts are often made by the whole household. While controlling for income, educational level and ethnicity, Mesch et al (2006) showed that single and married women and married men had a higher incidence of giving compared with single men in the US. They also found that single and married women donated more to charitable organisations than single men, while there was no statistical significant difference in the donations between married and single men. These results are in line with previous findings by Rooney et al (2005). Piper and Schnepf (2008) found that single women had a higher incidence of giving than single men in the UK, but did not find significant differences in the amount donated by single men and women. Andreoni et al (2003) tested whether the equations predicting incidence of giving and amount donated differed between single men and women. They found that single men and women did display different tendencies towards giving. Women tended to give to a higher number of charities, while men were more sensitive to income and the price of a gift. Also interesting is the finding of Pharoah and Tanner (1997), who showed that both the likelihood of giving and the amount donated increased when there were more women living in a household in the UK.

Family composition

Marital status

Marriage is mostly found to be positively related to incidence of giving (Hodgkinson and Weitzman, 1996; Eschholz and Van Slyke, 2002; Reed and Selbee, 2002; Apinunmahakul and Devlin, 2004; Hrungr, 2004; Wu et al, 2004; Houston, 2006; Matsunaga, 2006; Mesch et al, 2006) and amount donated (Feldstein and Taylor, 1976; Feenberg, 1987; Slemrod, 1989; Auten and Rudney, 1990; Barrett, 1991; Lankford and Wyckoff, 1991; Auten et al, 1992; O'Neill et al, 1996; Andreoni and Scholz, 1998; Duquette, 1999; Long, 2000; Tiehen, 2001; Eschholz and Van Slyke, 2002; Apinunmahakul and Devlin, 2004; Hrungr, 2004; Wu et al, 2004; Brooks, 2005; Chang, 2005b; Van Slyke and Brooks, 2005; Brown and Ferris, 2007; Feldman, 2007; Wilhelm et al, 2008). These studies are all cross-sectional and do not show whether giving actually increases over time when people get married. Studies rarely examine the relationship of types of partnerships other than marriage with giving, but when they do, results are similar (Wiepking and Maas, 2009). Like gender, marriage is often only included as a control variable, and therefore does not feature in the discussion of results of studies whose main interest is other determinants of giving. This is especially the case in studies published in economics because marital status has an

effect on itemising status and needs to be controlled for when estimating income and price effects. Most of these studies find a positive relationship between marriage and charitable giving. This indicates that there is a rather robust positive relationship between marriage and philanthropic behaviour in economic model specifications.

However, there is also a substantial amount of research – including economic studies – that has found no relationship between marital status and giving, or reports mixed findings. Studies from the Center on Philanthropy in Indiana (Rooney et al, 2001; Rooney et al, 2005; Mesch et al, 2006) found that both married men and women were more likely to give than single men, but only married women (and not married men) gave higher amounts than single men. In a study of single-earner households, Schiff (1990) found no relationship between marriage and giving. Carroll et al (2006) find no relationship between marital status and giving in an econometric study of charitable donations in Ireland. Randolph (1995) drew a similar conclusion using advanced econometric models predicting giving in the US. In an early study of giving over time, Clotfelter (1980) found no relationship between marital status and giving, as well as no relationship with changes in marital status on giving. This result suggests that the higher level of household giving among married couples is not due to marriage itself but to other factors. In a study on charitable giving in the UK, Jones and Posnett (1991a) found no relationship between being single and making donations in a tobit regression analysis. Eaton (2001) found no relationship between being married and amount donated when controlling for ‘two-earner deduction’, which indicates whether or not both spouses claimed gifts. In a study on the relationship between welfare income and charitable giving, Brooks (2002) found no relationship between marital status and giving.

Types of organisations

In an experiment examining current student donations to Social Funds of the University of Zurich, Switzerland, Frey and Meier (2004) found that married students were more generous than those who were unmarried. However, they showed that this relationship was not statistically significant in a fixed-effects model. This led Frey and Meier (2004: 80) to conclude that ‘marriage itself does not make one more generous, but married students are a special selection’.

