Altruistic Bequests: Giving Motive and Receipt Expectation Using the 2019 Survey of Consumer Finances

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Abstract

This study uses Altruistic Bequest Theory to update research by Kao et al. (1997) exploring the factors driving the giving and receiving of bequests using data collected from the 2019 Survey of Consumer Finances (SCF). The bequest gift motive multinomial logit model uncovered evidence in support of Altruistic Bequest Theory, specifically regarding family savings priorities and charitable giving. On the other hand, volunteerism was not associated with the bequest gift motive. Respective to the base categories, receiving an inheritance, self-employment, marital status, race, attitude toward leaving a bequest, charitable giving, risk tolerance, family savings priorities, poor health status, age, income, financial assets, and nonfinancial assets were more likely to predict giving a bequest versus no bequest. For bequest receipt expectations, a binomial logit model showed receiving an inheritance, education, marital status, race, presence of living parents, age, income, and financial assets were the most important predictors of receiving a bequest. For both models, results show economic and attitudinal variables are important drivers for the giving and receiving of bequests.

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Introduction

As the Baby Boomer generation (those born between 1946 and 1964) continues its journey into retirement, the transfer of wealth is a noteworthy topic of study in the field of personal financial planning due to, at least in part, the estimated value of the transfer. A 2010 study from MetLife (2010) using the Survey of Consumer Finances (SCF) estimated the Baby Boomer generation inherited $11.6 trillion from the former generation, money that will transfer to the next if not spent. This vast sum has undoubtedly garnered interest from researchers and practitioners alike. Indeed, Grable (2013) noted that this generation is "one of the most discussed, studied, and evaluated groups of

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people the world has ever known" (p.7). This current study continues this discussion on a critical aspect of wealth transfer: the giving and receiving of bequests.

The purpose of this research is threefold. The first is to update the bequest research conducted by Kao et al. (1997). Kao et al.'s research used Altruistic Bequest Theory to explore the relationship between respondents' sociodemographic characteristics on their expectations of receiving and leaving bequests. The authors found significant relationships between certain respondent sociodemographic traits (education, marital status, race, surviving parents, and the number of siblings) and expecting to receive a bequest. An exploration of the expectation to leave a bequest uncovered both positive (self-employment, middle age, nonliquid asset holdings, education, marital status, and a favorable attitude toward bequests) and negative relationships (total number of children and disability). Many of the original variables found in the Kao et al. (1997) study are further investigated here using the newer 2019 SCF dataset. The second purpose of this study is to improve the model by adding variables within the SCF that better align with Altruistic Bequest Theory. Finally, this study explores the relationship between longevity expectation and bequest motive.

Literature Review

Generational Transfers

Rossi and Rossi (1990) examined the various beneficiary types stated in respondents' wills using information from a sectional three-generation survey conducted in the years 1984–1985. Both the likely (hypothetical) beneficiaries and the beneficiaries of the respondents' actual wills, if any, were inquired about in the poll. The most frequent beneficiaries of wills were wives and children, according to descriptive statistics from the study (Rossi & Rossi, 1990, p. 475). When the actual beneficiaries of wills were examined, it was found that women were more likely than males to leave provisions for close relatives (such as a child, parent, sibling, or niece). It was suggested that for those who are childless, nieces and nephews might stand in for one's children, and for those who are not married, siblings could stand in for a spouse.

Coleman and Ganong (1998) explored the effect of divorce and remarriage on leaving bequests. The authors found that genetic relationships, patriarchal lineage, and family ties influenced perception on regarding which family members should be included in the will. Reciprocity, a concept closely aligned with altruism, was found to highly influence the individual's definition of what constitutes a family. In contrast to the need to leave a bequest based on proximity and reciprocity, the obligation to include next of kin was stronger. Even when reciprocity was a crucial contextual factor in establishing the limit of family, relatives who voluntarily chose to be included in a parent's will were less likely to do so (e.g., daughters-in-law and step-grandchildren). Grandchildren were more likely to be listed as beneficiaries following a parent's divorce or remarriage.

Engler-Bowles and Kart (1983) surveyed 60 wills from rural northwest Ohio (Wood County) from probate records from 1820-1967, focusing on how changes in intergenerational relationships affected patterns of inheritance. Based on the degree of familial duty, inheritance patterns were categorized into three groups: familistic inheritance, articulated inheritance, and disinheritance. Familistic inheritance patterns comprised the bulk of inheritance patterns, meaning only family members received the estate. An articulated inheritance that emphasized non-family members was relatively uncommon (only 3 out of 60 wills). It was referred to as disinheritance when a family member was not listed in a will. Only one case demonstrated a trend of disinheritance (today, most state laws have protections for spouses in such cases, see Levmore, 2020). The researchers concluded that the relationships between parents and children were based on mutual affection, understanding, and respect, even if testators favored spousal ties above lineal ones in all periods surveyed.

