

Philanthropy in Israel: An Updated Picture

Claude Berrebi and Hanan Yonah

A chapter from *The State of the Nation 2017*

Jerusalem, December 2017

Taub Center for Social Policy Studies in Israel

The Taub Center was established in 1982 under the leadership and vision of Herbert M. Singer, Henry Taub, and the American Jewish Joint Distribution Committee. The Center is funded by a permanent endowment created by the Henry and Marilyn Taub Foundation, the Herbert M. and Nell Singer Foundation, Jane and John Colman, the Kolker-Saxon-Hallock Family Foundation, the Milton A. and Roslyn Z. Wolf Family Foundation, and the American Jewish Joint Distribution Committee

This paper, like all Center publications, represents the views of its authors only, and they alone are responsible for its contents. Nothing stated in this paper creates an obligation on the part of the Center, its Board of Directors, its employees, other affiliated persons, or those who support its activities

Center address: 15 Ha'ari Street, Jerusalem, Israel
Telephone: 02 5671818 Fax: 02 5671919
Email: info@taubcenter.org.il Website: www.taubcenter.org.il

 Internet edition

Philanthropy in Israel: An Updated Picture

Claude Berrebi and Hanan Yonah*

Abstract

In the last few decades, philanthropy in Israeli society has changed and along with the traditional charitable giving, a new kind of modern philanthropy has emerged. This empirical study aims to profile modern Israeli philanthropists, and to present the characteristics that are linked to donation amounts, donor generosity, and the link between donor characteristics and the likelihood to donate. The study results show differences in Israeli philanthropic behavior that are linked to a variety of economic and socio-demographic variables.

First, everything else being equal, female-headed households tend to be more generous in terms of donation as a percent of income. However, male-headed households contribute higher amounts on average. Second, new immigrant philanthropists contribute significantly higher amounts than their Israel-born counterparts and long-time residents. With each additional year of residence in Israel, assimilating and integrating into its society, giving generosity decreases, converging to the level of Israel-born donors. Philanthropists originating from the United States and Western Europe contribute the highest amounts and are found to be the most generous donors compared to those originating from Asia, Africa and Eastern Europe. The gap between these groups has widened considerably since 2000. Merging philanthropists' data with the Central Bureau of Statistics *Household Expenditure Survey*, shows that philanthropist households differ from the general population in virtually every category examined. All of the results are statistically significant and robust to alternate specifications.

* Prof. Claude Berrebi, Director of Research and Chair, Taub Center Labor Policy Program; Federmann School of Public Policy and Governance, The Hebrew University of Jerusalem. Hanan Yonah, doctoral candidate, Federmann School of Public Policy and Government, The Hebrew University of Jerusalem. Thanks to Ariel Karlinsky, master's student, The Hebrew University of Jerusalem, for his excellent work as a research assistant on this project. Additional thanks to the Central Bureau of Statistics for allowing us access to data on philanthropy and philanthropists in Israel, and in particular to Ms. Nava Brenner for her assistance.

Introduction

There has been a great deal of academic literature written about the importance of philanthropic behavior to society, such as the relationship between individuals and society, individuals' solidarity with their community, the provision of a safety net to disadvantaged groups, narrowing the gaps between different socioeconomic classes, expressing and supporting individual's values, and more (Payton and Moody, 2008; Frumkin, 2006; Fleishman, 2009). While Western philanthropic patterns have been widely studied (for a thorough review see Bekkers and Wiepking, 2010; 2012), little research has been conducted in Israel. Israeli society has unique characteristics that differentiate it from other societies. A relatively young country founded by immigrants from the Jewish diaspora, Israeli society today is comprised of native-born Israelis, Jewish immigrants and various ethnic minorities. These groups differ in their traditions, institutions, cultures, and interests. The special characteristics and diversity of Israeli society, may indeed give rise to unique philanthropic behaviors and patterns of giving.

In the last few decades, a new kind of modern philanthropy has emerged (Schmid, 2011). While traditional Israeli philanthropy is considered "romantic," Zionist and nationalistic, new philanthropy is considered to be more rational and focused, based on principles of for-profit management (Shimoni, 2008; Silber, 2008). The new elite philanthropists are wealthy individuals who made their fortune in high tech and other advanced industries over the last few decades (Schmid and Rudich-Cohn, 2012). These new philanthropists bring business management patterns to their philanthropic activity, measuring and treating it no differently than their business investments (Schmid, 2011).

The field of philanthropy in Israel has drawn the attention of a growing number of scholars who are studying and characterizing giving patterns among the Israeli population (Katz, Levinson and Gidron, 2007; Shimoni, 2008; Haski-Leventhal et al., 2011; Schmid and Rudich-Cohn, 2012; Katz and Greenspan, 2015). These studies are based on representative samples and data collected from in-person interviews with donors, questionnaires and surveys. Katz, Levinson and Gidron (2007) report that married individuals, parents, and those with higher incomes were found to be more generous. The average annual contribution was about \$170 (NIS 750) per household (median of \$80, approximately NIS 350).¹ A later survey with 1,538 respondents finds that the average annual contribution in 2008 is \$430 (NIS 1,540) per household (Haski-Leventhal, Yogev-Keren and Katz, 2011). In that

1 All amounts in NIS correspond to New Israeli Shekels (NIS) in fixed 2011 NIS (i.e., in real terms). The average exchange rate for 2011 as published by the Bank of Israel was NIS 3.5781 to \$1.

study, the highest percentage of donors is among the 25-40-year-old age group. It was also found that men are more likely to donate than women, the extent of formal giving increases with age, and higher rates of donors are found among those born in America, Jews, widows and those with higher income and education levels. Katz and Greenspan (2015) report that annual giving to nonprofit organizations increases with higher levels of education, household income, level of religious observance (among Jews), and was higher among the married and respondents who expressed higher generalized trust in others.

This study aims to add depth to the study of philanthropy in Israel and to focus on the characteristics of donors and the links between demographic, social and economic variables and their likelihood to donate. In the first part of the chapter, statistical data on donors in Israel is detailed. The second part includes a theoretical analysis of philanthropic qualities. The third section describes the relationship between different donor characteristics and the extent or depth of generosity. The fourth and final section compares individual donor characteristics to the philanthropic characteristics of households in Israel (as characterized by the Central Bureau of Statistics, *Household Expenditure Surveys*).

Data and methodology

The methodology used in this study is based on the analysis of a unique panel dataset of all donors who claimed tax credit for contributions to recognized non-profit organizations in Israel during at least one of the following years: 1999, 2000, 2004, 2006-2011.^{2,3} Philanthropic information was obtained and merged from two sources: (1) the Israel Tax Authority, and (2) the Central Bureau of Statistics, Population Registry.⁴ This represents the entire population of donors who claimed tax credits by submitting tax return reports during this period: 152,728 unique individuals and households.⁵

2 Recognized non-profit organizations are public institutions pursuant to Section 46 of the Israeli Income Tax Ordinance. Such recognition affords the non-profit organization a tax benefit, by way of a tax credit to donors for their contributions to that organization.

3 Years for which the Israel Tax Authority's data are available.

4 The dataset includes detailed personal information and therefore is not publicly available.

5 Three outliers (27 observations) were excluded from the data, representing two households that reported an exceptional contribution amount in a single year, and a single individual whose reported income was nearly NIS 1 billion. These contributions were exceptional compared to other amounts donated by these three households in all other years, and compared to all other philanthropists. All our results remain qualitatively similar when these three outliers are included in the analyses.

A single observation is the donor (an individual or household) in a given year. Since each donor is observed in each of the study years (except in cases of death), the total number of observations was 1,359,224.⁶ The main dependent variable is the donation in the preceding year, measured by the extent of annual monetary contribution, and by the donations share out of income, which can be interpreted as a donor's generosity.⁷ This study does not cover informal, undeclared giving such as giving to friends, family members and organizations that are not recognized for donor tax deductions.

Since the database does not include undeclared household donations, one could question whether the group who file tax claims for their donations are truly representative of all donors. Indeed, individuals and households who make non-substantial (i.e., small) donations are less likely to request tax exemptions for their donations. The focus of this study, though, is on those likely to make substantial donations.⁸

The independent variables (i.e., our explanatory variables) are based on the literature about individual and household giving, along with additional factors that are unique to Israeli society. Since the data lack information about donor education level, this variable is not included in the analysis.⁹ However, the literature documents a strong positive correlation between educational attainment and income (Angrist and Krueger, 1991; Becker, 1993; Mincer, 1974) which alleviates some of the bias concerns related to omitting this variable. The set of relevant independent variables used in this study are: individual income, spouse's income, total annual household income; income source (earned or unearned income); industry category

6 Some 3,786 donors died between 1999 and 2011; for these donors, data are available until their time of death.

7 While significant and consistent contributions by an individual will earn him or her the title of philanthropist, the extent of giving in terms of absolute amounts is not necessarily the only indication of one's generosity. Since our data do not include details about households' wealth, we used the ratio of annual household contribution as a percentage of the yearly reported income as a proxy for generosity, similar to Auten and Rudney (1990).

8 Since the decision to engage in philanthropic behavior might be endogenous, one should be careful in generalizing this study's findings to the entire population. According to the Israeli Central Bureau of Statistics (CBS) survey (2013), donations reported to the tax authorities comprised 34 percent of the total donations received by nonprofit institutions. However, since a large share (approximately half) of philanthropy in Israel originates from foreign sources that do not report to the Israel Tax Authority, it is plausible that the share of contributions by Israeli individuals and households covered in our data is significantly higher.

9 Both international and Israeli studies find education to be positively correlated with giving (for example: Mesch, Rooney, Steinberg, and Denton, 2006; Bryant, Jeon-Slaughter, Kang, and Tax, 2003; Brown and Bean, 2001).

of the donor's occupation (manufacturing and high tech, banking and finance, real estate, etc.); age; age-squared; gender; marital status; number of children; country of birth and year of immigration to Israel; place of residence; father's country of birth and year of immigration; and, sector.

In order to estimate the relationship between the independent variables and donation, a series of panel OLS regression analyses were performed. These analyses included two fixed effects (residential locality and year) that mitigate many of the concerns for potential omitted variable bias.¹⁰ The regression results of the main models are presented in Appendix Table 1. All results described in the following sections are statistically significant, unless specifically indicated otherwise.

1. Donor characteristics

Table 1 presents a summary of the donor statistics. The average annual contribution was NIS 2,776 (about \$790), though the average annual donation among those making a donation every year was NIS 8,436 (\$2,400).¹¹ These figures are higher than the findings reported in previous studies (Katz, Levinson and Gidron, 2007; Haski-Leventhal, Yogev-Keren and Katz, 2011). The average annual income of donors is NIS 307,876 (about \$88,200), almost twice the annual average income in 2011 (according to Central Bureau of Statistics (CBS) data, 2012).

Almost 99 percent of all donors claiming a tax benefit are Jewish. The oldest donor is 106 years old, and the youngest is 18.¹² The median donation is 0, since many individuals are not consistent, that is they donate only once or twice in a few years and report no donations in the other years. The average donor's age is 48 and 19 percent of the donors are female.¹³ About 82 percent of donors are married and the average number of their children is 2.89.

10 All models include standard errors clustered at the individual level, which are robust to arbitrary heteroscedasticity and serial correlation.

11 All the amounts in NIS correspond to New Israeli Shekels (NIS) in fixed 2011 NIS (i.e., in real terms). The average exchange rate for 2011 as published by the Bank of Israel was NIS 3.5781 to \$1.

12 The youngest individual in our dataset is 7-years-old. Children younger than 18 do not submit tax returns. However, since our data consists of a full and complete panel, it includes young donors who claimed tax credits in the later waves of the panel.

13 In the case of household donations, gender is associated with the head of household.

Almost 88 percent of all donors reside in urban localities (not presented in the table). About 34 percent were born outside Israel, originating in approximately equal proportions from each of the three groups: Africa and Asia; the Americas, Oceania and Western Europe; and Eastern Europe (not in the table). Some 93 percent of donors report having an earned income (i.e., active income such as salary or business income) and the mode or most frequently recorded industry category was organizations (e.g., NGOs, NPOs, and public organizations).

Table 1. Philanthropy statistics, 2011

	Average	Standard deviation	Minimum value	Maximum value	Median
Donation	2,776	60,611	0	21,291,725	0
Income	307,876	555,294	-33,521	157,544,672	211,245
Age	48.61	14.57	7	106	49
Number of children in household	2.89	2.01	0	21	3
Family status (married=1)	81.68%				
Income source (earned income=1)	93.48%				
Gender (female=1)	19.10%				
Sector (Jews=1)	98.97%				
Industry category:					
Manufacturing/High tech	3.16%				
Banking/Finance	2.74%				
Real estate	25.66%				
Organizations	34.77%				
Other	33.67%				
Number of observations	1,359,224				

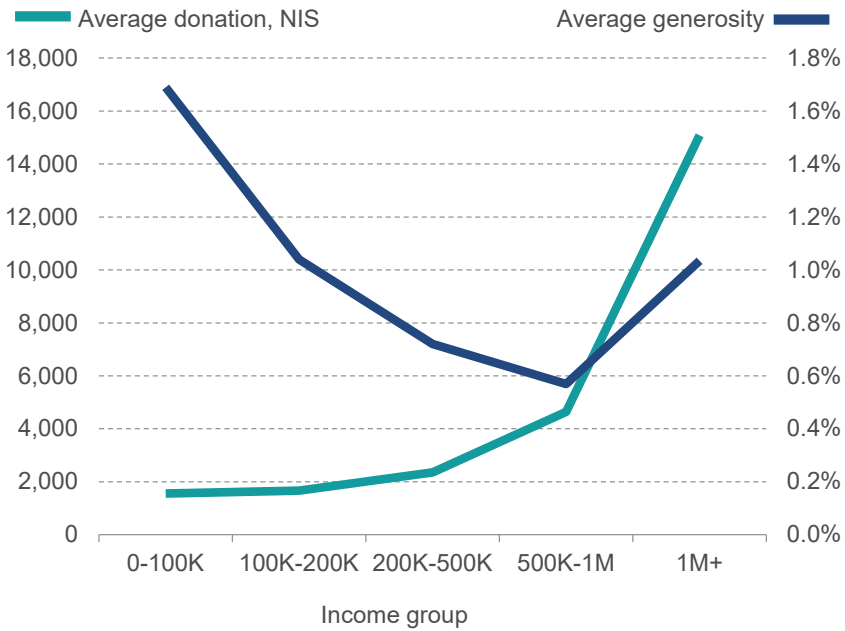
Notes: Panel dataset of 152,728 individuals and households who filed a tax claim including tax credit for a contribution at least once during the years 1999, 2000, 2004, 2006-2011. Monetary variables are NIS 2011.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

2. The link between philanthropic characteristics and donation variables: A theoretical analysis

Figure 1 shows that among donors who reported a positive income, those with higher income contribute higher amounts on average than donors with lower income. Those with lower incomes, though, were found to be more generous on average (when contributions are measured as a percentage of income). It is interesting to see that as income rises above NIS 500,000, there is a moderate increase in generosity.