Although Hrung (2004) found a positive effect of marriage on total and religious giving in the US, his results also showed that there was no relationship between being married and secular giving. Wilhelm et al (2008) did, however, find a positive relationship between marital status and both religious and secular giving. In a study examining overall – religious and non-religious (secular) – giving, Bielefeld et al (2005) only found a positive relationship between marriage and the likelihood of making non-religious donations. They found no relationship between marriage and total giving, religious giving and the amount donated to non-religious organisations. Brown and Ferris (2007) showed that an initially significant positive relationship between being married and secular giving in a tobit regression was fully mediated by indicators for social capital. The relationship between marriage and religious giving remained significantly positive after the inclusion of social capital measures. In a tobit

regression analysis of amounts donated to different types of organisations in Taiwan, Chang (2005b) found a positive relationship between being married and giving to religious, charitable and academic organisations. He found no relationship between being married and giving to medical and political organisations.

Examining donations to a local United Way, Pitts and Skelly (1984) found that single people were less likely to donate and donate lower amounts than those who were married. Regnerus et al (1998) found that married people in the US were more likely to give to organisations supporting the poor and the needy. Lee and Farrell (2003) found that married people were not more likely to give to panhandlers than people with another marital status, but married people were more likely to be panhandled. In an analysis predicting whether or not people made donations to human services, Marx (2000) found no relationship between marital status and giving.

In two studies including many other socioeconomic predictors of giving, Duncan (1999) and Monks (2003) found a negative relationship between marriage and total giving and alumni giving. Olson and Caddell (1994) found that the never married gave more to their congregation than those who had ever been married. Gruber (2004) found that those who were not married gave higher amounts to religious and to a combination of religious and secular causes. Using tobit regression analyses, Clotfelter (2003) found that married alumni of the 1976 cohort in the US gave less to their alma mater in the early 1990s than their single counterparts. Interestingly, Clotfelter (2003) found no relationship between marital status and giving for the 1951 cohort. Daneshvary and Luksetich (1997) found that marriage was only related to higher giving among households with an average annual income of over US\$25,000. Lunn et al (2001) found that having a spouse who was not also a member of the same Presbyterian Church actually lowered giving, religious and non-religious alike.

Relations of divorce and widowhood with philanthropy have been less studied to date. Bryant et al (2003) found no difference between singles, divorcees or widowed respondents on the one hand and married respondents on the other in the likelihood of giving, but they did find that being divorced was associated with a lower likelihood of receiving requests for donations. A US study of donations deducted from income tax (itemised deductions) found no relationship between widowhood and giving (Long, 2000). Wiepking and Bekkers (2010) found that Dutch people living in a two-adult household who had previously experienced a divorce were much less likely to make joint decisions on charitable giving, and gave lower amounts than people who had not experienced a divorce. Controlling for age, Belfield and Beney (2000) found that divorced, separated or widowed alumni were more likely to give and give higher amounts to their alma mater in the UK than single alumni. Married alumni also had a lower probability of giving and gave lower amounts than single alumni. Interestingly, Belfield and Beney (2000) found that there was no difference between being single and being divorced, separated or widowed and amount donated when the former spouse was a graduate from the same educational institution.

Mechanisms

When marrying, people likely experience changes in their social networks. In some cases, people may retreat from certain social networks after marriage. However, as marriage brings together the networks of the two spouses, married people will typically be more likely to participate in larger and more diverse social networks. Through these larger and more diverse social networks they may be solicited for contributions (Bryant et al, 2003). In addition, those who are married are also more likely to endorse religious values (Christiano, 2000; Wilcox and Wolfing, 2007), indicating a potential role for the values mechanism.

Having children

The number of children in a household is positively related to philanthropy in most studies that have included this variable (Auten and Rudney, 1990; Lankford and Wyckoff, 1991; Auten et al, 1992; Choe and Jeong, 1993; Hoge and Yang, 1994; Banks and Tanner, 1999; Tiehen, 2001; Carroll et al, 2006). Studies of donations in the UK and Ireland found a positive relationship between the number of children and the likelihood of making donations but not with the amount donated (Pharoah and Tanner, 1997; Carroll et al, 2006). Cowley et al (2011) found that the presence of children was related to both the likelihood of making donations and higher contributions in the UK. Sullivan (1985) drew a similar conclusion for religious contributions in the US, but also showed that this did not relate to the presence of preschool-aged children. Yen (2002) and Hrung (2004) both found a positive relationship between household size and religious giving, but no relationship with giving to (secular) charitable causes. Brooks (2005) and Brown and Ferris (2007) found a positive relationship with religious giving and a negative relationship with secular giving, controlling for memberships and trust. In an earlier analysis of the same dataset, a positive relationship of having children with religious giving but no relationship with secular giving was found (Brooks, 2004). Duncan (1999) found a positive relationship between the level of giving and having children between the ages of three and 10, but no relationship for those with children outside this age range. James and Wiepking (2008) found a positive relationship between the number of children living at home and the incidence and amount of money donated to educational causes in the Netherlands. Wiepking (2006) found that there was a positive relationship between having children and making donations to organisations that support children.