Bequest Gift Motive

The studies investigating the bequest gift motive are numerous. Key study themes include the relationship between giving a bequest to annuities (particularly the "annuity puzzle") and savings.

Friedman and Warshawsky (1990) concluded that bequest motives and yield differentials influence annuity purchase behaviors. Hansen and İmrohoroğlu (2008) used the bequest motive to study the annuity puzzle and hump-shaped consumption patterns within the United States. Finally, personal financial planning researchers Williams and James (2019) demonstrated that bequest provisions, in addition to mortality salience, can drive annuity type selection.

The relationship between savings and bequest motives has been explored by several researchers as well, especially within the context of the theoretical framework of the life-cycle hypothesis. Hurd (1987) is an older example of a study that fails to find broad-reaching evidence for a bequest motive. Hurd (2002) later observed that the marginal utility from bequests was much lower than that from consumption. Davies (1981) argued that the unknown lifespan is a main driver of post-retirement expenditure rates while De Nardi et al. (2009a; 2009b) concluded that uncertain longevity and high medical costs are more explanatory in elderly saving than bequests. In contrast, Dynan et al. (2002) looked at saving in terms of contingencies and the bequest motive. Additional perspectives can be found in Browning and Lusardi (1996) and Spencer and Fan (2002), who explored the motivations for bequests through the lenses of savings and debt.

Philanthropic Bequests

A charitable bequest occurs when someone leaves assets to charities or nonprofit organizations rather than to family, close friends, or other relatives. According to a review of 319 wills by Schwartz (1993), most who make philanthropic bequests leave around five percent of their assets to charities and unrelated persons.

Rossi and Rossi (1990), a study mentioned previously, also explored when charities and institutions were named as beneficiaries in respondents' wills. It was discovered that women were more likely than men to include non-kin beneficiaries—friends, charities, and institutions—in their wills (Rossi & Rossi, 1990, p. 475). More women than men named a friend as a beneficiary. Key indicators for providing for an institution in a will included age, marital status, previous experience receiving a bequest, education, and religiosity with an unmarried status having the largest effect (Rossi & Rossi, 1990, p. 479).

To explore charitable bequests, Boskin (1976) created two separate models: the economic estate (i.e., the gross estate less debts and expenses) and the adjusted disposable estate (i.e., economic estate less the taxes paid where there is no charitable bequest). Boskin showed that bequests to charities were significantly lower for decedents who passed away before the age of 65, had spouses or children, had small estates, were single, and lived in states with community property laws. The main finding of Boskin's study was that the deductibility of inheritance taxes significantly impacted the number of charitable bequests.

Barthold and Plotnick (1984) explored Connecticut estates to look at the demographics of additional beneficiaries as well as the inheritance tax. Decedents without surviving spouses or children were more likely to leave sizeable charitable bequests. The volume of philanthropic bequests was significantly and favorably influenced by religious choice. In contrast to previous studies, the magnitude of charitable bequests was not significantly correlated with inheritance tax rates.

Auten and Joulifan (1996) developed a model of philanthropic bequests and gifts to consider intergenerational wealth transfers from parents to their offspring. The aim of the study was to determine the effects of children's income and bequest taxes on parents' charitable contributions. The main finding of this study was that the size of a charitable bequest was influenced by the “tax price” of the bequest due to estate tax rates. Those who were older, married, and wealthy left more money to charity. Further evidence that parents of financially better-off children made more lifetime charitable contributions than did parents of children with lower incomes can be seen in the insight that the children's wages greatly enhanced the amounts of charitable contributions.

Receiving Bequests

Fewer studies have investigated receiving bequests. Grawe (2010) used the Panel Study of Income Dynamics (PSID) to study bequest

receipt, family size, and earnings. Zagheni and Wagner (2015) also used this dataset to explore the interplay between age and bequest receipt and found that the timing of a bequest's receipt impacts wealth inequality. Stark and Nicinska (2015) used the Survey on Health, Ageing and Retirement in Europe (SHARE) to show that those who receive a bequest are more likely to expect to give one.

Conceptual Model

Bequests have been studied using several theoretical frameworks and models including economic theory, the overlapping-generations model, and the economic theory of family size effect (Brown et al., 2010; Grawe, 2010; Weil, 1996). This paper uses the same theory found in the study by Kao et al. (1997): Altruistic Bequest Theory. Altruistic Bequest Theory holds that, in addition to their own consumption, parents' utility is influenced by the resources and wealth of their offspring. Parents maximize their lifetime usefulness and feel contentment by enhancing their children's financial security through bequests (Becker, 1974; Becker and Tomes, 1979; Menchik and David, 1983; Tomes, 1981).