Figure 1. Extent of giving and generosity by income level



Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

In geographic terms, donors residing in small localities in the center of Israel, such as Kfar Shmaryahu and Savyon, were found to be the most generous (measured by total donations of residents as a percent of their total income) (Figure 2). This is somewhat surprising since many of the

wealthiest households in Israel reside in these towns.¹⁴ Interestingly, further examination of the 10 localities with the most generous residents shows that they include mostly small towns in the lower range of the socioeconomic index in Israel (such as Modi'in Illit, Hatzor HaGlilit and Tiberias) (CBS classification, 2008). These towns are characterized by smaller communities, a higher percentage of children under 20-years-old, and a higher level of religiosity, characteristics that, according to the literature and our analyses, are positively correlated with charitable giving. Haski-Leventhal, Yogev-Keren and Katz (2011) show that religiosity is positively correlated with the likelihood to give, and we show in the next sections of this study that a greater number of children is related to greater generosity and is statistically significant. There is a relatively high overlap between the level of donations per capita (or per donor) and generosity, with a few additional localities such as Herzilya and Ramat HaSharon – secular localities with low fertility rates.

Despite their political, economic and social importance, Jerusalem and Tel Aviv-Yafo – the most populous cities in Israel – are not among the localities with the most generous residents. However, while comprising only 1 percent of Israel's territory and about 15 percent of the adult population, they are responsible for the highest total amount of contributions during the sample period: 34 percent of total contributions in Israel (CBS, *Statistical Abstract of Israel 2012*).

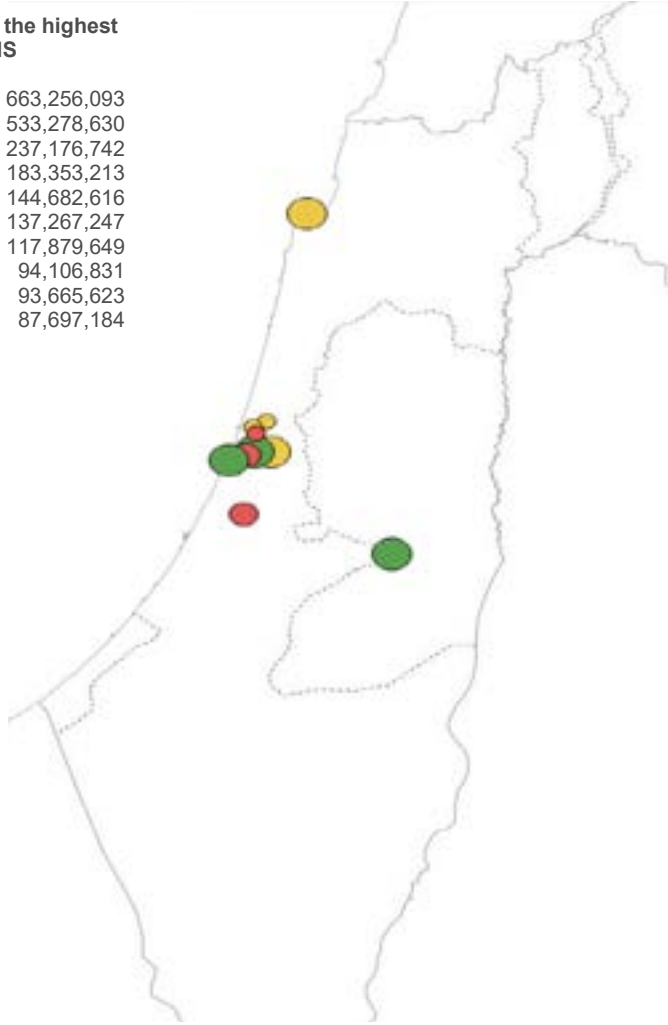
¹⁴ As presented in Figure 1, higher income donors were found to be less generous (measured by donation as percentage of income).

Figure 2. Geographic distribution of donor localities

Ten localities with the highest donation levels, NIS

Jerusalem	663,256,093
Tel Aviv-Yafo	533,278,630
Bnei Brak	237,176,742
Herzliya	183,353,213
Petah Tikva	144,682,616
Ra'anana	137,267,247
Haifa	117,879,649
Rehovot	94,106,831
Ramat Gan	93,665,623
Ramat HaSharon	87,697,184

- High
- Medium
- Low
- Locality size



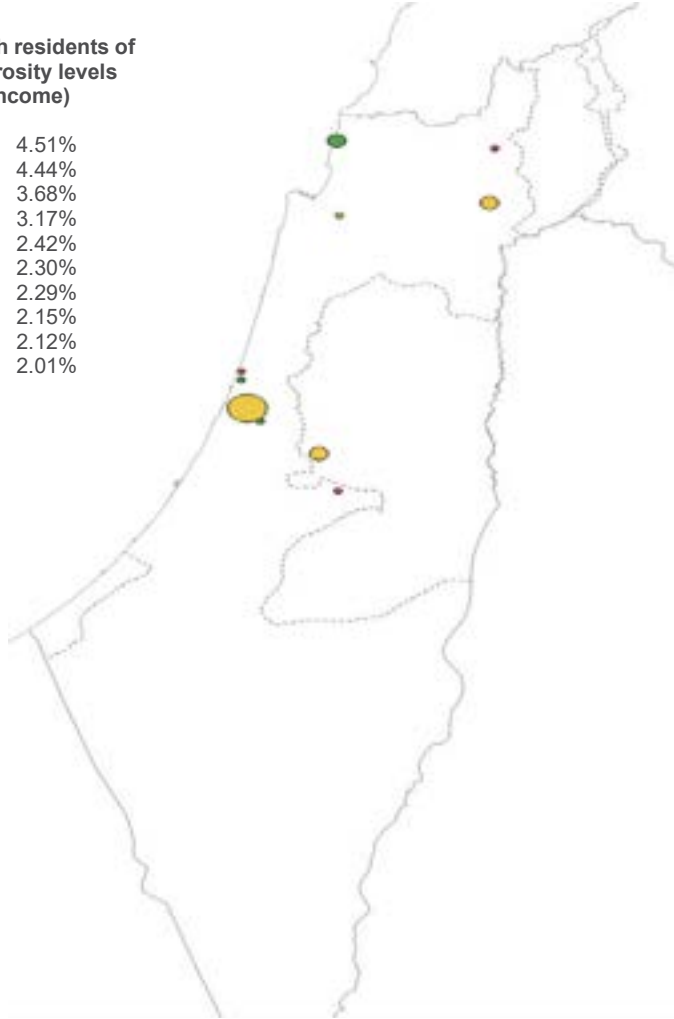
Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Figure 2. Geographic distribution of localities and levels of generosity

Ten localities with residents of the highest generosity levels (as a percent of income)

Nahariya	4.51%
Kfar Shmaryahu	4.44%
Savyon	3.68%
Bnei Brak	3.17%
Tiberias	2.42%
Rekhasim	2.30%
Modi'in Illit	2.29%
Hof HaSharon	2.15%
Kiryat Ye'arim	2.12%
Hatzor HaGlilit	2.01%

- High
- Medium
- Low
- Locality size



Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Table 2 presents summary statistics of trends in philanthropy over the sample period. While the number of donors claiming tax credits more than doubled over the years (from 29,419 individuals in 1999 to 61,036 in 2011)

total donations almost quadrupled (in real terms) during that period, possibly linked to improvements in the overall GDP. It is interesting to note a drop in almost every donation indicator in 2008, and to some extent in 2009 as well, despite a continued moderate increase in the number of claimants in these years. In 2010, there was somewhat of a recovery in the donation indicators and 2011 measures exceed all previous years in our dataset. It is possible that these trends are due, at least partially, to the 2008 global financial crisis.

Table 2. Philanthropy trends summary statistics

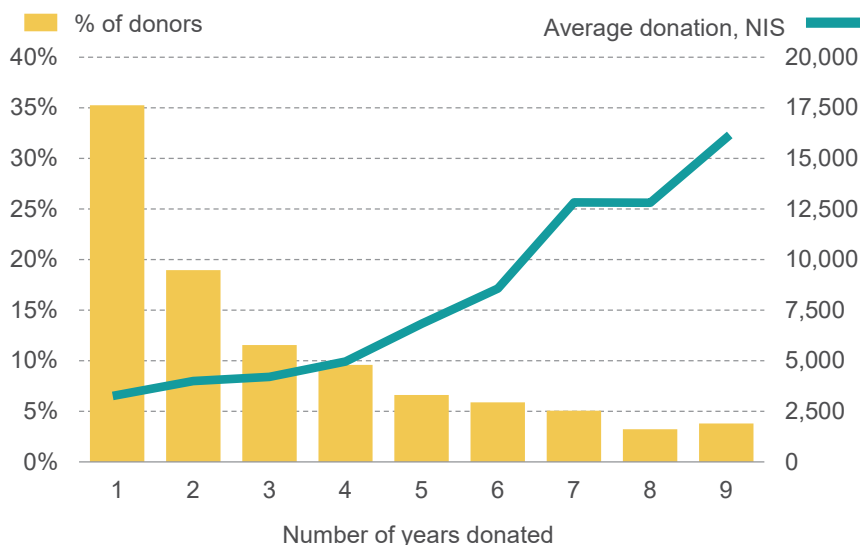
Year	Number of claimants	Average donation	Donations to income	Average donation to GDP per capita	Total donations
(1)	(2)	(3)	(4)	(5)	(6)
1999	29,419	5,214	0.36%	5.29%	153,381,203
2000	33,532	5,641	0.37%	5.40%	189,140,881
2004	42,115	7,111	0.70%	6.92%	299,461,345
2006	49,603	9,070	0.95%	8.29%	449,878,212
2007	59,820	9,252	1.11%	8.11%	553,453,711
2008	60,505	7,997	0.99%	6.93%	483,839,997
2009	65,650	7,545	1.06%	6.57%	495,348,700
2010	72,456	7,478	1.21%	6.29%	541,831,634
2011	61,036	9,941	1.35%	8.11%	606,778,283
Number of observations					1,359,224

Notes: Panel dataset of 152,728 individuals and households who filed a tax claim including tax credit for a contribution at least once during the years 1999, 2000, 2004, 2006-2011. Monetary values are in 2011 NIS.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Figure 3 presents findings about donor consistency. The average contribution increases as consistency increases, as well as other donation parameters (median contributions and contribution as percentage of income, not presented in the figure). Only 3.8 percent of the donors (5,820 households) contributed in all nine years of the sample period while 54.2 percent contributed only once or twice. Individuals and households who were the most consistent givers contributing each year (i.e., contributed in all nine years of the sample period) gave the largest annual average donation amount, and, consequently, contributed the most in total (not presented).

Figure 3. Philanthropy consistency, number of years donating and average donation



Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

To better understand the consistency patterns while controlling for other observable characteristics, donor consistency was also analyzed using Poisson and negative binomial models. In these models, the dependent variable is the number of years contributions were made by a donor during the sample period (given the value between 1 and 9). The results, presented in Appendix Table 2, show that donors with high income from work and donors in the real estate sector are all more likely to be consistent donors. Other variables that were found to be positively related to consistency are a higher number of children, donor age, being single, Jewish, and originating from North and South America and Western Europe.

Figures 4 and 5 present donors' contributions as a percent of income and annual average contributions. Women are found to be more generous, while men contribute higher amounts on average.¹⁵ The literature about gender

¹⁵ In the case of households, measuring gender philanthropic behavior is a challenge, since it is not possible to retrieve from the data each spouses' weight regarding the decision about the household's donation. In the next section, we used several alternative models to measure female versus male generosity. These models control for marital status, number of children and other covariates that could potentially have a differential effect on gender contribution patterns.

differences in giving is mixed. According to Bekkers and Wiepking (2010), empathy is one of the mechanisms that drives charitable giving, a trait that is more strongly developed among women according to many psychological studies (Lennon and Eisenberg, 1987; Davis, 1980; Hoffman, 1977). A further discussion of gender differences in charitable giving, based on the results of our econometric analysis, is presented in the next section.