However, no relationship between having children and engagement in philanthropy was found by Schiff (1990), Barrett (1991), Smith et al (1995), Marx (2000), Brooks (2002), Bryant et al (2003), Houston (2006) and Feldman (2007).

In Indonesia, the number of children younger than the age of 14 was found to be negatively related to the likelihood of giving and the amount donated (Okten and Osili, 2004). In Taiwan, larger households were found to donate less (Wu et al, 2004; Chang, 2005a); also, in the Netherlands, a negative relationship was found between household size and amount donated as measured in a short questionnaire (Bekkers and

Wiepking, 2006). In a study of alumni giving, donations were lower among business school alumni with children in the age range of 12–18 (Okunade and Berl, 1997).

Mechanisms

The relationship between having children and charitable giving is likely to be due to several mechanisms. First, having children increases the awareness of need (the awareness of beneficiaries’ needs). Through children, people are likely to become involved in educational and other local associations, such as a sports club or a music group. This participation increases the awareness of the needs of these organisations, and also increases the likelihood that people will be solicited by these organisations. Having children increases awareness about charitable organisations (especially with a focus on children) in need of donations and increases the likelihood of being solicited for donations and thus stimulates philanthropic behaviour.

It should be noted that religious people tend to have a higher number of children than non-religious people (McQuillan, 2004). Lacking measures of religiosity, the number of children may proxy for religiosity, yielding a spurious relationship with charitable giving. People with more children are likely to hold stronger religious values, which stimulates their philanthropic behaviour through the values mechanism. Figure 2 displays the mechanisms identified in the literature as explanations for the relationship between charitable giving and family composition.

Figure 2: Mechanisms explaining the relationships between charitable giving and family composition

Note: All displayed relationships are positive unless noted otherwise.

Income

Research provides overwhelming evidence for a positive relationship between income, wealth and amount donated to charitable organisations (Steinberg, 1990; Auten et al, 2002). There are five relationships between financial resources and philanthropic giving that have been of key interest to scholars studying philanthropic behaviour:

- the relationship between financial resources and the incidence of giving (are those with more financial resources more likely to give?);
- the relationship between financial resources and the amount donated (do those with higher levels of financial resources give more?);
- the relationship between financial resources and the relative amount donated (do those with higher levels of financial resources give a smaller portion of their income?);
- the relationship between fiscal incentives and giving (do fiscal incentives more strongly affect giving by those with higher levels of financial resources?);
- the relationship between financial perceptions and giving (do people who feel financially secure give more?).

Financial resources and incidence of giving

Some studies have found a positive relationship between financial resources and incidence of giving (Schervish and Havens, 1995a; Banks and Tanner, 1999; Rooney et al, 2001; Cowley et al, 2011) while others have found that people with more financial resources, such as income from employment and wealth, do not exhibit a higher incidence of making philanthropic donations than other people (Smith et al, 1995; Wiepking, 2007). These different results could be explained possibly by differences in the frequency of giving behaviour. The studies that have found no relationship between financial resources and giving analysed survey data using questions about giving over the course of the previous year (or several years in the case of Smith et al, 1995), indicating that there were no differences between income groups in incidence of giving over the course of a year. However, Banks and Tanner (1999) analysed data measuring giving during the previous two weeks of their survey, and did find a positive relationship between income and incidence of giving.

Types of organisations

Research studying giving to particular types of philanthropic organisations, such as international relief organisations, or religious organisations, usually finds differences between income groups in incidence of giving. Regnerus et al (1998) found that those with a higher income were more likely to donate to organisations supporting poor people. Banks and Tanner (1999) showed that, in the UK, those with more financial means had a preference for making donations to organisations with a focus on culture and the arts, education, recreation and leisure, environment and economic and community development. Lower-income donors were more likely to give to animal charities and international relief organisations. There is no clear trend in the relationship between income and giving to different types of charities. It could be that the differences in these results are driven by differences between countries.