Altruistic Bequest Theory was created chiefly by Becker (1974), who used economic theory to analyze interactions between members of the same family. Becker's model had two basic concepts: "social environment" (i.e., the monetary value of other people's traits) and "social income" (i.e., the sum of an individual's income). Due to the interconnectivity of the individual and family within this framework, family members behave altruistically and are motivated to maximize the wealth of the entire family rather than their own individual incomes. The family unit has one utility function. Becker goes on to state that "The major, and somewhat unexpected, conclusion is that if a head exists, other members also are motivated to maximize family income and consumption, even if their welfare depends on their own consumption alone" (Becker, 1974, p. 19). He concluded that parents commonly give their children proportionally larger bequests of wealth than the amount of their own income increase since transfers are thought to be responsive to changes in parental income (i.e., high-income elasticity). Becker expanded the altruistic model of wealth transfer to include charitable transfers, which are motivated by the desire to improve the well-being of unrelated people.

Becker and Tomes (1979) developed a cogent theory of intergenerational inequality and the intergenerational mobility of wealth on the premise that each family's goal is to maximize its utility across several generations. Tomes (1981) empirically investigated the altruistic bequest model of intergenerational transmission of inequality proposed by Becker (1974), Blinder (1973), and Ishikawa (1975). According to this study, parental investments in human capital and transfers of monetary wealth were undertaken as a form of altruism. Because parents leave different amounts as compensation for economic inequality among the children, a larger share of wealth is passed down to low-income children than to children in higher income categories, according to Tomes (1981), who saw this finding as supporting altruistic bequests.

An empirical study on the quantity of bequests and the desire to leave bequests was conducted by Menchik and David (1983). They concluded from tax return data in Wisconsin between 1946-1964 that the quantity of the bequest and the parents' propensity to do so were closely connected to the parents' ages at death, likely due to a desire to bequest and/or risk aversion. Those with higher incomes left greater bequests than by lower discounted lifetime earnings. The study also found that self-employed decedents left larger bequests than non-self-employed.

In summary, Altruistic Bequest Theory posits that parents gain utility from giving a bequest to their children, similar to the utility begotten from consumption. Furthermore, parents will bequeath larger amounts to children of low earnings, in other words, bequests are compensatory (Wilhelm, 1996). This paper argues that further insight can be gained into the dynamics of Altruistic Bequest Theory through proxies or indicators of altruism, namely, charitable giving, the prioritization of saving for the benefit of children, and volunteerism.

Data and Sample

As mentioned previously, this study updates Kao et al.'s (1997) initial analysis using the 1989 SCF to the 2019 wave. The SCF is a cross-sectional survey sponsored by the Federal Reserve System, which employs a complex sampling technique (Board of Governors of the Federal Reserve System, 2022). The SCF employs multiple imputations that include five times the actual observations (Board of Governors of the Federal Reserve System, 2022; Hanna et al., 2018; Montalto and Sung, 1996). Therefore, the Repeated Imputation Inference (RII) method is used to estimate the correct standard errors (Hanna et al., 2018; Montalto and Sung, 1996). The survey is conducted every three years and is meant to be representative of the United States population after applying the appropriate statistical weighting (Board of Governors of the Federal Reserve System, 2022).

Dependent Variables

The first dependent variable for this study captures those who expect to receive an inheritance, which is a dichotomous variable in the SCF ("Do you (or your husband/wife) expect to receive a substantial inheritance or transfer of assets in the future?"). Label 1 signifies that the respondent expects an inheritance (n = 881) and label 5 if not (n = 4,895).

Table 1. Cross Tabulation of Bequest Gift Motive and Receipt Expectation

	Bequest Receipt Expectation		
Bequest Gift Motive	No	Yes	Total
Yes	78%	22%	100%
No	86%	14%	100%
Maybe	93%	7%	100%
Total	85%	15%	100%

The second dependent variable is for those expecting to leave a bequest coming from variable x5825 ("Do you (and your {husband/wife/partner/spouse}) expect to leave a sizable estate to others?"). This is a three-level variable with yes (1), possibly (3), and no (5) as answers. There were approximately n = 2,522 households who expected to give a bequest. A cross-tabulation of these two dependent variables is shown in Table 1.

Bequest Gift Motive Independent Variables

Economic measures. Bequest gift motive economic measures include the log of household income (a continuous variable), the log of liquid and non-liquid asset holdings (continuous variables), if the respondent had received an inheritance (binary where 1 indicates having received an inheritance and 0 otherwise), and self-employment status (binary where 1 self-employment and 0 otherwise).