Figure 4. Average donation by gender

In 2011 shekels

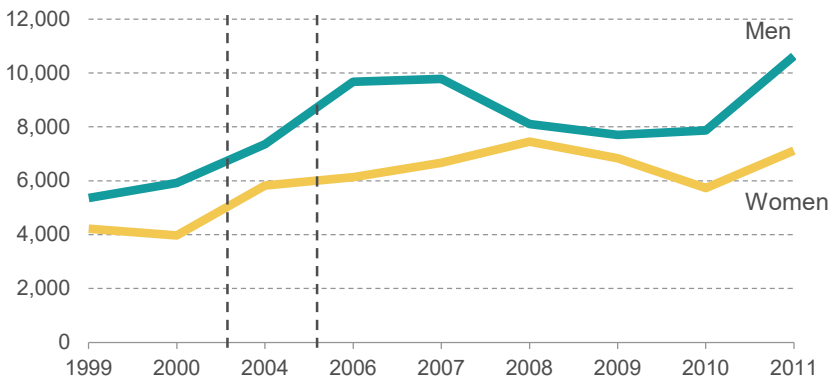
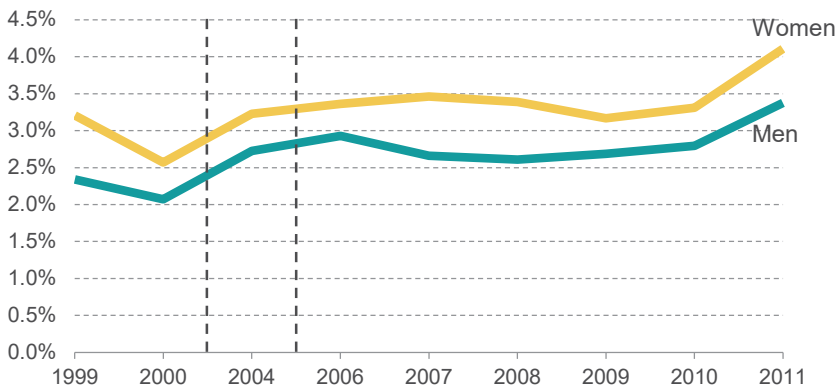


Figure 5. Generosity by gender

Donation as a percent of annual income

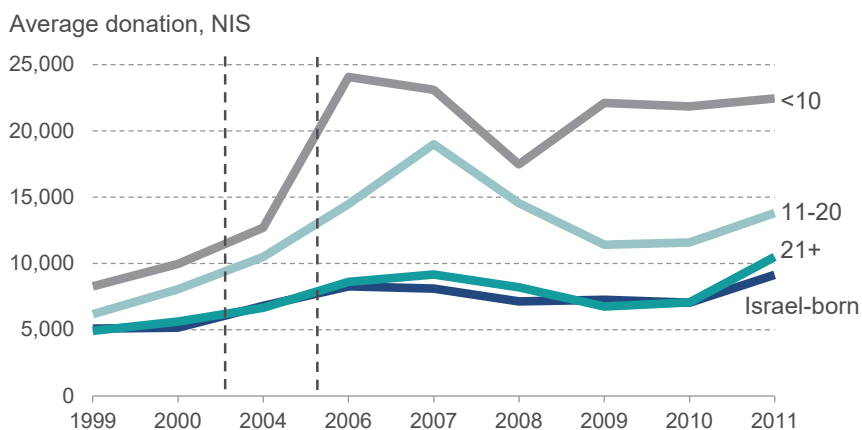


Notes for both figures: The database includes only the years specified in the figure; data were not available for 2001-2003 and 2005.

Source for both: Claude Berrebi and Hanan Yonah, Taub Center | Data for both: CBS, Population and Immigration Authority; Israel Tax Authority

On average, donors who immigrated to Israel contribute larger amounts relative to Israel-born donors, and are also found to be more generous. Moreover, recent immigrants contribute larger amounts on average and are found to be more generous than veteran former immigrant/long-time residents. Figures 6 and 7 show the donation size and generosity level as a share of income as a function of the number of years residing in Israel since immigration.¹⁶ While recent immigrant giving indicators are highest, the giving patterns of those who have resided in Israel for a period of 21 years and longer is similar to the level of their Israel-born counterparts. A possible explanation is that immigrants bring with them a different giving culture that gradually converges to the level of the local culture, potentially indicating assimilation and integration into the host society. A more detailed analysis of immigrant philanthropists is presented in Section 3.

Figure 6. Immigrants' average contribution by number of years since immigration



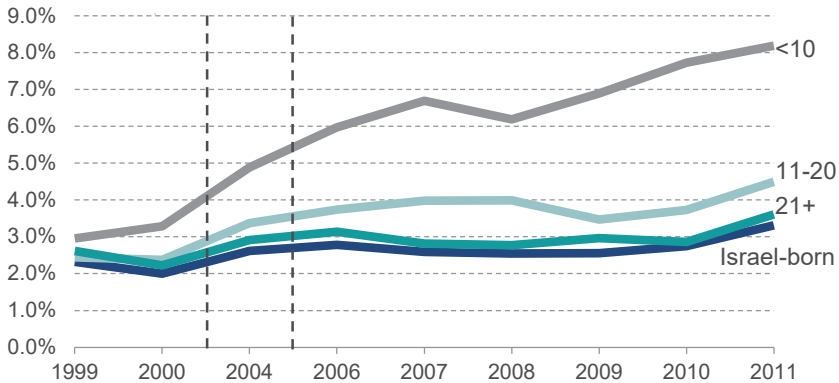
Notes: The database includes only the years specified in the figure; data were not available for 2001-2003 and 2005.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

¹⁶ Figures 6 and 7 do not control for country of origin or additional covariates that could potentially affect generosity and the tendency to contribute as a function of the duration of residency in Israel. In the next section, we present multivariate analyses that control for all of these factors.

Figure 7. Immigrants' generosity by number of years since immigration

Donation as a percent of annual income



Notes: The database includes only the years specified in the figure; data were not available for 2001-2003 and 2005.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

3. The link between philanthropic characteristics and donations: A multivariate regression analysis

The previous section showed the analysis of philanthropic characteristics from the raw data. An analysis of this type can be misleading due to the existence of unobserved variables that are linked to donation level and generosity in tandem with the variables that have been examined and their interaction. This section examines the relationship between philanthropic characteristics and donation variables – the size of the donation and its share out of income (generosity) while controlling for individual variables. In order to estimate the relationship between the independent variables and the donation, panel OLS regression analyses were run. These analyses include two fixed effects (residential locality and year) that minimize potential omitted variable bias.¹⁷ Results of the regressions of the main models are presented in Appendix Table 1 and this section will review the main findings. Each subsection presents the net relationship of the independent variables; that is, controls for the influence of the other variables.

¹⁷ Households with more than one source of income were categorized according to the single highest income.

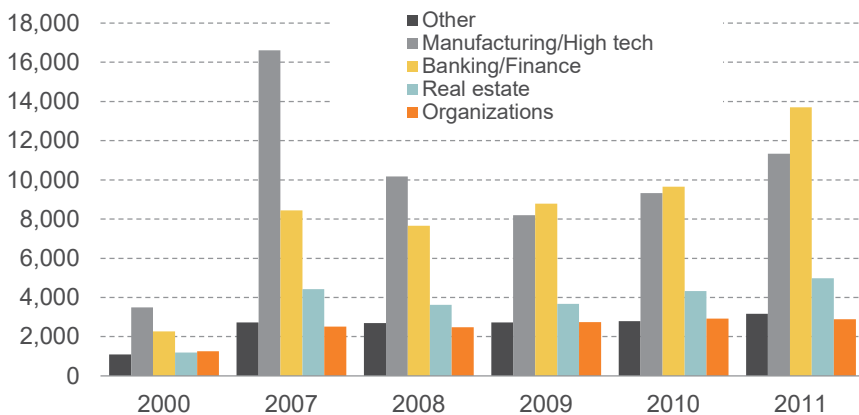
Income. Higher income is correlated with the extent and level of generosity. The resulting income coefficients are positive and statistically significant in all specifications (the income variable is defined as the total reported annual household income in NIS thousands). The relationship between income and contribution is non-linear. Contribution amounts increase with income, at a decreasing rate up to an annual income of NIS 76 million. At this point, a further increase in income decreases the net contribution amounts. Although the monetary magnitude of the coefficients is relatively low (4.047), an increase of NIS 10,000 in annual income raises the average contribution by about NIS 40. This result is consistent with the vast international literature investigating the relationship between income and giving (for a thorough review see Bekkers and Wiepking (2010, 2012)). As noted earlier, including the income variable reduces concerns related to the lack of an education variable, since, according to previous studies, the two are positively correlated both with giving and with one another (Mesch, Rooney, Steinberg, and Denton, 2006; Bryant, Jeon-Slaughter, Kang, and Tax, 2003; Angrist and Krueger, 1991; Becker, 1993; Mincer, 1974).

Income Source. This variable differentiates between earned income (active income) and unearned income (passive income) sources. Earned income includes salary and business income, while unearned income includes all other sources of income such as capital gains, dividends, rent income, interest, etc. Differentiating between earned and unearned income allows us to understand to what extent donors are sensitive to income volatility. While some sources of unearned income such as rent income or pension annuity are characterized by a relatively stable stream of cash flow, earned income might be subject to temporal financial fluctuations such as bonuses, salary raises or cuts due to changes in business revenue or other business factors.

Philanthropists with active income contribute on average NIS 1,285 (\$370) more than those with passive income, but are found to be less generous. A possible explanation for this finding could be related to the higher variance and uncertainty in income among donors with active income. While these donors have, on average, a higher level of income (over 30 percent higher than those with passive income), and are contributing on average higher amounts, they tend to be more sensitive to the potential fluctuation and risks of their earnings, and, therefore, contribute a smaller portion of their income. This finding is in line with previous studies about permanent versus transitory income, showing that greater variability in the flow of annual income has a negative effect on giving (Hughes and Luksetich, 2008).

Industry category. Philanthropists whose occupation is classified in the manufacturing and high tech sector and in the banking and finance sector, contribute significantly higher amounts than donors from any of the other sectors, and also found to be more generous as well. These donors contributed on average NIS 7,290 (\$2,100) and NIS 5,874 (\$1,680), respectively, more than other philanthropists (reference category).¹⁸ Figures 8 and 9 present differences in giving patterns between donors from the main industry categories over time.¹⁹ These results support previous studies' findings about the "new philanthropy" in Israel and, particularly, about the role of "new philanthropists," i.e., wealthy Israeli individuals who made their fortune in the high tech and other advanced industries (Shimoni, 2008; Schmid and Rudich-Cohn, 2012).

**Figure 8. Average donation by industry classification of donor
In 2011 shekels**



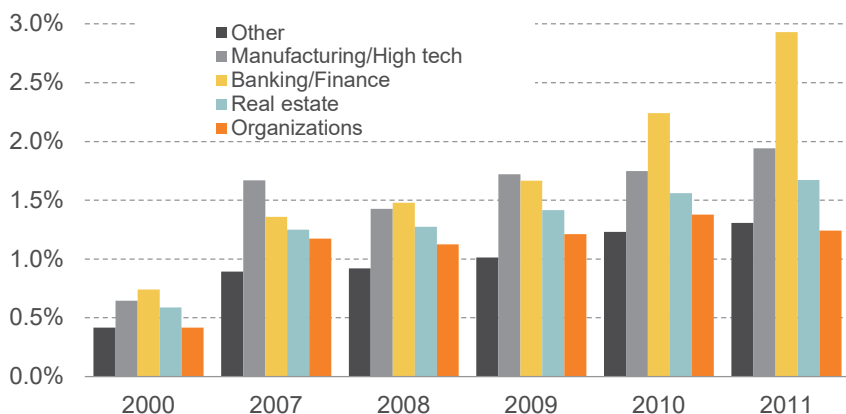
Notes: Marginal values for industry classification are based on a multivariate regression model of industry category and year interaction with controls for: income, children, age, gender, marital status, minority status, immigration status, ethnic origin, income source, year, and locality. The projections are for the years specified in the figure.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

18 The reference sector is all other business and economic classification sectors (i.e., services, agriculture, commerce, tourism, etc.).

19 Figures 8 and 9 and those following present the estimated marginal values for the variables depicted, resulting from an estimated model similar to those in Appendix Table 1, including an additional inclusion of a time by variable interaction in order to estimate the variable over time.

Figure 9. Generosity by industry classification of donor
Donation as a percent of annual income



Notes: Marginal values for industry classification are based on a multivariate regression model of industry category and year interaction with controls for: income, children, age, gender, marital status, minority status, immigration status, ethnic origin, income source, year, and locality. The projections are for the years specified in the figure.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

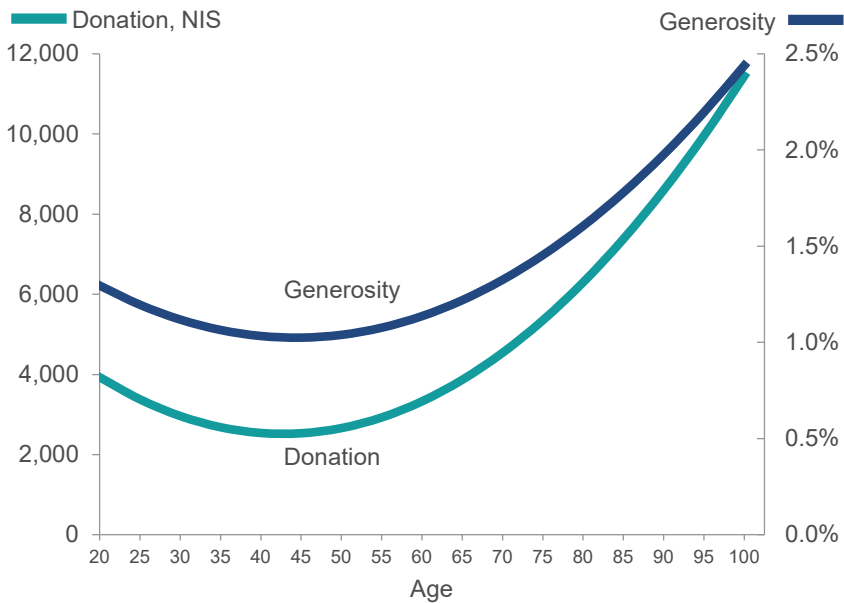
Interestingly, the coefficient of philanthropists classified in the organizations sector, which includes the non-governmental and non-profit organizations in Israel, is not statistically significant. This category includes recognized organizations that are the beneficiaries of the philanthropists' contributions; hence it is somewhat surprising that despite their awareness of the importance of philanthropic activity, these donors do not contribute more than other philanthropists both in absolute and relative terms.