Financial resources and amount donated

Those with more financial means give higher amounts. Income and wealth have a positive relationship with the level of philanthropic donations that people make (Schwartz, 1970; Feldstein, 1975a, 1975b; Feldstein and Clotfelter, 1976; Feldstein and Taylor, 1976; Hood et al, 1977; Abrams and Schmitz, 1978, 1984; Reece, 1979; Clotfelter, 1980; Reece and Zieschang, 1985, 1989; Sullivan, 1985; Glenday et al, 1986; Kingma, 1989; Slemrod, 1989; Auten and Rudney, 1990; Schiff, 1990; Barrett, 1991; Jones and Posnett, 1991b; Brown and Lankford, 1992; Choe and Jeong, 1993; McClelland and Kokoski, 1994; Olson and Caddell, 1994; Schervish and Havens, 1995a, 1995b, 1998, 2003; O'Neill et al, 1996; Sokolowski, 1996; Daneshvary and Luksetich, 1997; Okunade and Berl, 1997; Pharoah and Tanner, 1997; Schlegelmilch et al, 1997; Regnerus et al, 1998; Banks and Tanner, 1999; Chua and Wong, 1999; Todd and Lawson, 1999; Belfield and Beney, 2000; Long, 2000; Marx, 2000; Eaton, 2001; Farmer and Fedor, 2001; Lunn et al, 2001; Tiehen, 2001; Andreoni and Miller, 2002; Brooks, 2002, 2005; Reed and Selbee, 2002; Yen, 2002; Apinunmahakul and Devlin, 2004; Gruber, 2004; Hrung, 2004; Okten and Osili, 2004; Wu et al, 2004; Bielefeld et al, 2005; Chang, 2005b; Lyons and Passey, 2005; Rooney et al, 2005; Van Slyke and Brooks, 2005; Bekkers, 2006; Bekkers and Wiepking, 2006; Carman, 2006; Houston, 2006; Lyons and Nivison-Smith, 2006; Matsunaga, 2006; Mesch et al, 2006; Havens et al, 2007; James and Sharpe, 2007; Bekkers and Schuyt, 2008; Wilhelm et al, 2008). This is also not surprising: one needs money in order to give it away. The more money a household owns and earns, the more it can donate to charitable causes. Havens et al (2007) showed that the level of wealth had a stronger relationship with the level of giving than the level of income from employment. Of course, having achieved a higher educational level usually facilitates people to acquire more financial resources. Empirical models not including educational level therefore tend to overestimate the relationship between income and amount donated.

The only two US studies that we found that did not find a significant income relationship were a field experiment with mail solicitations for donations to a university among households with an income of over US\$70,000 in central Florida (List, 2004) and a study of donations to panhandlers (Lee and Farrell, 2003). Both studies examined relatively small donations, which could account for the absence of a relationship with income. The average donation in the study by List (2004) was US\$0.97 (US\$21.06 among donors) and the study by Lee and Farrell (2003) concerned a very small donation to a panhandler. People with all levels of financial resources are capable of making these small donations. One further exception to the general findings is that, in Taiwan, religious, academic, medical and political giving was not related to income measured in three categories (Chang, 2005b).

Economists often express the relationship between income and giving in the form of an income elasticity of giving: the change in amount donated relative to the change in income (for overview studies, see Steinberg, 1990; Auten et al, 2002; Peloza and Steel, 2005). An income elasticity of between 0 and 1 indicates that giving is 'inelastic' and comparable with basic good consumption: with increasing levels of income, people will increase their level of giving, but at a lower rate than the rate

at which their income increases. An income elasticity higher than 1 indicates that giving is 'elastic' and comparable with luxury good consumption: people will increase their giving at a higher rate than the rate at which their income increases. Results of empirical studies on income and giving show that giving is comparable to basic good consumption and inelastic: people increase donations when gaining income, but the increase in giving is lower than the increase in income (McClelland and Brooks, 2004). Three studies in the US found that income elasticities were higher for contributions to political and other secular organisations than for contributions to religious organisations (Feldstein, 1975b; Reece, 1979; Brooks, 2005).