Sociodemographic measures. Bequest gift motive respondent sociodemographic measures include age (continuous), education (recoded as a categorical variable with levels of high school or less, some college, and bachelor's degree or above), marital status (recoded as a categorical variable with married, partner relationship, single female, and single male), race (recoded as a categorical variable with White, Black, Hispanic, and Other), number of children within the household (categorical with a range of 0 to 7 which includes kids of respondent and reference person), and if the respondent had a living parent (binary where 1 represents the presence of a living mother or father and 0 otherwise).

Attitudinal measures. Bequest gift motive sociodemographic measures include attitude toward leaving a bequest, having made a charitable contribution, and risk aversion. Attitude toward a bequest is a categorical variable with the answer to the following question: "Some people think it is important to leave an estate or inheritance to their surviving heirs, while others don't. Which is closer to your (and your husband/wife/partner/spouse's) feelings? Would you say it is very important, important, somewhat important, or not important?" The answers represent the levels for this variable. The charitable contribution variable is dichotomous with 1 representing ever making a charitable contribution and 0 otherwise. Finally, risk aversion is a categorical variable representing the answer to the following question: "Some people are fully prepared to take financial risks when they save or make investments, while others try to avoid taking financial risks. On a scale from

zero to ten, where zero is not at all willing to take risks and ten is very willing to take risks, what number would you (and your husband/wife/partner) be on the scale?" To simplify the reporting of the results, this variable was recoded into low (up to 4), medium (5 to 7), and high (8 to 10) risk categories.

Health measures. Bequest gift motive health measures include self-reported health and disability status and longevity expectations. The self-reported health status categorical variable stores the three categories from the following question: "Would you say your (husband/wife/partner/spouse)'s health in general is excellent, good, fair, or poor?" The answers represent the levels in the variable. Disability status is dichotomous with 1 representing a disabled job status and 0 otherwise. Longevity expectation is a continuous variable representing how long the respondent expects to live, ranging from 40 to 150 years.

Altruistic measures. Altruistic measures were added to the current study to test Altruistic Bequest Theory. Bequest gift motive altruistic measures include household volunteerism, saving for college as a savings priority, and helping kids as a savings priority. Volunteerism is dichotomous with 1 representing someone in the household volunteering at least one hour or more a week and 0 otherwise. The second two variables measure savings attitudes. The SCF asks the following question: "People have different reasons for saving, even though they may not be saving all the time. What are your most important reasons for saving?" The saving for college variable is dichotomous, with 1 representing the answer of "Children's education; education of grandchildren" to this question and 0 otherwise. The helping kids variable is dichotomous, with 1 representing the desire to save "for the children/family," "to help the kids out," or "estate" and 0 otherwise.

Bequest Receipt Expectation Independent Variables

Economic measures. Bequest receipt expectation economic measures include the log of household income, the log of liquid and non-liquid asset holdings, and if the respondent had received an inheritance. These variables were coded the same as previously mentioned for the bequest gift motive.

Sociodemographic measures. Bequest receipt sociodemographic measures include age, education, marital status, race, number of siblings, and if the respondent was living with parents. Age, education, marital status, race, and if the respondent had living parents were coded the same as previously mentioned for the bequest gift motive. The number of siblings variable was recoded to capture a range from 0 to 6.

Health measures. Bequest receipt health measures include self-reported health and disability status**.** These variables were coded the same as previously mentioned for the bequest gift motive. Table 2 shows a summary of the various independent variables for each part of the study.

Table 2. Independent Variables for Bequest Gift Motive and Bequest Receipt Expectation

Bequest Gift Motive	Bequest Receipt Expectation
Group 1: Economic Measures	Group 1: Economic Measures
a.1 Household income	b.1 Household income
a.2 Liquid and non-liquid asset holdings	b.2 Liquid and non-liquid assets
a.3 Amount of inheritance ever received – changed to binary	**b.3 Ever received inheritance**
a.4 Self-employment status	
Group 2: Sociodemographic Measures	Group 2: Sociodemographic Measures
a.5 Age	b.4 Age
a.6 Education	b.5 Education
a.7 Marital status	b.6 Marital Status
a.8 Race	b.7 Race
a.9 Number of children	**b.8 Number of children under 18 – dropped from the study**
a.10 Respondent has living parents	b.9 Number of siblings
	b.10 Respondent has living parents
Group 3: Attitudinal Measures	Group 3: Health-Related Measures
a.11 Attitude toward leaving a bequest	b.11 Self-reported health
a.12 Ever having made a charitable contribution	b.12 Disability status
a.13 Extent of risk aversion	
Group 4: Health-Related Measures	
a.14 Self-reported health	
a.15 Disability status	
a.16 Longevity expectation	
Group 5: Altruistic Measures	
a.17 Household volunteerism	
a.18 Saving for college is a savings priority	
a.19 Helping kids is a savings priority	

Note. Bolded variables are new or modified variables compared to Kao et al. (1997).