Age. The relationship between age and philanthropy is non-linear. While the coefficient of age is negative and statistically significant, the coefficient of age squared is positive and statistically significant. Figure 10 presents the overall estimated relationship between the philanthropic behavior of donors and age. The results show that philanthropists up to 43-years-old decrease their formal giving each year both in absolute terms and as a percentage of income, and from 43-years-old and on, they increase their charitable giving with each additional year.²⁰

²⁰ Age of children could potentially affect giving patterns as the children get older and household expenses increase and later decrease. Unfortunately, information regarding the age of children is unavailable due to privacy concerns.

The philanthropy literature examining the relationship between age and giving is not definitive. While some researchers found that this relationship is positive, others found a negative relationship, a decrease in giving after a certain age, or no significant relationship at all (for a thorough review see Bekkers and Wiepking (2010; 2012)). This study reveals the unique finding of a U-shape relationship between age and donation, and could potentially explain some of the contradicting results in the literature, as it shows different patterns depending on the age range examined.²¹

Figure 10. Donation and its portion out of income by donor age
Projected values from multivariate regression



Notes: Marginal values for age, based on a multivariate regression model (Appendix Table 1) with controls for: income, children, gender, marital status, minority, immigration, ethnic origin, income source, industry, year, and locality.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

²¹ Care should be taken when attempting to generalize these results outside of Israel, since Israeli demographics are characterized by a comparatively large number of children and a relatively young age at which people start having children.

Marital status. The estimated coefficients for marital status show that marriage is negatively linked to donation level, and widowed philanthropists are found to be the most generous. Marriage is found to be positively related to giving in most studies, while a number of others have found no relationship between marital status and giving (Wiepking and Bekkers, 2012). It is important to mention that the positive relationship was found in cross-sectional studies, that is, studies which are conducted at a single point in time. The current research is a panel study that follows individuals and households over time, as well as changes in family status over time. Since the status of being married often includes having children, it is possible that the mixed results in these studies derive from difficulties in distinguishing between the effect of marriage and the effect of having children on giving. Thus, when controlling for the number of children, the marriage coefficient becomes not statistically significant.²² Using multivariate regressions to analyze the panel dataset allows an examination of changes in giving patterns by donors over a period of time and distinguishing between changes in marital status from changes in the number of children.

Children. Having more children is positively associated with philanthropic behavior across all models and specifications. The marginal effect of an additional child is an additional NIS 542 (about \$155). The number of children in a household is positively related to philanthropy in most international studies that include this variable (for a thorough review, see Bekkers and Wiepking (2010, 2012)).

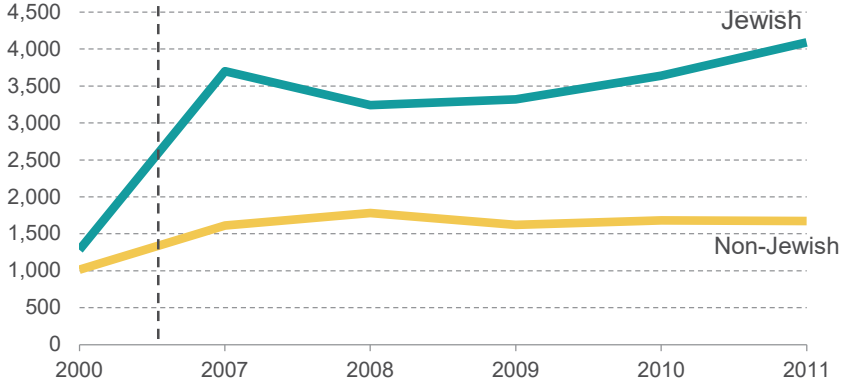
Children and marital status. Column 1 of Appendix Table 3 presents the results of the interaction model between the number of children (a continuous variable) and marital status (a binary variable). A rise in the number of children increases the average donation level, while being married indicates a decline in the average amount donated. However, the positive and statistically significant coefficient of the interaction between these two variables shows that every additional child has a positive marginal effect on married households. From the second child on, married philanthropists contribute, on average, a larger amount than non-married donors, as well as more than households with fewer children. In other words, the observed increase in giving by larger families is likely to be related to the number of children and not necessarily to the effect of being married.

²² Regression table is available upon request.

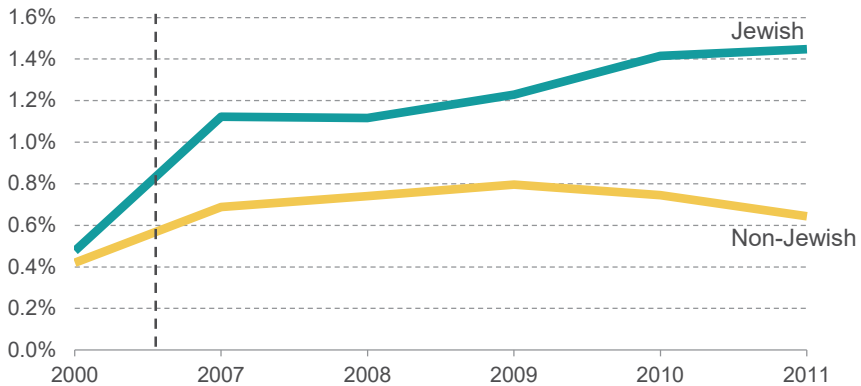
Minority status (non-Jewish religious affiliation). Arab Israelis are the largest of all religious-based minority groups (about 20 percent of the population). The estimated coefficients for minorities show that Arab Israeli minority philanthropists give lower donations and tend to be less generous than the Jewish majority (Figures 11 and 12). Former studies analyzing the differential patterns in giving among minorities in Israel are rare, and those that exist show that the rate of formal contributions among Arab Israelis is significantly lower than among the Jewish population (Zeidan and Ghanem, 2000; Zeidan, 2005). The gap in giving patterns between Jewish and Arab Israeli philanthropists may be related to political and cultural factors. Arab society is characterized by a collectivist orientation that emphasizes groups of belonging (family structure, tribes, and ethnic groups), and a significant portion of philanthropic activity is traditionally done through informal channels that are not reported to the tax authorities and, therefore, cannot be detected in this study. Philanthropic relationships in the Arab society are based on personal ties, in contrast to Western societies where these relationships tend to be more impersonal and individualistic (Zeidan and Ghanem, 2000). Moreover, Zeidan (2005) argues that the small number of Arab non-profit organizations relative to the number of Jewish non-profit organizations allows for fewer opportunities for formal giving. However, one could argue that thousands of qualified non-profit organizations whose mission statements are apolitical exist in Israel, and could potentially receive contributions from both majority and minority philanthropists. This raises fundamental questions about the relationship between the minority and the majority populations in Israel, and the minorities' identification and integration into the Israeli society. Berrebi and Yonah (2016) show that minorities in Israel give less, on average, than the Jewish majority and, during times of stressful events (i.e., terror attacks), the Arab minority may express less solidarity and empathy, and is likely to reduce monetary contributions even further.

Figure 11. Predicted average donation by minority status

In 2011 shekels

**Figure 12. Predicted generosity by minority status**

Donation as a percent of annual income



Notes for both figures: Marginal values for religious affiliation, based on a multivariate regression model of minorities and year interaction with controls for: income, children, age, gender, marital status, immigration, ethnic origin, income source, industry, year, and locality. The projections are for the years specified in the figure.

Source for both figures: Claude Berrebi and Hanan Yonah, Taub Center | Data for both figures: CBS, Population and Immigration Authority; Israel Tax Authority

Religiosity. Interestingly, the link between religiosity and philanthropic behavior is critically dependent on the definition of the former. Overall, contributions and generosity are seen to increase with the religiosity level

of the donor's residential locality. However, a closer look shows that the positive correlation can be attributed to belonging to the Haredi (ultra-Orthodox) population as opposed to being "religious" (National Religious). Since the data do not include information about the individuals' level of religiosity, the 2006 Knesset election results data serve as a proxy. Election data indicate the share of voters voting for the religious (Orthodox) and the Haredi parties in each locality.^{23, 24} The results are presented in Appendix Table 4, showing that donors who reside in localities with a higher share of Haredi population tend to contribute the highest amount on average, and are found to be the most generous.²⁵ The tendency to contribute higher amounts does not hold for donors who reside in localities characterized by a higher share of religious Israelis who are not Haredi (i.e., the National Religious population).

Gender. In each household, one member is categorized as the head of household. In this study, categorization was according to the Israeli Tax Authority. Household members can request a change from the Tax Authority at any time, although it seems that very few people ever do so. Female-headed households are found to be more generous than male-headed households, although male-headed households contribute higher amounts on average. The international findings about gender differences in giving are not definitive. One explanation for the increased female generosity might relate to empathic concern, which, according to psychological research, is more strongly developed among women (De Wit and Bekkers, 2016). Mesch et al. (2011) and Wilhelm and Bekkers (2010) show that this trait indeed enhances prosocial behavior.

In married households, it is impossible to know from the administrative data whether a decision about a donation was made by one of the spouses, jointly by both, or independently by each. According to Andreoni, Brown and Rischall (2003), household decisions represent a compromise between the partners, but the choice tends to be closer to the men's preferences. When men earn more than women, they appear to have most of the bargaining

23 Accordingly, one should be careful with the interpretation of these results, since we cannot ascertain that the higher share of contributions associated with Haredi localities is, in fact, the outcome of higher contributions by Haredi individuals and households (i.e., there is a potential ecological fallacy concern).

24 CBS - Measurement and Estimates of the Population of Ultra-Orthodox Jews, 2011: <http://www.cbs.gov.il/www/publications/tec25.pdf>.

25 These models do not include locality fixed effects to avoid collinearity with the religious community variable.

power. Since the head of household in our data was selected either by the Tax Authority or per household request, the results are subject to a potential selection bias.²⁶ To reduce this effect, six alternate definitions for the head of household gender assignment are used in this study. The first model, based on the Tax Authority, is the original recorded categorization of the gender of the head of household. This is our base model (Column 1 in Appendix Tables 1 and 5). The second model uses the same gender for the head of household as in the original Tax Authority data, while the income in the denominator of the generosity variable includes only the head of household's reported income. This model is based on the assumption that the decision to contribute is made by the head of household in proportion to his or her individual personal income and not the overall household income. In the third model, the gender head of household is reclassified and determined according to the spouse whose income is higher, assuming the spouse with the higher income is more dominant in financial decisions. The fourth model is similar to the third, but the income in the denominator of the generosity variable includes only the head of household's reported income. In the fifth model, married households are divided into two separate observations, and the income in the denominator of the generosity variable includes each individual's reported income. The last model restricts the analysis to the non-married sub-sample. These results are presented in Appendix Table 5 and are in line with the main model results, showing that, across all variations, female-headed households are more generous than male-headed households.

Gender and marital status. Column 2 in Appendix Table 3 presents the interaction between the variables of being male and married. As shown in the previous section, men are found to be less generous than women, however, the coefficient of the interaction between male and married variables is positive and statistically significant. One possible explanation for this result is that marriage has a marginal positive effect on men, as they contribute on average a higher percentage of their income compared to non-married men. Another interpretation is that married women, while more generous than men (either married or single), are less generous relative to widowed women (not shown in the table).

Gender and children. Column 3 of Appendix Table 3 presents the interaction between the variables of being male and the number of children. As discussed

²⁶ A couple can determine which spouse will be registered as head of household as long as the chosen spouse's income is at least 25 percent or more of the other spouse's income. Choosing head of household may have tax implications, therefore such a decision might be made based on a tax optimization plan.

previously, while men were found to be less generous than women, number of children is positively linked to generosity. The interaction coefficient between these two variables (positive and statistically significant) shows that the number children has a marginal positive effect on men. In fact, men's generosity increases with each additional child, so that from the seventh child and on, the gender generosity trend inverts and men start to contribute a higher percentage of their income than women.

Immigration. According to a number of philanthropy studies in the U.S., Australia and Switzerland, immigrants tend to give less and are less likely to make a formal contribution. As time passes, immigrants change their giving and volunteering patterns; their contributions increase with the number of years residing in the host country, and their charitable giving levels converge to the level of the native donors (Joseph, 1995; Mata and McRae, 2000; Osili and Du, 2005; Brown and Bean, 2006; Thomas, 2012; Nesbit, Christensen, Tschirhart, Clerkin, and Paarlberg, 2013). In Israel, the last large influx of immigrants occurred between 1990 and 2000. About one million immigrants, most of them Jews from the former Soviet Union, immigrated to Israel, making up about 20 percent of the population at that time (CBS, 2012). Since 2001, positive immigration flow to Israel continues every year, but in smaller numbers (in total about 240,000 individuals over the entire period according to the CBS, 2016), and the share of immigrants originating from wealthy countries such as the United States, Great Britain and France has increased significantly. As shown in the theoretical analysis of the data in Section 1, philanthropy patterns of long-time residents (living in Israel 21 years or more) are very similar to those of donors who are Israel-born. The assumption that emerges from this finding is that after an extended time in the host country, immigrants gradually gain language skills and adopt local culture, and become integrated into the host society (Chiswick, 1978).

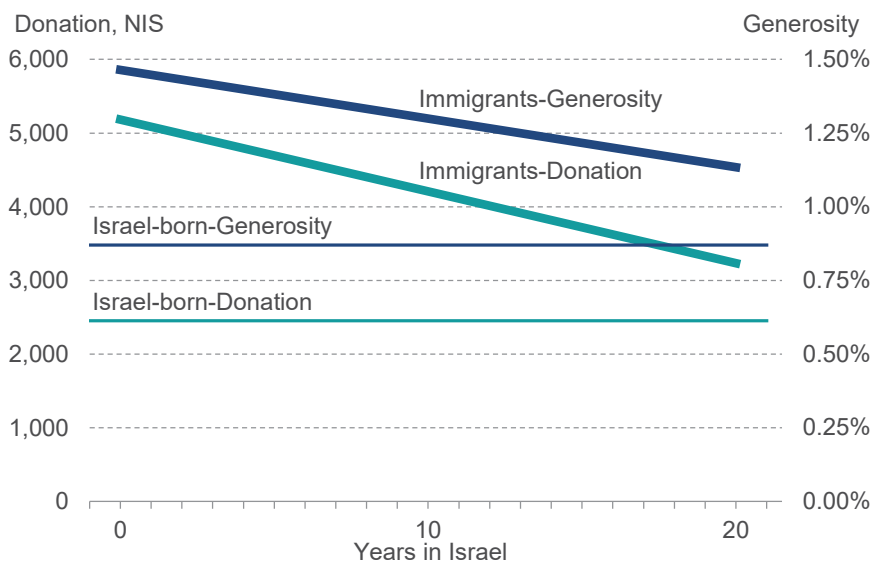
Immigration is a continuous variable whose value ranges between 1 and 20 for individuals and heads of households who were born outside Israel, based on the number of years they have resided in Israel since immigration. Immigrants who had resided in Israel for more than 21 years during the sample period were classified in the same group as Israel-born individuals. The explanatory variable of immigrant is binary with 0 assigned to a philanthropist who is Israel-born and 1 assigned to one born outside of Israel.