Researchers distinguish between persistent (or permanent) and transitory income elasticities. Persistent income elasticities refer to the changes in giving based on the pattern of income and wealth people expect throughout their lives. Transitory income elasticities refer to changes in giving due to temporary fluctuations in income, which may push the household into a different tax bracket (Peloza and Steel, 2005). Bakija and Heim (2008) and McClelland and Brooks (2004) investigated the income elasticity for different income levels and showed that the persistent income elasticity decreased as income increased. This implies that when gaining income, higher-income households increase their giving at lower rates than lower-income households. Bakija and Heim (2008) found persistent income elasticities of 0.846 for households with an income below US\$200,000, 0.806 for incomes between US\$200,000 and US\$500,000, 0.699 for incomes between US\$500,000 and US\$1 million, and 0.659 for incomes over US\$1 million. Income elasticities appear to differ between countries. In an overview study, Steinberg (2002) found income elasticities ranging from 0.60 and 0.80 for the US. In the Netherlands, the income elasticity of giving ranged from 0.19 to 0.32 (Bekkers, 2004; Wiepking and Maas, 2009).

Amount donated relative to financial resources

The findings are less straightforward for the proportion of financial resources that people donate to philanthropic organisations. Some researchers have found a u-shaped relationship between income and philanthropic donations relative to income: both lower- and higher-income households donated relatively more money than those with middle incomes (Schervish and Havens, 1995a; Hodgkinson and Weitzman, 1996; James III and Sharpe, 2007). Other researchers have found a declining trend: lower-income households donated relatively most, and higher-income households donated relatively least (Hoge and Yang, 1994; Smith et al, 1995; Baade and Sundberg, 1996; Wilhelm, 2002, 2007; Breeze, 2004; McClelland and Brooks, 2004; Wiepking, 2007; Wilhelm et al, 2007; Wiepking and Heijnen, 2011). Hoge and Yang (1994) found that income negatively predicted the percentage of income donated by Catholics and Protestants. This relationship was most strongly negative for Mainline Protestants, who donated the smallest proportion of their income.

One limitation of the research studying relative donations is that the samples used often do not include the wealthiest people. Havens et al (2007) argued that this explains why several studies find a declining relationship between income and proportional giving, rather than a u-shape. They argued that if these studies were to include the

wealthiest people, they would find that those with the most financial resources are relatively most generous.

Fiscal incentives and giving

Many countries provide price subsidies for philanthropic donations by their citizens (Dehne et al, 2008). In most of these countries, households are allowed to deduct their philanthropic donations from income, and hence giving is subsidised with public money. Households can use the fiscal opportunities for deducting gifts to lower the price of their donations. For example, a household subject to an income tax rate of 50% (the tax rate in the Netherlands for households with a gross income over €34,330 in 2009; Belastingdienst, 2009) can lower the price of a gift to 50% and pay only €50 when making a €100 donation. Over the past 20 years, economic research has developed advanced methodology to study the effect of price (tax incentives) on giving (Kingma, 1989; Randolph, 1995; Bakija, 2000). In a meta-analysis of price elasticities covering almost 70 articles, Pelozo and Steel (2005) found that the weighted mean of the price elasticity of giving was -1.44 . This means that an average reduction in the price of giving of 1% increased donations by 1.44%, indicating that the price of giving was elastic and treasury efficient: a 1% subsidy increased giving by more than 1%. Using state-of-the-art methodology, Bakija and Heim (2008) found an elasticity of giving with respect to a persistent price change of -0.7 in the US, smaller than the average mean found in the meta-analyses by Pelozo and Steel (2005). Bakija and Heim (2008) found strong evidence for parameter heterogeneity across income classes: for those with incomes below US\$200,000 the persistent price elasticity was estimated at -0.699 , for incomes between US\$200,000 and US\$500,000 this was -0.772 , for incomes between US\$500,000 and US\$1 million this was -0.832 and for incomes over US\$1 million this was -1.079 .