Empirical Model

There is much debate regarding the use of weighted vs. unweighted regression modeling. According to Shin and Hannah (2017), using unweighted models can produce more conservative significance test results when the focus is on structural relationships. We followed this guidance and chose to study the bequest gift motive dependent-independent variable relationships using an unweighted multinomial logit model. Three categories were compared: (a) bequest versus maybe bequest, (b) bequest versus no bequest, and (c) no bequest versus maybe bequest. The result of this analysis is found in

Table 4. The receipt expectation dependent-independent variable relationships were studied using an unweighted binary logit model. The result of this analysis is found in Table 5.

Results

Descriptive Statistics

The descriptive statistics for the variables in the current study are presented in Table 3. Unweighted results show 27% of the sample received an inheritance and 22% are self-employed. The sample was highly educated with 73% having at least some college education and 48% having a bachelor's degree or higher. Married persons represented 54% of the sample. Sample races included 72% White, 13% Black, 10% Hispanic, and 6% Other. Nearly 55% of the sample thought giving a bequest was "Important" or "Very Important." Risk tolerance categories included 40% for low, 44% for medium, and 16% for high. This sample's self-reported health was high with 28% reporting "Excellent" and 50% reporting "Good." The mean for longevity expectation was 86 years old. Regarding altruistic and additional variables for this study, 47% of the sample have given to charity at some point in the past, while 30% were volunteers. The college savings and child savings priorities represented a relatively minor portion of the sample at 4% and 5%. The mean age was 53 years old. The median income for the sample was $79,4131, with a median of $64,500 for financial assets and $252,600 for nonfinancial assets. (these figures are unweighted results across all five implicates; weighted results show the mean income for the sample was $106,251, with a mean of $358,116 for financial assets and $496,302 for nonfinancial assets).

Table 3. Descriptive Statistics

	Unweighted	Weighted
	Mean/Proportion	Mean/Proportion
Received an inheritance	0.2707	0.2361
Self-employed	0.2176	0.1111
Education		
High school or less	0.2667	0.3156
Some college	0.2557	0.2991
Bachelor's and above	0.4777	0.3853
Marital status		
Married	0.5380	0.4607
Partner relationship	0.0860	0.0997
Single female	0.2164	0.2614
Single male	0.1596	0.1782
Race		
White	0.7167	0.6800
Black	0.1301	0.1565
Hispanic	0.0966	0.1093
Other	0.0566	0.0542
Number of children	0.7483	0.7224
Number of siblings	2.4395	2.4714
Living Parents	0.3578	0.3802
Attitude toward bequest		
Very important	0.2811	0.2520
Important	0.2679	0.2771
Differ	0.0071	0.0064
Somewhat important	0.2778	0.2882
Not important	0.1661	0.1764
Charitable Giving	0.4730	0.3592
Risk tolerance		
Low	0.3945	0.4700
Medium	0.4424	0.4179
High	0.1631	0.1121
Health		
Excellent	0.2787	0.2349
Good	0.4913	0.5000
Fair	0.1906	0.2174
Poor	0.0394	0.0477
Disabled	0.0590	0.0713

Longevity Expectation	85.5674	85.0849
Volunteerism	0.2941	0.2324
Saving for college priority	0.0417	0.0424
Saving for children priority	0.0542	0.0527
Age	52.8039	51.2769
Income	79413*	106251
Financial assets	64500*	358116
Nonfinancial assets	252600*	496302

n = 5,777 (28,885 across five implicates)

*Median reported due to skewedness

Bequest Gift Motive Multinomial Logit Model

For the first column in Table 4, expecting to give a bequest versus maybe give a bequest, the multinomial logit model showed that those who received an inheritance had 1.30 times the odds of expecting to give a bequest versus maybe give a bequest compared to those who had not received an inheritance. Self-employed individuals had 1.36 times the odds of expecting to give a bequest versus maybe give a bequest compared to those who were not self-employed. Single females and single males had 1.27 and 1.31 times the odds, respectively, of expecting to give a bequest versus maybe give bequest compared to those who were married. Blacks had 1.27 times the odds of expecting to give a bequest versus maybe give bequest compared to Whites. Attitudes toward giving a bequest had a strong directional relationship with expecting to leave a bequest (across all three categories studied). Those with lower attitudes toward giving a bequest compared to those who thought giving a bequest was "very important" had lower odds of expecting to give a bequest versus maybe give a bequest. Respondents who reported "disabled" as their employment status had 1.65 times the odds of expecting to give a bequest versus maybe give a bequest compared to those who did not list this as their work status. Charitable givers had 1.39 times the odds of expecting to give a bequest versus maybe give a bequest compared to those who had not given to charity. Log of income, log of financial assets, and log of nonfinancial assets were positively associated with expecting to give a bequest versus maybe give a bequest. Longevity expectation, volunteerism, and the savings priority variables were not significant in the first column of results.