Columns 1 in Appendix Tables 6 and 7 present the coefficients for immigrants and show the influence of the variable on donation levels and generosity respectively. The results are positive and statistically significant in all the models and indicate that immigrant philanthropists contribute on average a higher amount — NIS 1,123 (\$320) — relative to Israel-born philanthropists (Panel A, Column 1).

The coefficients for immigration in the main model (Appendix Table 1) are negative: that is, as immigrant donors reside longer in Israel, their giving patterns decrease each year, converging to the giving level of Israel-born donors (Figure 13). The results are robust across alternative variations for immigration as presented in Panel A in Appendix Tables 6 and 7.

Figure 13. Average donation and generosity for immigrants versus Israel-born donors

In 2011 shekels, donation as a percent of annual income



Notes: Marginal values for immigration, based on a multivariate regression models (Appendix Table 1) with controls for: income, children, age, gender, marital status, minority status, ethnic origin, income source, industry, year, and locality.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

A possible explanation for this phenomenon could be the aspiration of recent immigrants to accelerate their assimilation and integration into the host society. By contributing significant amounts, recent immigrant philanthropists gain recognition from the general public and develop a social network with other local elite groups that can aid in their integration process. Another possible explanation is that recent immigrant philanthropists bring with them a philanthropic culture and tradition which, on average, is more generous than the local trend in Israel (the host country). As time

passes, immigrant philanthropists assimilate into the local society, adopt local philanthropic norms, and the level of their contributions converges to that of local philanthropists. Alternative explanations could be related to a possible decline in the wealth of the donors over the years,²⁷ or to tax planning of donors, who, although residing in Israel, prefer to donate in their country of origin.²⁸

Age at immigration. Panel B of Appendix Tables 6 and 7 presents the relationship between age at immigration and philanthropy. The coefficient for the explanatory variable “age at immigration” is positive and statistically significant showing that the extent of giving and generosity increase as the age at immigration increases. These findings support the vast literature about immigrant assimilation showing that the degree of integration varies inversely with age at immigration, and the age at arrival is a dominant factor determining the outcomes of immigrant integration (Friedberg, 1992; Borjas, 1995; Schaafsma and Sweetman, 2001; Gonzalez, 2003; Myers, Gao and Emeka, 2009).

Ethnicity (among Jewish donors). The Jewish population in Israel is made up of two major ethnic groups, referred to by social scientists as “Westerners” (European and American origin) and “Mizrahim” (African and Asian) (Cohen and Haberfeld, 1998). Ethnic origin is an important and sensitive subject in the Jewish world in general and specifically in Israel. Tensions and conflicts among the two Jewish ethnic groups have shaped the way Israeli society has developed since its early days as a state. The founding fathers of the State of Israel were Jewish immigrants who arrived from Europe at the beginning of the 20th century. For several decades, European and American immigrants comprised the majority of the Israeli political, intellectual and economic elite. Though inequality between the two ethnic groups has narrowed in certain areas, it nonetheless continues to be prevalent today (Dahan, 2013).

The ethnicity variable in this study is defined by the individual’s place of birth and the ethnic group reference variable is Israel-born philanthropists. As discussed, American and Oceania-born philanthropists contribute a significantly larger amount than any other ethnic group (NIS 4,928, or about \$1,400, more on average, see Appendix Table 1). They are also found to be

27 As noted before, our data do not include information about individuals’ wealth.

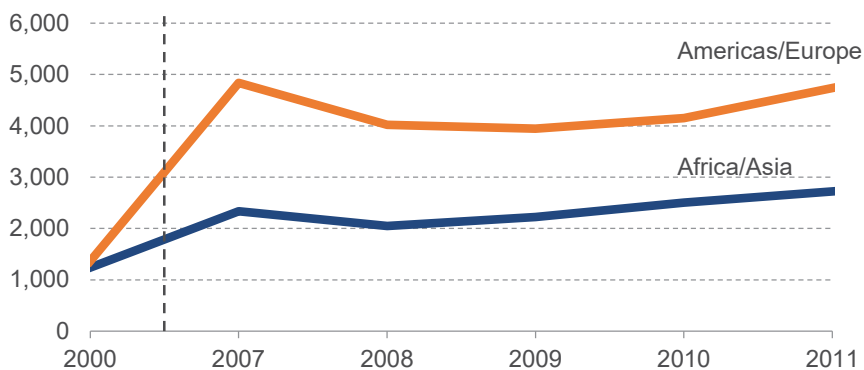
28 Immigrants who became citizens of Israel from January 1, 2007 and onwards are exempt from reporting their foreign-source income in Israel for 10 years (<https://taxes.gov.il/About/Reforms/>). In many cases this income is taxable in the country of origin. Therefore, deductible charity donations in those countries could be an alternative to donating in Israel.

the most generous donors among philanthropists. Second on the list are philanthropists who were born in Western European countries (NIS 1,146, or about \$330, more on average) who were also found to be the second most generous ethnic group of donors.

The relationship between philanthropy based on an alternative ethnic origin categorization used by the Central Bureau of Statistics was also tested. According to the CBS categorization, ethnic origin is determined by father's continent of birth for Israel-born individuals, and by continent of birth for those born outside of Israel. The results of this test are similar both in direction and magnitude to the main model's results. As shown in Figures 14 and 15, although both groups have increased their charitable contributions and generosity considerably, the gap between them has widened notably since 2000 – both in absolute and relative terms. In 2000, Jews of American and European descent contributed 10 percent more than Jews of African and Asian descent and the disparity grew to 74 percent in 2011. In terms of generosity, Jews of American and European descent were 0.11 percentage points more generous in 2000 and 0.57 percentage points more generous in 2011, with the relative gap increasing from 28 percent, in 2000, to 53 percent, in 2011.

Figure 14. Average predicted donation by donor country of origin

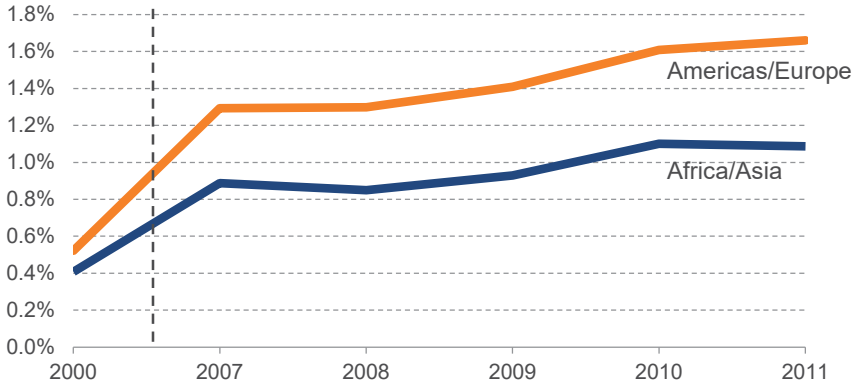
In 2011 shekels



Notes: Marginal values for country of origin, based on a multivariate regression model of ethnic origin and year interaction with controls for: income, children, age, gender, marital status, minority status, immigration, income source, industry, year, and locality. The projections are for the years specified in the figure.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Figure 15. Predicted generosity by donor country of origin
Donation as a percent of annual income



Notes: Marginal values for industry classification, based on a multivariate regression model of ethnic origin and year interaction with controls for: income, children, age, gender, marital status, minority status, immigration, income source, industry, year, and locality. The projections are for the years specified in the figure

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

4. A comparison with the general population

In the previous sections, administrative panel data were used to study variations among philanthropists. In this section, inter-group variations between philanthropists and the general population will be examined. For this purpose, donor data beginning in 2004 was merged with the annual Central Bureau of Statistics *Household Expenditure Survey*.²⁹ The *Household Expenditure Survey* is a representative sample of 6,000 households in Israel that records several socio-demographic and economic variables for each household. Although it is quite detailed, it is not as detailed as donor data due to privacy concerns. The main differences are as follows:

1. The *Household Expenditure Survey* records localities only for large cities with a population of over 50,000, while smaller localities are grouped together and categorized at the sub-district level (*nafa*).

²⁹ From 2004, the *Household Expenditure Survey* had comparable data.

2. Place of birth in the *Household Expenditure Survey* is divided into only four categories: Africa and Asia; America and Europe; Israel; and, unknown (place of birth in the donor data is recorded at the country level).
3. The number of children in the *Household Expenditure Survey* includes only those who live with the head of household (donor data includes information for all children).

Modifications to the donor data were made to adapt and reconcile the differences between the two data sources.

Table 3 shows the variable means included in a comparative analysis of philanthropists and the general population. Philanthropists differ from the general population in every measured category (all differences are statistically significant). Their mean annual income is higher (by approximately 40 percent), as well as their age and number of children. The percentage of those who are male, married, Jewish, Israel-born, and those who reported earned income is also higher among the philanthropists. While organizations is the most frequently recorded industry category among philanthropists (about 35 percent), other (i.e. services, commerce, etc.) is the most frequent among the general population (almost 71 percent).

Table 3. Descriptive statistics for donors and general population, 2004-2011

	Donors	Overall population	Difference
Number of observations	1,053,820	42,965	
Annual income, NIS	309,011	217,777	91,234
Number of children in household	3.03	1.28	1.75
Age	50.41	46.90	3.51
Gender of head of household (male=1)	80.79%	62.52%	18.27%
Minorities (Jewish=1)	98.95%	83.01%	15.94%
Income source (earned income=1)	92.76%	76.50%	16.26%
Marital status:			
Single	7.75%	17.74%	-9.99%
Married	83.30%	61.70%	21.59%
Divorced	5.78%	9.37%	-3.59%
Widowed	3.18%	11.19%	-8.01%
Place of birth:			
Americas/Europe	22.28%	30.10%	-7.82%
Asia/Africa	11.15%	13.80%	-2.65%
Israel	66.56%	56.10%	10.46%
Industry category:			
Manufacturing/High tech	3.13%	13.37%	-10.24%
Banking/Finance	2.74%	2.31%	0.43%
Real estate	25.49%	11.14%	14.34%
Organizations	34.86%	2.31%	32.55%
Other	33.78%	70.87%	-37.08%

Notes: All differences are statistically significant with $p < 0.001$. Means and differences are weighted according to probability weights.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; CBS, *Household Expenditure Survey*; Israel Tax Authority

Appendix Table 8 shows the analysis results of both Probit and Logit regression models of the merged data. In these models, the dependent variable equals 1 if the donor made a tax recognized contribution in that year (obtained from the original Tax Authority dataset) and those who did not report contributions (obtained from the *Household Expenditure Survey*) are given a value of 0. This is a classic case of choice-based sampling (whether to report donations or not). In order to yield consistent estimates, each group is weighted by the ratio of the estimated relative frequencies of the subject groups in the population to their relative frequencies in the sample (Manski and Lerman, 1977). The weight for donors is 0.961 and the weight for *Household Expenditure Survey* participants is 0.039.³⁰ In the following discussion, we present the results of the Probit and Logit regression models.

Economic variables. High income individuals, those with earned income and those in the real estate or the organizations sectors, are more likely to be philanthropists. Although the average marginal effect of the income variable is positive and statistically significant, its magnitude is relatively small, indicating that an increase or decrease in an individual's income will not significantly change his or her probability of becoming a philanthropist.

As presented in the previous section, the “new philanthropists” (those mainly categorized in the manufacturing and high tech sector) are found to be among the most generous donors, and contribute on average the highest amounts. However, when analyzed relative to individuals in this category in the general population, they are negatively associated with being a donor. In other words, individuals whose occupation is classified in the manufacturing and high tech sector are less likely to donate, even though those in the industry who do donate are found to be more significant philanthropists. The Israeli high tech sector began flourishing in the 1980's, only a few decades ago. It is possible that philanthropic behavior has not yet developed among individuals in this emerging sector to the extent it has in the more traditional industry sectors (i.e., real estate, finance and banking sectors).

The likelihood to contribute is highest (12 percent) among those whose occupation is classified in the real estate sector and in the organizations sector. As discussed previously, individuals in the real estate sector tend to contribute greater amounts, while the coefficient for donors in the organizations sector was found to be not statistically significant. It is possible that those in the real estate sector are motivated by business interests and

30 Donors' weight is calculated as the share of donors in the sample — 1,053,827/1,096,827. Before weighting, each donor's probability weight is 1, as there is 100 percent probability of being sampled, while the *Household Expenditure Survey* participant's weights as calculated by the CBS range from 10 to 2,305.

so are likely to contribute more.³¹ Heightened awareness among those in the organizations sector about the importance of philanthropy does not translate into higher contribution amounts or more generosity.

Socio-demographic variables. Being a donor is positively related to number of children, and each additional child increases the likelihood of being a donor by a marginal average effect of 3 percent. In 2011, an average Israeli family had 2.4 children (according to the CBS), and the likelihood was that the average family was 7.2 percent more likely to make a contribution than a childless family. Not only is every additional child associated with an increased probability to contribute, but also with increased donations and generosity levels.