Perceived financial position

Havens et al (2007) and Wiepking and Breeze (2012) showed that not only does the relationship between absolute financial resources and giving matter for people's philanthropic behaviour, but also their perception of their financial resources. People who perceived their financial situation as more positive were more generous donors (Havens et al, 2007; Wiepking and Breeze, 2012). One study that included several background characteristics but not actual income found that those who considered themselves 'financially better off than most other people' reported higher donations to relief appeals (Bennett and Kottasz, 2000). A study of graduate school alumni donations that also lacks an income measure found that alumni giving was higher among those who had more confidence in the economy (Okunade, 1996). Another study, including actual income measures, found that a better financial position as perceived by individuals was associated with a higher likelihood of sponsorship, attending charitable events and donation in shops (Schlegelmilch et al, 1997). This finding suggests that the subjective financial position has a positive relationship with giving over and above the relationship with the objective financial position.

Nevertheless, a better objective financial position represented by higher income, wealth and home ownership is likely to enhance the subjective financial position as well.

Mechanisms

Based on the review of the literature above, we can conclude that there are large differences in philanthropic giving between people with different levels of financial resources. The relationship between financial resources and giving can, to some extent, be explained by the costs mechanism, according to which people will donate more money when the costs for doing so are lower, for example, because they can deduct their donations from income tax. In countries that allow for charitable deduction and that have progressive income tax systems, the costs of giving are lower for higher-income taxpayers. One should expect the income elasticity of giving to be higher in such countries. The low income elasticity in the Netherlands is an anomaly to this hypothesis. The costs mechanism only works when people have the opportunity to deduct their donations and are aware of this possibility. Availability and awareness of tax deductibility differ between countries and also between people. Sweden and Finland, for example, do not allow private citizens to use charitable deductions (Dehne et al, 2008). Also, not all people are aware of the possibility to lower the cost of giving using charitable deductions (Horne et al, 2005). The value mechanism may play a role as well, as wealth sometimes carries with it a moral responsibility for others (Odendahl, 1990; Ostrower, 1997; Schervish, 2006).

Current research does not lead to a clear understanding of the relationship between subjective financial position and philanthropic behaviour. It may be that, in general, financial resources are perceived as a condition for philanthropic behaviour. Only when people perceive their own and their family's financial future as stable and secure are they susceptible to other mechanisms stimulating philanthropic behaviour. These might include the altruism mechanism and the psychological benefits (intangible rewards for giving) mechanism. It may be that as people feel more secure about their own and their children's current and future financial situation, they feel they can afford to be altruistic and help others. It is also possible that the psychological benefits of giving tend to weigh more heavily once their own financial needs are perceived as taken care of. Figure 3 displays the mechanisms through which financial resources and charitable giving are related.

Discussion

This article has discussed the evidence on the mechanisms that may explain why gender, family composition and income are related to philanthropic behaviour. It is the second part of our study 'Who Gives? A Literature Review of Predictors of Charitable Giving' in which we aim to guide scholars as well as practitioners in the third sector through the available multidisciplinary knowledge on individual and household characteristics as predictors of their charitable giving. The first part of this article, published in *Voluntary Sector Review* in 2011 (Bekkers and Wiepking, 2011a), presented the evidence on religion, education, age and socialisation practices as

Figure 3: Mechanisms explaining the relationship between charitable giving and financial resources

Note: All displayed relationships are positive unless noted otherwise.

correlates of philanthropic behaviour. At the end of this second article, and at the end of our project reviewing the literature on charitable giving, what can we conclude? There is a lot of evidence for relationships between all seven of the predictor variables discussed in these two articles – religion, education, age, socialisation, gender, family composition and income – and philanthropic behaviour. However, the literature shows such mixed findings regarding the nature of most of these relationships, that it only seems possible to draw tentative conclusions. As one of the anonymous reviewers of this article points out: ‘relationships seem to be so contingent on other factors ... , it is impossible to feel too confident one way or another’. We agree with this assessment. Future work could build on the current study and conduct meta-analyses of the different empirical relationships. This will hopefully lead to more definitive conclusions about the nature of the relationship between the different predictor variables and charitable giving.

One possible way to solve this issue in future research is for researchers to focus more strongly on understanding why a specific relationship exists. One of the problems we feel there is with existing literature on charitable giving is that too little of this research focuses on understanding the mechanisms behind (a) specific relationship(s). With this project, we hope to have contributed to an increased understanding of the mechanisms behind philanthropic behaviour. We view this project emphatically as a starting point in unravelling the mechanisms behind charitable behaviour, and not as an end point in itself. When we started this project in 2006, the evidence on the relationship between many predictor variables and philanthropic behaviour was scattered across disciplines. With this project we have attempted to provide researchers, new and established, with an overview of the results of research across these disciplines.