The focus of this paper rests on the second column of the multinomial logit model, namely, giving a bequest versus not giving a bequest. This column is likely the most important for interpreting the results given the study's research question. The multinomial logit model showed that those who received an inheritance had 1.84 times the odds of expecting to give a bequest versus no bequest compared to those who had not received an inheritance. This is in line with a recent study by DeBoer and Hoang (2017). The self-employed had 1.47 times the odds of expecting to give a bequest versus no bequest compared to those who were not self-employed. Single males had 1.32 times the odds of expecting to give a bequest versus no bequest compared to those who were married. Blacks had 1.80 times the odds and Hispanics 1.81 times the odds of expecting to give a bequest versus no bequest compared to Whites. Those with lower attitudes toward giving a bequest compared to those who thought giving a bequest was "very important" had lower odds of expecting to give a bequest versus no bequest. Charitable givers had 1.62 times the odds of expecting to give a bequest versus no bequest compared to those who had not given to charity. Risk tolerance also played a role in bequest expectations; those ranked at medium risk tolerance and high risk tolerance had 1.31 and 1.92 times the odds of giving a bequest versus no bequest compared to those with low risk tolerance. Those reporting poor health had 0.47 times the odds of giving a bequest versus no bequest compared to those with excellent health.

Log of income, log of financial assets, and log of nonfinancial assets were positively associated with expecting to give a bequest versus no bequest. Longevity expectation and volunteerism were not significant in the second column of results, but the two savings priority variables were. Respondents with the saving for college priority had 1.93 times the odds of expecting to give a bequest versus no bequest compared to those who did not have this saving priority. Respondents with the saving for children priority had 1.84 times the odds of expecting to give a bequest versus no bequest compared to those who did not have this saving priority.

For the final column in Table 4, no bequest versus maybe bequest, the model showed that those who received an inheritance had 0.71 times the odds of expecting to not give a bequest versus maybe give a bequest compared to those who had not received an inheritance. Those who held the two savings priorities exhibited lower odds of expecting to not give a bequest versus maybe give a bequest compared to those who did not have these savings priorities. Unlike the previous two categories, charitable giving was not statistically significant for the no bequest versus maybe bequest category. Longevity expectation had a significant relationship with an odds ratio close to 1 (of 0.99) for the no bequest versus maybe bequest category. Finally, the log of financial assets and the log of nonfinancial assets had a negative relationship with the odds of being in the no bequest category rather than the maybe bequest category.

Table 4. Multinomial Logit for Bequest Gift Motive

	Modeled Response v. Base											
	Bequest v. Maybe Bequest				Bequest v. No Bequest				No Bequest v. Maybe Bequest			
	Est. Coef		SE	Odds Ratio	Est. Coef		SE	Odds Ratio	Est. Coef		SE	Odds Ratio
Received an inheritance	0.2608	**	0.0884	1.2980	0.6100	***	0.0965	1.8404	-0.3492	***	0.1001	0.7053
Self-employed	0.3055	**	0.0979	1.3573	0.3852	***	0.1093	1.4699	-0.0797		0.1153	0.9234
Education (ref= hs or less)												
Some college	-0.2471	*	0.1056	0.7811	-0.0701		0.1083	0.9323	-0.1769		0.1041	0.8378
Bachelor's and above	-0.1069		0.1078	0.8987	-0.1077		0.1110	0.8979	0.0008		0.1106	1.0008
Marital status (ref=married)				1.0000								
Partner relationship	0.0939		0.1372	1.0985	0.1087		0.1468	1.1148	-0.0147		0.1417	0.9854
Single female	0.2389	*	0.1097	1.2698	0.1210		0.1108	1.1286	0.1178		0.1089	1.1251
Single male	0.2699	*	0.1173	1.3098	0.2769	*	0.1215	1.3191	-0.0070		0.1215	0.9930
Race (ref=white)				1.0000								
Black	0.2420	*	0.1223	1.2738	0.5892	***	0.1287	1.8026	-0.3472	**	0.1255	0.7067
Hispanic	0.1131		0.1301	1.1197	0.5948	***	0.1401	1.8127	-0.4817	***	0.1337	0.6177
Other	-0.0803		0.1539	0.9228	0.2628		0.1763	1.3005	-0.3431	*	0.1722	0.7096
Number of children	-0.0121		0.0368	0.9879	-0.0711		0.0398	0.9314	0.0590		0.0396	1.0608
Living Parents	0.0551		0.0978	1.0567	0.0771		0.1054	1.0801	-0.0219		0.1058	0.9783
Attitude toward bequest (ref= very important)												
Important	-0.7003	***	0.0952	0.4964	-1.0548	***	0.1141	0.3483	0.3545	**	0.1222	1.4254
Differ	-1.0165	**	0.3799	0.3618	-1.2927		0.4649	0.2745	0.2762		0.4747	1.3181
Somewhat important	-1.3801	***	0.0987	0.2516	-2.2118	***	0.1147	0.1095	0.8317	***	0.1177	2.2973
Not important	-1.4065	***	0.1377	0.2450	-3.3186	***	0.1376	0.0362	1.9122	***	0.1369	6.7676
Charitable Giving	0.3285	***	0.0917	1.3888	0.4815	***	0.0974	1.6185	-0.1531		0.0987	0.8581