Being a donor is negatively associated with being divorced or widowed. While the negative marginal average effect of divorce (-5 percent) is fairly predictable and in line with the main model results (among the philanthropists), the negative marginal average effect of being widowed (-10 percent) is somewhat surprising, since they were found to be the most generous donors among philanthropists. In other words, while the probability for widowed individuals to contribute is relatively low, when they are philanthropists, they tend to be the most generous.

A comparative analysis with the general population shows that the relationship between age and the probability to contribute is minor. As noted earlier, a unique U-shaped relationship between age and formal giving was found among philanthropists. However, when compared with the general population, no such relationship was found. Rather, the probability of a randomly selected individual being a donor increases linearly with age and does not invert during the individual's lifespan.

Gender differences were found among philanthropists, with men contributing higher amounts but women being more generous (see discussion in Section 2). In the general population, the probability of being a donor remains higher for men than for women, although the difference is negligible (0.02).

Immigration and minority status variables. Individuals originating from America and Europe are more likely to become donors than either Israel-born individuals or those originating from Africa and Asia (who are the least likely to be donors). With respect to individuals of American

31 The relationship between building contractors and donations to non-profit organizations has been well documented in recent years by the Israeli mass media. Many articles, shedding light on the phenomenon of real estate contractors who paved their way in business by contributing to organizations related to local politicians and localities.

origin, the analysis shows that, in addition to being more likely to donate, they are also more likely to contribute higher amounts and are more generous. These results support our earlier hypothesis that immigrants bring their philanthropic culture and charitable giving traditions to the host country. Indeed, those who were born in wealthy Western countries with a long tradition of charitable giving are more likely to contribute, and, as philanthropists, they contribute the highest amounts and are the most generous donors. The probability of a Jewish individual becoming a donor is 17 percent higher than that of a non-Jewish individual. This result is in line with the main model results showing that among philanthropists, Jewish donors contribute on average larger amounts and are more generous than Arab Israeli donors (see discussion in Section 3).

Conclusions

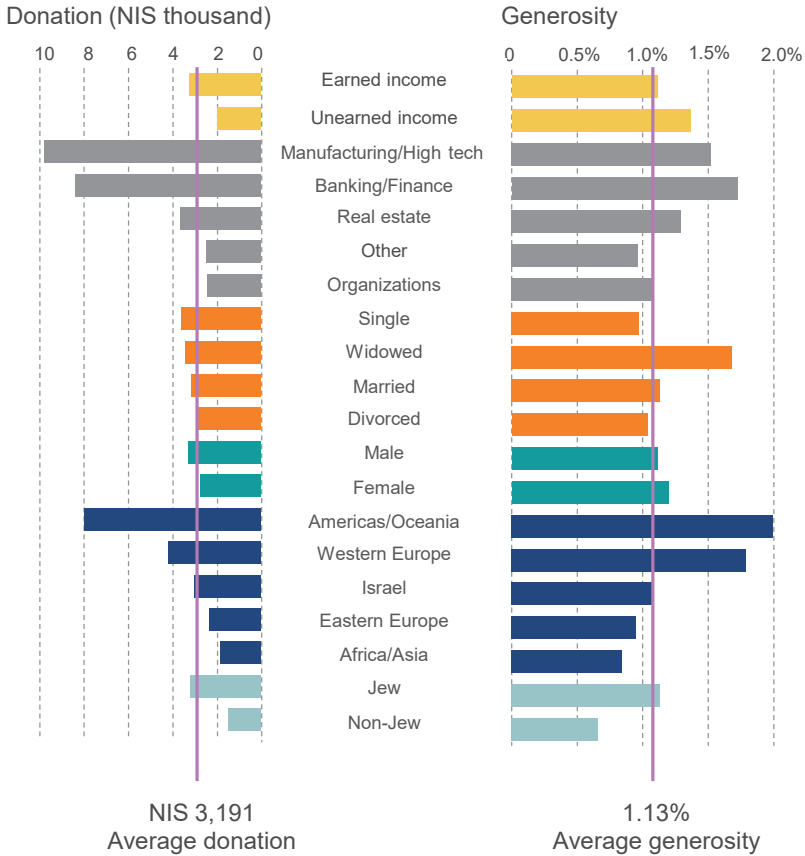
This study explores the characteristics of modern Israeli philanthropists who claim their donations on annual tax returns. The findings point to significant differences in philanthropic behavior between donors across a multitude of socio-demographic and economic variables, along with some interesting differences between philanthropists and the general population.

Figure 16 presents the level of donation and generosity predicted by the econometric model controlling for donor characteristics. The bars to the left show predicted donations and those to the right show predicted generosity. The two vertical lines, from left to right, show the predicted average donation and the predicted average generosity across all groups. This figure is a graphic representation of Appendix Table 1, and it helps to visualize the differences and similarities among groups, both across donations and generosity. For example, with respect to ethnic origin, American and Western European donors are both more generous and contribute higher amounts than all other groups. On the other hand, the figure also shows the nuanced differences by gender, with male-headed households contributing higher amounts on average than female-headed households, yet female-headed households being more generous on average.

Variations in philanthropic behavior may well reflect certain sociological phenomena embedded in Israeli society, such as inequality between various ethnic groups, a mostly patriarchal society, political and cultural gaps between the minority and majority populations, and different attitudes toward philanthropy between the “new” and traditional philanthropists.

Figure 16. Average donation level and generosity by donor characteristics

Projected values according to multivariate regression analysis (Appendix Table 1)



Notes: Marginal values, based on a multivariate regression models (Appendix Table 1) with controls for: income, children, age, gender, marital status, minority status, immigration, ethnic origin, income source, industry, year, and locality.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

References

English

- Andreoni, James, Eleanor Brown and Isaac Rischall (2003), "Charitable Giving by Married Couples," *Journal of Human Resources*, XXXVIII (1), University of Wisconsin Press, pp. 111-133.
- Angrist, Joshua D., and Alan B. Krueger (1991), "Does Compulsory School Attendance Affect Schooling and Earnings?" *The Quarterly Journal of Economics*, 106 (4), pp. 979-1014.
- Auten, Gerald, and Gabriel Rudney (1990), "The Variability of Individual Charitable Giving in the US," *Voluntas*, 1 (2), Kluwer Academic Publishers, pp. 80-97, doi:10.1007/BF01397439.
- Becker, Gary S. (1993), *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, The University of Chicago Press.
- Bekkers, René, and Pamala Wiepking (2010), "A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving," *Nonprofit and Voluntary Sector Quarterly*, 40 (5), pp. 924-973.
- Berrebi, Claude, and Hanan Yonah (2016), "Terrorism and Philanthropy: The Effect of Terror Attacks on the Scope of Giving by Individuals and Households," *Public Choice*, 169 (3-4), pp. 171-194.
- Borjas, George J. (1995), "Assimilation and Changes in Cohort Quality Revisited: What Happened to Immigrant Earnings in the 1980s?" *Journal of Labor Economics*, 13 (2), pp. 201-245.
- Brown, Susan K., and Frank D. Bean (2006), *Assimilation Models, Old and New: Explaining a Long-Term Process*, Migration Information Source.
- Bryant, W. Keith, Haekyung Jeon-Slaughter, Hyojin Kang, and Aaron Tax (2003), "Participation in Philanthropic Activities: Donating Money and Time," *Journal of Consumer Policy*, 26 (1), pp. 43-73.
- Chiswick, Barry R. (1978), "The Effect of Americanization on the Earnings of Foreign-Born Men," *Journal of Political Economy*, 86 (5), pp. 897-921.
- Davis, Mark H. (1980), "A Multidimensional Approach to Individual Differences in Empathy," *Catalog of Selected Documents in Psychology*, 40 (7), pp. 3480.
- De Wit, Arjen, and Rene Bekkers (2016), "Exploring Gender Differences in Charitable Giving," *Nonprofit and Voluntary Sector Quarterly*, 45 (4), pp. 741-761.
- Fleishman, Joel L. (2009), *The Foundation: A Great American Secret : How Private Wealth Is Changing the World*, PublicAffairs.

- Friedberg, Rachel M. (1992), *The Labor Market Assimilation of Immigrants in the United States: The Role of Age at Arrival*, Brown University.
- Frumkin, Peter (2006), *Strategic Giving: The Art and Science of Philanthropy*, University of Chicago Press.
- Gonzalez, Arturo (2003), "The Education and Wages of Immigrant Children: The Impact of Age at Arrival," *Economics of Education Review*, 22 (2), pp. 203-212.
- Hoffman, Martin L. (1977), "Sex Differences in Empathy and Related Behaviors," *Psychological Bulletin*, 84 (4), pp. 712-722.
- Hughes, Patricia, and William Luksetich (2008), "Income Volatility and Wealth: The Effect on Charitable Giving," *Nonprofit and Voluntary Sector Quarterly*, 37 (2), pp. 264-280.
- Joseph, James A. (1995), *Remaking America : How the Benevolent Traditions of Many Cultures Are Transforming Our National Life*, Jossey-Bass.
- Katz, Hagai, Esther Levinson and Benjamin Gidron (2007), *Philanthropy in Israel 2006: Patterns of Giving and Volunteering of the Israeli Public*, Israeli Center for Third Sector Research.
- Katz, Hagai, and Itay Greenspan (2015), "Giving in Israel: From Old Traditions to an Emerging Culture of Philanthropy?" in Pamala Wiepking and Femida Handy (eds.), *The Palgrave Handbook of Global Philanthropy*, pp. 316-337.
- Lennon, Randy, and Nancy Eisenberg, (1987), "Gender and Age Differences in Empathy and Sympathy," in Nancy Eisenberg and Janet Strayer (eds.), *Empathy and Its Development*, Cambridge University Press, pp. 195-217.
- Manski, Charles F., and Steven R. Lerman (1977), "The Estimation of Choice Probabilities from Choice Based Samples," *Econometrica*, 45 (8), pp. 1977-1988.
- Mata, Fernando, and Don McRae (2000), "Charitable Giving among the Foreign-Born in Canada," *Journal of International Migration and Integration / Revue de L'integration et de La Migration Internationale*, 1 (2), pp. 205-232.
- Mesch, Debra J., Patrick M. Rooney, Kathryn S. Steinberg, and Brian Denton (2006), "The Effects of Race, Gender, and Marital Status on Giving and Volunteering in Indiana," *Nonprofit and Voluntary Sector Quarterly*, 35 (4), pp. 565-587.
- Mesch, Debra J., Melissa S. Brown, Zachary I. Moore, and Amir Daniel Hayat (2011), "Gender Differences in Charitable Giving," *International Journal of Nonprofit and Voluntary Sector Marketing*, 16 (4), pp. 342-355.

- Mincer, Jacob (1974), *Schooling, Experience, and Earnings*, Columbia University Press.
- Myers, Dowell, Xin Gao and Amon Emeka (2009), "The Gradient of Immigrant Age-at-Arrival Effects on Socioeconomic Outcomes in the U.S." *International Migration Review*, 43 (1), pp. 205-229.
- Nesbit, Rebecca, Robert Christensen, Mary Tschirhart, Richard Clerkin, and Laurie Paarlberg (2013), "Philanthropic Mobility and the Influence of Duration of Donor Residency on Donation Choices," *Voluntas*, 26 (1), pp. 267-287.
- Osili, Una Okonkwo, and Dan Du (2005), "Immigration Assimilation and Charitable Giving," *New Directions in Philanthropic Giving*, 48 (Summer), pp. 89-104.
- Payton, Robert L., and Michael P Moody (2008), *Understanding Philanthropy*, Indiana University Press.
- Schaafsma, Joseph, and Arthur Sweetman (2001), "Immigrant Earnings: Age at Immigration Matters," *The Canadian Journal of Economics*, 34 (4), pp. 1066-1099.
- Schmid, Hillel (2011), *Characteristics of Israeli Philanthropy in the 21st Century: Motives and Barriers for Giving and Future Developments*, eJewish Philanthropy.
- Schmid, Hillel, and Avishag Rudich-Cohn (2012), "Elite Philanthropy in Israel," *Society*, 49 (2), pp. 175-181.
- Shimoni, Baruch (2008), *The New Philanthropy in Israel: Ethnography of Mega Donors*, The Center for the Study of Philanthropy in Israel.
- Thomas, Derrick (2012), "Giving and Volunteering Among Canada's Immigrants," *Canadian Social Trends*, 93, Statistics Canada.
- Wiepking, Pamala, and René Bekkers (2012), "Who Gives? A Literature Review of Predictors of Charitable Giving. Part Two: Gender, Family Composition and Income," *Voluntary Sector Review*, 3 (2), pp. 217-245.
- Wilhelm, Mark Ottoni, and René Bekkers (2010), "Helping Behavior, Dispositional Empathic Concern, and the Principle of Care," *Social Psychology Quarterly*, 73 (1), pp. 11-32.

Hebrew

Dahan, Momi (2013), "The Israeli Economy: Has the Melting Pot Succeeded?" *The Economic Quarterly*.

Haski-Leventhal, Debbi, Hilla Yogev-Keren and Hagai Katz (2011), *Philanthropy in Israel 2008: Pattern of Giving, Volunteering and Organ Donation of the Israeli Public*, Israeli Center for Third Sector Research.

Zeidan, Elias, and As'ad Ghanem (2000), *Patterns of Giving and Volunteering of the Palestinian Arab Population in Israel*, Israeli Center for Third Sector Research.

Zeidan, Elias (2005), *Reevaluating Volunteering, Donations and Disposition Towards Organizations in the Palestinian-Arab Society in Israel*, Israeli Center for Third Sector Research.