We hope that this will enable scholars to go beyond 'variable sociology': testing many predictors for giving in one model and looking for significant relationships. The results of our project summarise the results of this approach and show which variables relate to philanthropic behaviour. Now it is time to focus on *understanding philanthropy*: why do some people display more generous philanthropic behaviour than others?

The editors of interdisciplinary non-profit journals can play an important role in achieving this next step. New scholarly articles on the topic of philanthropic behaviour should at a minimum contribute to the literature and build on existing knowledge, and should not merely replicate the current state of the art. Although we acknowledge the importance of replicating studies, especially in different cultural and geographical contexts, progress in our field can only be achieved when researchers build on previous work to better understand philanthropic behaviour.

Editors have a gatekeeper position, and should encourage submission of articles that go beyond basic exploratory regression analyses in which no theoretical or empirical progress is achieved, and instead seek to unravel the mechanisms behind giving. This is exactly what the authors in the 2011 special issue 'Testing mechanisms for philanthropic behaviour' of the *International Journal of Nonprofit and Voluntary Sector Marketing* (volume 16, issue 4) contributed to: the understanding of philanthropy through the unravelling of the mechanisms behind giving and volunteering. We emphasise that tests of mechanisms should not be restricted only to the eight mechanisms as derived in our literature review (Bekkers and Wiepking, 2011b). We identified these eight mechanisms as key factors driving giving, but at the same time acknowledge that (a) these are very broad mechanisms under which many sub-mechanisms are at work and (b) there might be additional mechanisms that we failed to identify based on the existing literature up to 2007. Nevertheless, we hope that the eight mechanisms can function as a starting point of unravelling philanthropic behaviour, and look forward to suggestions for improvements of these mechanisms.

One of the limitations for the next steps in philanthropy research is the lack of high-quality data including (validated) measures of the mechanisms that may explain relationships between predictors and charitable giving. Designing and validating measures of mechanisms explaining relationships with philanthropy in new data collections will enable future researchers to better understand why some people are giving more than others.

Notes

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² Gender typically relates to the social construct of being men or women, while sex relates to biological differences (Oakley, 1972). Empirical research on charitable giving predominantly uses participants' self-reported gender. Hence our review discusses the relation between 'gender' and giving.

³ Many people have developed cognitive strategies to justify their rejection of the responsibility for the welfare of others. One such strategy is the argument that one 'cannot afford a donation'. Legitimising paltry contributions by adding the phrase 'every penny helps' or 'even a penny helps' in a solicitation for contributions may neutralise these strategies (Cialdini and Schroeder, 1976; Reingen, 1978; Brockner et al, 1984; Weyant and

Smith, 1987; Doob and McLaughlin, 1989). When even a penny helps, one easily appears to be an unhelpful person if one does not donate, which makes it difficult to say no.

⁴ A censored system of donation equations accommodates censoring in the data, for example takes into account people not making any donations (zero donations). An example of an econometric procedure that accommodates censoring is the tobit model (Smith et al, 1995; Yen, 2002). Tobit is a form of truncated regression analysis, which can be used to censor the non-donors (left-censoring). See Buis and Wiepking (2006) and Forbes and Zampelli (2011) for a non-technical description of the use of econometric procedures accommodating censoring in the analyses of giving data.

⁵ The similarity principle refers to the principle that people tend to like others with attributes similar to their own. In this study, Bekkers (2010) examined whether similarity in fields of study and association memberships between students soliciting donations and potential donors increased donations.

⁶ The main problems with using OLS regression analyses when analysing donations, is that linear regression produces biased results, due to truncation or a selection bias. In addition, OLS regression predicts negative donations. The tobit model, discussed in note 3, provides a solution to this problem by left-censoring the data. Another solution is provided by sample selection models, like the Heckman two-stage model. This estimates two models: one for the decision to give and one for the decision how much is given. Results of prediction equations for charitable giving differ between the different econometric models. See Smith et al (1995), Rooney et al (2001), Buis and Wiepking (2006) and Forbes and Zampelli (2011) for more information on the use of different econometric models in the analyses of charitable giving.

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