Risk tolerance (ref=low)												
Medium	0.1618		0.0836	1.1756	0.2720	**	0.0867	1.3126	-0.1102		0.0852	0.8957
High	0.4074	***	0.1155	1.5029	0.6516	***	0.1274	1.9187	-0.2442		0.1327	0.7833
Health (ref=excellent)												
Good	-0.0637		0.0872	0.9383	-0.1428		0.0968	0.8669	0.0791		0.0992	1.0823
Fair	-0.0992		0.1213	0.9056	-0.1735		0.1275	0.8407	0.0743		0.1264	1.0771
Poor	-0.1393		0.2679	0.8699	-0.7575	**	0.2398	0.4688	0.6181	**	0.2373	1.8555
Disabled	0.5021	*	0.2042	1.6522	0.1121		0.1797	1.1186	0.3900	*	0.1801	1.4770
Longevity Expectation	-0.0024		0.0039	0.9976	0.0061		0.0039	1.0061	-0.0085	*	0.0039	0.9916
Volunteerism	0.1134		0.0859	1.1201	0.0507		0.0927	1.0520	0.0627		0.0956	1.0648
Saving for college priority	0.1406		0.1708	1.1510	0.6590	**	0.2064	1.9328	-0.5184	*	0.2047	0.5955
Saving for children priority	0.2081		0.1635	1.2313	0.6084	**	0.1866	1.8375	-0.4003	*	0.1896	0.6701
Age	-0.0029		0.0035	0.9971	-0.0280	***	0.0037	0.9724	0.0250	***	0.0036	1.0254
Log of income	0.1190	***	0.0276	1.1263	0.0919	**	0.0325	1.0962	0.0271		0.0299	1.0275
Log of financial assets	0.1095	***	0.0195	1.1158	0.2521	***	0.0197	1.2867	-0.1426	***	0.0182	0.8671
Log of nonfinancial assets	0.0291	*	0.0146	1.0295	0.0753	***	0.0144	1.0782	-0.0463	***	0.0130	0.9548
Constant	-1.8025	***	0.4710	0.1649	-2.5855	***	0.5060	0.0754	0.7830		0.4974	2.1880
Model fit statistics												
Log-likelihood	-4823.2696											
McFadden pseudo R^2	0.2182											

*$p < .05$ ** $p < .01$ ***p<0.001

Bequest Receipt Expectation Binary Logit Model

For the binary logit model (Table 5), those who received an inheritance had 1.85 times the odds of expecting to receive a bequest compared to those who had not received an inheritance. Those with more education had higher odds of expecting a bequest compared to those with less education. Black, Hispanic, and other races had lower odds compared to Whites to expect a bequest. Those with living parents had 1.54 times the odds of expecting a bequest compared to those who did not have living parents. Although the SCF does not explicitly link the parent-to-child bequest type, this finding makes sense as this bequest would require living parents to execute. Age had a negative relationship with bequest receipt expectation. In other words, older individuals were less likely to expect a bequest from their benefactors. The log of income had a negative relationship with bequest receipt expectation, whereas the log of financial assets had a positive relationship.