Appendix

To estimate the relationship between the independent variables and donation, a Panel OLS regression analysis was performed, using a dataset of 152,728 individuals and households in 246 localities over the nine-year period between 1999 and 2011. The main model utilizes a panel ordinary least squares framework with both locality and year fixed effects, which mitigate many of the concerns for potential omitted variable bias.³² The fixed effects model allows controlling for time-invariant as well as temporal factors that could influence the donor's behavior, such as changes in national tax policy, nationwide political events and other national trends. The locality fixed effects control for any locality-specific variables that are time invariant, such as local cultural variations in philanthropic practices, while year fixed effects control for the average effects of specific periods over all localities. Moreover, these controls help reduce bias from overall trends and events that occurred at a specific time and might have influenced the average extent of giving. This approach is described by the following fixed effects model:

$$\text{donation}_{(it+1)} = \alpha + \beta_1 \text{economic}_{it} + \beta_2 \text{SocioDemog}_{it} + \beta_3 \text{Immig}_{it} + \varrho \text{locality}_l + \tau_t + \varepsilon_{it}$$

where donation_{it+1} is the dependent variable for individual i in locality l in year $t+1$,

economic_{it} is a set of economic variables for individual i in locality l at year t ,

SocioDemog_{it} is a set of socio-demographic variables for individual i in locality l at year t ,

Immig_{it} is a set of variables related to immigration and minorities for individual i in locality l at year t ,

$\varrho \text{locality}_l$ is a locality fixed effect unique to locality l , and τ_t is a time (year) fixed effect.

This specification is intended to describe the characteristics of donors who itemize charitable deductions in their tax return by measuring the relationship between each independent variable and donation (direction and magnitude). The above equation was estimated separately for each of the dependent variables (the extent of giving, and contribution as a percentage of income).

³² All models include standard error clustered at the individual level, which are robust to arbitrary heteroscedasticity and serial correlation.

Appendix Table 1. OLS Main models (Panel)

Dependent variable	Donation (t+1)	Donation/Income Ratio % (t+1)
Income (NIS thousands)	4.047*** (1.454)	
Income ²	-0.0000265** (0.0000104)	
Number of children in household	542.5*** (82.88)	0.154*** (0.00855)
Age	-233.1*** (73.53)	-0.0405*** (0.00504)
Age ²	2.725*** (0.786)	0.000457*** (0.0000533)
Gender (male=1)	532.0** (223.4)	-0.0862*** (0.0268)
Marital status:		
Widowed	-183.6 (576.3)	0.707*** (0.108)
Married	-456.5* (240.5)	0.158*** (0.0360)
Divorced	-713.5 (443.2)	0.0630 (0.0520)
Minorities (Jewish=1)	1681.4*** (280.4)	0.475*** (0.0752)
Immigration	-97.45** (46.59)	-0.0165*** (0.00521)
Ethnic origin:		
Africa/Asia	-1175.9*** (330.6)	-0.235*** (0.0345)
Americas/Oceania	4928.1*** (1343.4)	0.914*** (0.0777)
Western Europe	1146.4*** (408.8)	0.709*** (0.0701)

Appendix Table 1. OLS main models (Panel) (continued)

Dependent variable	Donation (t+1)	Donation/Income Ratio % (t+1)
Eastern Europe	-671.8* (407.9)	-0.128*** (0.0362)
Income source (earned income=1)	1285.3*** (266.0)	-0.254*** (0.0503)
Industry category:		
Manufacturing/High tech	7289.5*** (2394.6)	0.558*** (0.0871)
Banking/Finance	5874.0*** (1719.3)	0.760*** (0.0937)
Real estate	1166.6*** (322.3)	0.328*** (0.0292)
Organizations	-51.57 (151.3)	0.126*** (0.0223)
Constant	-772.2 (1388.0)	0.186 (0.210)
Time FE	Yes	Yes
Locality FE	Yes	Yes
N	900,431	886,452
R² overall	0.00503	0.0184

Notes: Standard errors clustered at the individual level in parentheses. Factor variable reference categories: marital status – single; ethnic origin – Israel; industry category – other.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 2. Count models

	(1)		(2)	
Dependent variable: Number of donations				
Model	Poisson		Nbreg	
Income	0.000338*** (0.0000271)	[0.000979***]	0.000356*** (0.0000306)	[0.00102***]
Income ²	-3.17e-08*** (7.50e-09)		-3.85e-08*** (9.29e-09)	
Number of children	0.0393*** (0.00116)	[0.122***]	0.0383*** (0.00116)	[0.119***]
Age	0.0180*** (0.00110)	[0.0349***]	0.0141*** (0.00111)	[0.0328***]
Age ²	-0.0000662*** (0.0000105)		-0.0000351*** (0.0000107)	
Gender (male=1)	0.0141*** (0.00503)	[0.0435***]	0.0145*** (0.00485)	[0.0448***]
Marital status:				
Widowed	-0.0450*** (0.0137)	[-0.134***]	-0.0514*** (0.0132)	[-0.154***]
Married	0.0331*** (0.00851)	[0.102***]	0.0210*** (0.00799)	[0.0653***]
Divorced	-0.130*** (0.0115)	[-0.369***]	-0.130*** (0.0106)	[-0.373***]
Minorities (Jewish=1)	0.364*** (0.0286)	[0.949***]	0.328*** (0.0251)	[0.871***]
Immigration	-0.000978 (0.000748)	[-0.00304]	-0.00116 (0.000736)	[-0.00359]
Ethnic origin:				
Africa/Asia	-0.0654*** (0.00645)	[-0.195***]	-0.0619*** (0.00632)	[-0.185***]
Americas/Oceania	0.126*** (0.00799)	[0.412***]	0.123*** (0.00806)	[0.403***]

Appendix Table 2. Count models (continued)

	(1)		(2)	
Dependent variable: Number of donations				
Model	Poisson		Nbreg	
Western Europe	0.131*** (0.00808)	[0.433***]	0.130*** (0.00814)	[0.429***]
Eastern Europe	-0.0196*** (0.00644)	[-0.0598***]	-0.0193*** (0.00632)	[-0.0590***]
Income source (earned income=1)	0.0439*** (0.00859)	[0.134***]	0.0441*** (0.00851)	[0.134***]
Industry category:				
Manufacturing/High tech	-0.0333*** (0.0112)	[-0.0979***]	-0.0356*** (0.0109)	[-0.105***]
Banking/Finance	0.0140 (0.0118)	[0.0421]	0.00944 (0.0116)	[0.0284]
Real estate	0.149*** (0.00480)	[0.481***]	0.146*** (0.00477)	[0.472***]
Organizations	-0.0106** (0.00458)	[-0.0315**] (0.0136)	-0.00667 (0.00442)	[-0.0199] (0.0132)
Constant	-2.635*** (0.0852)		-2.463*** (0.0796)	
Locality FE	Yes		Yes	
Exposure Year	Yes		Yes	
N	152,710		152,710	
Pseudo R²	0.0527		0.0326	
Log Likelihood	-317642.9		-312134.6	

Notes: Standard errors clustered at the individual level in parentheses, AMEs in square brackets. Factor variable reference categories: marital status — single; ethnic origin — Israel; industry category — other.
* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 3. Interactions

Dependent variable:	(1) Donation (t+1)	(2) Donation/Income Ratio (0-100%) (t+1)	(3)
Interaction var 1	Number of children	Male	Male
Interaction var 2	Married	Married	Number of children
Interaction term	Number of children × Married	Male × Married	Male × Number of children
Interaction var 1	315.2** (143.8)	-0.268*** (0.0506)	-0.180*** (0.0417)
Interaction var 2	-511.0** (227.7)	-0.0191 (0.0536)	0.125*** (0.0137)
Interaction term	243.0* (141.5)	0.257*** (0.0604)	0.0365** (0.0146)
Time FE	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes
N	900,431	886,452	886,452
R² overall	0.00504	0.0162	0.0185

Notes: All regression are controlled for all explanatory variable, not shown in the table for brevity. Standard errors clustered at the individual level in parentheses.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 4. Religiosity (Panel)

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Donation (t+1)			Donation/Income ratio (0-100%) (t+1)		
Religiosity (%)	15.35*** (5.821)			0.0130*** (0.000631)		
Haredi (%) (ultra-Orthodox)		20.08*** (6.764)			0.0146*** (0.000767)	
Religious (%) (National Religious)			0.0221 (5.578)			0.00499*** (0.000927)
Income	4.144*** (1.445)	4.144*** (1.445)	4.118*** (1.442)			
Income ²	-0.0000273*** (0.0000103)	-0.0000274*** (0.0000103)	-0.0000271*** (0.0000103)			
No. of children	513.1*** (80.09)	519.4*** (78.36)	565.0*** (71.03)	0.148*** (0.00843)	0.159*** (0.00824)	0.187*** (0.00826)
Age	-238.7*** (73.32)	-241.2*** (72.99)	-260.9*** (73.56)	-0.0422*** (0.00504)	-0.0468*** (0.00500)	-0.0593*** (0.00499)
Age ²	2.908*** (0.777)	2.919*** (0.773)	3.078*** (0.777)	0.000494*** (0.0000534)	0.000523*** (0.0000532)	0.000626*** (0.0000532)
Gender (male=1)	406.6* (218.1)	431.7** (219.9)	357.9 (220.8)	-0.124*** (0.0267)	-0.112*** (0.0267)	-0.169*** (0.0269)
Marital status:						
Widowed	-314.8 (573.4)	-293.5 (575.0)	-297.5 (573.5)	0.683*** (0.108)	0.700*** (0.108)	0.691*** (0.108)
Married	-575.1** (243.5)	-555.2** (243.3)	-551.1** (244.4)	0.131*** (0.0359)	0.148*** (0.0360)	0.144*** (0.0360)
Divorced	-726.9 (442.5)	-716.5 (443.1)	-727.3 (442.3)	0.0545 (0.0520)	0.0622 (0.0520)	0.0536 (0.0520)
Minorities (Jewish=1)	1885.4*** (270.2)	1962.2*** (244.1)	2120.9*** (230.4)	0.472*** (0.0417)	0.556*** (0.0411)	0.632*** (0.0417)
Immigration	-111.4** (47.06)	-111.6** (47.07)	-115.9** (46.81)	-0.0187*** (0.00518)	-0.0193*** (0.00518)	-0.0219*** (0.00517)

Appendix Table 4. Religiosity (Panel) (continued)

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Donation (t+1)			Donation/Income ratio (0-100%) (t+1)		
Ethnic origin:						
Africa/Asia	-1336.5*** (320.5)	-1348.4*** (318.8)	-1337.3*** (321.9)	-0.278*** (0.0339)	-0.287*** (0.0339)	-0.274*** (0.0340)
Americas/ Oceania	5032.4*** (1312.5)	5097.1*** (1306.8)	5141.4*** (1314.4)	0.929*** (0.0781)	0.989*** (0.0781)	0.997*** (0.0786)
Western Europe	1313.8*** (398.6)	1336.4*** (402.2)	1383.2*** (403.2)	0.745*** (0.0707)	0.770*** (0.0707)	0.793*** (0.0708)
Eastern Europe	-831.3** (396.0)	-840.6** (395.5)	-826.8** (397.1)	-0.139*** (0.0359)	-0.145*** (0.0359)	-0.133*** (0.0360)
Income source (earned income=1)	1366.8*** (274.7)	1367.8*** (274.6)	1369.6*** (274.6)	-0.250*** (0.0503)	-0.249*** (0.0503)	-0.249*** (0.0504)
Industry category:						
Manufacturing/ High tech	7604.1*** (2379.7)	7598.3*** (2380.1)	7616.3*** (2377.2)	0.600*** (0.0874)	0.597*** (0.0874)	0.610*** (0.0875)
Banking/ Finance	6220.4*** (1741.9)	6194.2*** (1743.1)	6202.7*** (1741.7)	0.815*** (0.0944)	0.793*** (0.0943)	0.806*** (0.0944)
Real estate	1386.4*** (332.1)	1375.8*** (332.9)	1365.0*** (332.7)	0.379*** (0.0292)	0.369*** (0.0292)	0.364*** (0.0292)
Organizations	-121.2 (151.6)	-126.6 (152.3)	-50.78 (152.6)	0.130*** (0.0220)	0.135*** (0.0220)	0.186*** (0.0219)
Constant	1167.1 (1401.6)	1205.9 (1406.1)	1900.6 (1403.0)	0.491*** (0.139)	0.611*** (0.139)	1.057*** (0.136)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Locality FE	No	No	No	No	No	No
N	899,419	899,419	899,419	885,453	885,453	885,453
R² overall	0.00402	0.00404	0.00397	0.0156	0.0157	0.0133

Notes: Standard errors clustered at the individual level in parentheses. Factor variable reference categories: marital status – single; ethnic origin – Israel; industry category – other.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 5. Gender variations - Generosity

Column 1 of Appendix Table 5 presents the results of the main model using the gender head of household as defined by the income tax authority in the original data. Columns 2 to 6 present the gender variations' results. Model 2 uses the same gender for the head of household as in the original data, while the income in the denominator of the generosity variable includes only the head of household's reported income as opposed to the combined household income. This model is based on the assumption that the decision to contribute is made by the head of household in proportion to his or her individual personal income. The gender head of household in Model 3 was reclassified and determined according to the spouse whose income was higher, assuming the spouse with the higher income is more dominant regarding financial decisions. Model 4 is similar to Model 3, but the income in the denominator of the generosity variable includes only the head of household's reported income. In Model 5, married households were divided into two separate observations, and the income in the denominator of the dependent variable includes each individual's reported income. Model 6 presents the results for the non-married individuals sub-sample.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Donation/Income ratio (0-100%) (t+1)						
Gender (male=1)	-0.0862*** (0.0268)	-0.0292* (0.0174)	-0.119*** (0.0256)	-1.057*** (0.0449)	-1.630*** (0.0232)	-0.130*** (0.0460)
Number of children	0.154*** (0.00855)	0.153*** (0.00857)	0.248*** (0.0110)	0.257*** (0.0110)	0.455*** (0.0126)	0.00421 (0.0372)
Age	-0.0405*** (0.00504)	-0.0408*** (0.00504)	-0.0455*** (0.00576)	-0.0428*** (0.00575)	-0.0755*** (0.00621)	0.0213*** (0.00806)
Age ²	0.000457*** (0.0000533)	0.000456*** (0.0000533)	0.000435*** (0.0000595)	0.000450*** (0.0000595)	0.000604*** (0.0000620)	-0.0000136 (0.0000945)
Marital status:						
Widowed	0.707*** (0.108)	0.723*** (0.107)	0.578*** (0.110)	0.337*** (0.110)	0.175 (0.113)	0.136 (0.147)
Married	0.158*** (0.0360)	0.152*** (0.0359)	0.353*** (0.0411)	0.421*** (0.0413)	0.224*** (0.0415)	
Divorced	0.0630 (0.0520)	0.0699 (0.0519)	-0.123** (0.0565)	-0.233*** (0.0566)	-0.432*** (0.0582)	-0.381*** (0.0961)

Appendix Table 5. Gender variations — Generosity (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Donation/Income ratio (0-100%) (t+1)						
Minorities (Jewish=1)	0.475*** (0.0752)	0.476*** (0.0751)	0.765*** (0.0968)	0.751*** (0.0974)	1.123*** (0.115)	0.371*** (0.110)
Immigration	-0.0165*** (0.00521)	-0.0166*** (0.00521)	-0.0131** (0.00606)	-0.0131** (0.00606)	-0.0189*** (0.00702)	0.00617 (0.00700)
Ethnic origin:						
Africa/Asia	-0.235*** (0.0345)	-0.236*** (0.0345)	-0.363*** (0.0423)	-0.341*** (0.0422)	-0.375*** (0.0464)	-0.157 (0.101)
Americas/Oceania	0.914*** (0.0777)	0.918*** (0.0776)	1.237*** (0.0952)	1.188*** (0.0948)	1.838*** (0.105)	0.558*** (0.164)
Western Europe	0.709*** (0.0701)	0.712*** (0.0701)	1.072*** (0.0909)	1.034*** (0.0906)	1.534*** (0.101)	0.361*** (0.139)
Eastern Europe	-0.128*** (0.0362)	-0.127*** (0.0362)	-0.126*** (0.0437)	-0.141*** (0.0437)	-0.0856* (0.0469)	-0.0419 (0.108)
Income source (earned income=1)	-0.254*** (0.0503)	-0.255*** (0.0502)	-0.215*** (0.0588)	-0.190*** (0.0588)	-0.0508 (0.0528)	-0.486*** (0.141)
Industry category:						
Manufacturing/ High tech	0.558*** (0.0871)	0.554*** (0.0871)	0.510*** (0.102)	0.568*** (0.102)	0.603*** (0.107)	0.430** (0.206)
Banking/Finance	0.760*** (0.0937)	0.756*** (0.0937)	0.608*** (0.108)	0.662*** (0.108)	0.901*** (0.111)	1.022*** (0.226)
Real estate	0.328*** (0.0292)	0.326*** (0.0292)	0.294*** (0.0374)	0.319*** (0.0373)	0.578*** (0.0415)	0.186*** (0.0607)
Organizations	0.126*** (0.0223)	0.123*** (0.0223)	-0.129*** (0.0307)	-0.101*** (0.0305)	-0.0160 (0.0347)	0.114** (0.0446)
Constant	0.186 (0.210)	0.160 (0.211)	-0.343 (0.303)	0.154 (0.302)	0.904* (0.511)	-0.855*** (0.284)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes	Yes
N	886,452	886,452	869,358	869,358	1,543,787	152,423
R² overall	0.0184	0.0184	0.0212	0.0234	0.0310	0.0139

Notes: Standard errors clustered at the individual level in parentheses. Factor variable reference categories: marital status — single; ethnic origin — Israel; industry category — other.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 6. Immigration variations - Donation

All models in panel A of Appendix Tables 6 and 7 control for immigration status (Immigrant = 1). Model 2 includes controls for the length of time residing in Israel since immigration. Similarly, model 3 controls for the duration of residency in Israel, but for Israel-born donors every year is weighted 0.5. The purpose of weighting the duration of immigrant and Israel-born philanthropists differently is to take into consideration the possibility that life experience in the host country is perceived differently by recent immigrants versus native individuals. The fourth model is similar to Model 2, however after residing 20 years in Israel immigrant donors become like Israel-born donors in terms of time since immigration, but the Immigrant indicator variable still shows if a person was originally born outside of Israel. All immigration variable's coefficients are statistically significant, supporting our findings that recent immigrant philanthropists in Israel tend to be more generous and contribute higher amounts than native and veteran immigrant philanthropists, but with each additional year residing in the host country, they tend to reduce the level of their contributions, converging to the level of their native counterparts.

Dependent variable:	Panel A				Panel B
	(1)	(2)	(3)	(4)	(5)
	Donation (t+1)				Donation (t+1)
Immigrant	1123.4*** (291.8)	906.0*** (293.5)	1879.1*** (350.7)	863.3*** (303.4)	
Number of years in Israel		-30.91*** (10.61)			
Number of years in Israel – w2eighted (Israelis 0.5)			-48.20*** (14.35)		
Number of years in Israel < 20 years				-148.9*** (40.39)	
Age at immigration					111.6*** (17.28)
Income (NIS thousand))	3.922*** (1.429)	3.930*** (1.429)	3.918*** (1.429)	3.933*** (1.429)	3.945*** (1.429)

Appendix Table 6. Immigration variations (continued)

Dependent variable:	Panel A				Panel B
	(1)	(2)	(3)	(4)	(5)
	Donation (t+1)				Donation (t+1)
Income ²	-0.0000254** (0.0000102)	-0.0000255** (0.0000102)	-0.0000254** (0.0000102)	-0.0000255** (0.0000102)	-0.0000256** (0.0000102)
Number of children	432.9*** (79.02)	471.8*** (81.83)	467.7*** (81.30)	449.3*** (79.60)	469.3*** (77.08)
Gender (male=1)	565.1** (222.9)	688.8*** (228.3)	709.1*** (230.7)	595.8*** (223.3)	541.0** (222.0)
Marital status:					
Widowed	291.5 (529.6)	727.9 (565.3)	753.6 (564.2)	364.2 (529.3)	-81.06 (529.6)
Married	-778.6*** (290.3)	-638.2** (289.7)	-665.0** (293.8)	-769.5*** (290.2)	-950.3*** (287.1)
Divorced	-1146.5** (453.2)	-933.5** (464.4)	-975.9** (460.6)	-1121.4** (452.8)	-1312.9*** (453.7)
Minorities (Jewish=1)	1967.8*** (305.4)	2326.2*** (304.0)	2440.5*** (300.7)	2382.2*** (316.8)	2846.7*** (380.9)
Income source (earned income=1)	724.5*** (181.1)	490.6** (203.6)	431.3** (199.5)	675.5*** (181.7)	821.2*** (187.2)
Industry category:					
Manufacturing/High tech	7388.4*** (2410.1)	7514.9*** (2408.4)	7540.2*** (2403.4)	7421.4*** (2410.9)	7437.5*** (2413.9)
Banking/Finance	5983.2*** (1722.4)	6070.1*** (1722.6)	6079.7*** (1725.0)	5980.3*** (1722.0)	6072.2*** (1723.2)
Real estate	1320.6*** (323.5)	1370.7*** (324.6)	1376.5*** (326.2)	1326.6*** (323.5)	1351.1*** (324.3)
Organizations	-142.8 (151.7)	-166.6 (149.9)	-150.7 (151.3)	-134.4 (152.0)	-81.87 (152.7)

Appendix Table 6. Immigration variations (continued)

Dependent variable:	Panel A				Panel B
	(1)	(2)	(3)	(4)	(5)
	Donation (t+1)				Donation (t+1)
Constant	-6408.2*** (642.9)	-5535.9*** (741.6)	-5932.9*** (679.9)	-3785.8*** (958.0)	-7453.6*** (725.6)
Time FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
N	900,431	900,431	900,431	900,431	900,431
R² overall	0.00450	0.00454	0.00456	0.00460	0.00475

Appendix Table 7. Immigration variations — Generosity

Dependent variable:	Panel A				Panel B
	(1)	(2)	(3)	(4)	(5)
	Donation/Income Ratio (0-100%) (t+1)				
Immigrant	0.252*** (0.0254)	0.181*** (0.0255)	0.457*** (0.0342)	0.199*** (0.0271)	
Number of years in Israel		-0.0102*** (0.00111)			
Number of years in Israel — Weighted (Israelis 0.5)			-0.0131*** (0.00139)		
Number of years in Israel — up to 20 years				-0.0305*** (0.00497)	
Age at immigration					0.0257*** (0.00163)
Number of children	0.134*** (0.00782)	0.147*** (0.00811)	0.143*** (0.00798)	0.137*** (0.00784)	0.141*** (0.00776)
Gender (male=1)	-0.0964*** (0.0265)	-0.0552** (0.0270)	-0.0571** (0.0269)	-0.0897*** (0.0266)	-0.101*** (0.0265)
Marital status:					
Widowed	0.756*** (0.105)	0.900*** (0.107)	0.882*** (0.106)	0.771*** (0.105)	0.675*** (0.105)

Appendix Table 7. Immigration variations (continued)

	Panel A				Panel B
	(1)	(2)	(3)	(4)	(5)
Dependent variable:	Donation/Income Ratio (0-100%) (t+1)				
Married	0.0909*** (0.0336)	0.138*** (0.0343)	0.121*** (0.0339)	0.0925*** (0.0336)	0.0529 (0.0336)
Divorced	-0.0254 (0.0491)	0.0449 (0.0500)	0.0207 (0.0494)	-0.0207 (0.0491)	-0.0638 (0.0492)
Minorities (Jewish=1)	0.506*** (0.0732)	0.624*** (0.0749)	0.634*** (0.0751)	0.592*** (0.0752)	0.713*** (0.0774)
Income source (earned income=1)	-0.336*** (0.0469)	-0.413*** (0.0477)	-0.415*** (0.0478)	-0.345*** (0.0469)	-0.311*** (0.0469)
Industry category:					
Manufacturing/High tech	0.567*** (0.0874)	0.608*** (0.0874)	0.608*** (0.0874)	0.574*** (0.0874)	0.579*** (0.0874)
Banking/Finance	0.771*** (0.0942)	0.801*** (0.0944)	0.798*** (0.0943)	0.771*** (0.0940)	0.795*** (0.0938)
Real estate	0.355*** (0.0294)	0.371*** (0.0295)	0.369*** (0.0295)	0.356*** (0.0294)	0.364*** (0.0294)
Organizations	0.108*** (0.0224)	0.100*** (0.0223)	0.106*** (0.0223)	0.110*** (0.0224)	0.123*** (0.0224)
Constant	-0.775*** (0.184)	-0.487*** (0.186)	-0.645*** (0.184)	-0.237 (0.202)	-1.024*** (0.183)
Time FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
N	886,452	886,452	886,452	886,452	886,452
R² overall	0.0153	0.0158	0.0159	0.0159	0.0168

Notes for Tables 6 and 7: Standard errors clustered at the individual level in parentheses. Factor variable reference categories: marital status – single; ethnic origin – Israel; industry category – other.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source for both tables: Claude Berrebi and Hanan Yonah, Taub Center | Data for both tables: CBS, Population and Immigration Authority; Israel Tax Authority

Appendix Table 8. Comparison between donors and the general population

Model	(1)		(2)	
	Probit		Logit	
Income (log)	0.131*** (0.00178)	[0.0359***]	0.234*** (0.00312)	[0.0377***]
Number of children	0.126*** (0.00104)	[0.0344***]	0.210*** (0.00181)	[0.0339***]
Age	0.0228*** (0.000833)	[0.00377***]	0.0385*** (0.00146)	[0.00381***]
Age ²	-0.0000887*** (0.00000795)		-0.000145*** (0.0000139)	
Gender (male=1)	0.0871*** (0.00442)	[0.0236***]	0.148*** (0.00774)	[0.0235***]
Marital status:				
Widowed	-0.398*** (0.0114)	[-0.101***]	-0.663*** (0.0209)	[-0.0981***]
Married	-0.0512*** (0.00764)	[-0.0144***]	-0.0645*** (0.0141)	[-0.0107***]
Divorced	-0.210*** (0.00970)	[-0.0566***]	-0.338*** (0.0176)	[-0.0535***]
Minorities (Jewish=1)	0.799*** (0.0138)	[0.168***]	1.537*** (0.0285)	[0.178***]
Immigration	0.0138*** (0.000746)	[0.00377***]	0.0233*** (0.00135)	[0.00375***]
Ethnic origin:				
Africa/Asia	-0.137*** (0.00539)	[-0.0362***]	-0.228*** (0.00921)	[-0.0354***]
Americas/Europe	0.0370*** (0.00457)	[0.0103***]	0.0660*** (0.00774)	[0.0108***]

Appendix Table 8. Comparisons (continued)

Dependent variable: Pr(Donor)	(1)		(2)	
	Probit		Logit	
Income source (earned income=1)	0.493*** (0.00590)	[0.120***]	0.823*** (0.0103)	[0.117***]
Industry category:	0		0	
Manufacturing/High tech	-0.323*** (0.00839)	[-0.0707***]	-0.564*** (0.0154)	[-0.0707***]
Banking/Finance	0.138*** (0.0107)	[0.0360***]	0.228*** (0.0180)	[0.0348***]
Real estate	0.424*** (0.00441)	[0.121***]	0.701*** (0.00745)	[0.118***]
Organizations	0.423*** (0.00391)	[0.121***]	0.683*** (0.00676)	[0.115***]
Constant	-4.483*** (0.0305)		-7.825*** (0.0553)	
Year FE	Yes		Yes	
Locality FE	Yes		Yes	
Observations	1,091,784		1,091,784	
Age reversal	126.9		126.1	
Pseudo R²	0.137		0.134	
log likelihood	-757893.6		-760183.2	

Notes: Standard errors clustered at the individual level in parentheses, AMEs in square brackets

Factor variable reference categories: marital status – single; ethnic origin – Israel;

industry category – other.

* p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Claude Berrebi and Hanan Yonah, Taub Center | Data: CBS, Population and Immigration Authority; CBS, *Household Expenditure Survey*; Israel Tax Authority