Discussion

This paper's discussion begins with the new variables added to the bequest gift motive multinomial logit model. First, household volunteerism was not associated with the bequest gift motive across any of the categories compared to the base category of those who do not volunteer. It is possible that this can be explained because volunteers consider their time and efforts as equivalent to a monetary bequest. Second, although longevity expectation was associated with the bequest gift motive for the no bequest versus maybe bequest category, the relationship was quite weak. This result suggests that longevity expectation is not a strong predictor of bequest intention. Third, the two savings priorities were associated with bequest intention in two categories (i.e., bequest vs. no bequest and no bequest vs. maybe bequest), which supports the idea that parents who prioritize the well-being of their children are more likely to leave bequests. This finding reinforces the underlying concepts of Altruistic Bequest Theory. Respective to the base categories of receiving an inheritance, self-employed, single (male) marital status, race (Black and Hispanic), positive attitude toward leaving a bequest, charitable giving, higher risk tolerance, age, income, financial assets, and nonfinancial assets were more likely to predict giving a bequest versus no bequest. Outside of the poor health status, health was not a key predictor in the model. This finding deserves further study to understand the dynamics underlying this relationship.

Regarding the bequest receipt expectation binomial logit model, receiving an inheritance, level of education, marital status, race, presence of living parents, age, income, and financial assets were the most important predictors of receiving a bequest. Surprisingly, the log of income showed a negative relationship with the expectation of receiving a bequest. Perhaps this means children or relatives with lower incomes are more likely to expect a bequest from their benefactors.

Limitations and Future Research

The current study curated variables from the SCF to test Altruistic Bequest Theory. Although large secondary datasets have great value in answering research questions, a researcher cannot go back to ask more precise questions of the respondents. As such, a few of the variables used to answer the study's research questions have inherent limitations. First, the volunteerism variable extracted from the SCF measures if someone in the household volunteers at least one hour or more a week. However, a direct link between the volunteering individual (or individuals) and the bequest receipt or bequest gift expectation is unknown. Also, the charitable giving dichotomous variable gives equal weight to someone who, hypothetically, gave one small gift ten years ago versus someone who regularly gives to multiple charities. Furthermore, the SCF often does not go beyond an expectation to act to measure the action itself. The savings priority variables used in this study, for example, simply measure a desire to prioritize saving for children, grandchildren, or college but do not measure if this occurred. Researchers in future studies could attempt to gather primary data that have less ambiguity in measuring Altruistic Bequest Theory, ones that better define relationships and test behavior.

This investigation encourages further study in two areas. First, it points to the need for continued study of the relationship between the bequest gift motive and health, as noted previously. Second, a similar study could be enhanced by studying variables across waves of the SCF to show if the relationships uncovered in this study change over time.

Table 5. Binary Logit Model for Bequest Receipt Expectation

	Coeff		SE	Odds Ratio
Received an inheritance	0.6152	***	0.0895	1.8519
Self employed	0.1535		0.0972	1.1688
Education				
Some college	0.2689	*	0.1282	1.3112
Bachelor's and above	0.5110	***	0.1252	1.6683
Marital status				
Partner relationship	-0.0175		0.1450	0.9780
Single female	-0.5659	***	0.1330	0.5670
Single male	-0.1067		0.1213	0.8957
Race				
Black	-0.8287	***	0.1661	0.4387
Hispanic	-1.3017	***	0.2104	0.2721
Other	-0.4919	**	0.1754	0.6090
Number of siblings	-0.0271		0.0254	0.9729
Living Parents	0.4291	***	0.1035	1.5386
Health				
Good	0.0364		0.0882	1.0373
Fair	-0.1865		0.1350	0.8276
Poor	-0.1953		0.2922	0.8227
Disabled	0.3551		0.2188	1.4309
Age	-0.0369	***	0.0038	0.9637
Log of income	-0.0636	*	0.0254	0.9382
Log of financial assets	0.0960	***	0.0213	1.1003
Log of nonfinancial assets	-0.0052		0.0156	0.9946
Constant	-0.5388		0.3431	0.5871
Model fit statistics				
Log-likelihood	-2183.6854			
McFadden pseudo R^2	0.1149			

* Significant at $p < 0.05$; ** significant at $p < 0.01$; *** significant at $p < 0.001$

Conclusion

This paper updated bequest research conducted by Kao et al. (1997). This original study used the 1989 SCF to study the two sides of bequests: the bequest gift motive and the receipt expectation. Many of the original economic, sociodemographic, attitudinal, and health variables found in that study are further investigated here using the 2019 SCF. Further, this paper added additional variables found within the SCF that align with Altruistic Bequest

Theory. Results from the addition of these altruistic variables offer support for the continued use of Altruistic Bequest Theory in the study of bequest intention. Finally, this paper explored the relationship between longevity expectation and bequest motive, showing that longevity expectation is not a strong predictor of bequest intention.

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