Understanding Bequest Expectations: The Interplay of Charitable Giving, Wealth Composition, and Income Dynamics

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Abstract

When it comes to deciding to leave an estate or inheritance, the primary motivation would be to enhance others' financial well-being or contribute to the betterment of others' live. Normally, transferers have two possible options, transferring or leaving wealth to their family or descendant, or contributing their financial resources for philanthropic purposes. The desire to leave wealth to family or descendants is primarily driven by bequest expectation, which is often influenced by financial status, personal values and beliefs, family history and expectations, and other socio factors. While the desire to make contributions for philanthropic purposes, is primarily driven by charitable motive, which is often influenced by altruism, social or legacy impact, and occasionally tax saving incentives. Unlike leaving an estate to family, contributions for philanthropic purposes fall into three main categories, exclusive monetary contribution, exclusive time contribution, and both. Obviously, individuals may have two motives simultaneously, which means both motives can coexist. The differing motivation of transferring wealth reveals a practically and theoretically important distinction to enhance understanding of bequest expectations, particularly as they intersect with charitable motives, wealth composition, and income dynamics.

Key Words: wealth transfer, bequest intentions, charitable motives, wealth composition, and income dynamics.

Introduction

Bequest expectation was notably introduced by Irving Fisher, back to 1930. His work delved into the reasons behind the consumers' saving and spending behaviors, especially a desire to leave an inheritance as a part of wealth management (Fisher, 1930). Franco Modigliani formalized bequest expectation within economic theory, especially incorporated it into Life-Cycle Hypothesis framework. He suggested that individuals' decisions on savings and consumptions are not only for lifetime income but also for leaving a bequest or inheritance (Modigliani, 1986).

Giving motive was introduced and further expanded by Gary S. Becker. He introduced the *Theory of Social Interactions* in 1970 to explain altruism and why individuals are willing to give and make donations to help others. And this is because givers have the potential to gain utility and satisfaction from enhancing or improving others' well-being and society welfare (Becker, 1974). His work laid the groundwork for understanding altruistic and philanthropic behaviors and worked as the foundational framework for subsequent researchers and economists. James Andreoni expanded the social interaction framework on *Warm-glow theory* in 1990s, and explained the motivation behind charitable giving that individuals make charitable donations is not only because of the altruism, but also because the "warm-glow" and personal satisfaction. And charitable giving is driven by mixed and complex motivations (Andreoni, 1990).

In most cases, individuals have limited financial resources and have insufficient wealth to support all their financial goals. Normally, individuals prioritize their goals by their financial status, values, beliefs, and other social factors. The bequest expectation and charitable motive represent two distinct approaches for wealth management (Hurd, 1989). Different management strategies align with individuals' personal and unique goals and implications. Typically, individuals who have strong bequest expectation focus on capital preservation, like how to maintain and secure wealth for future generations and other heirs (De Nardi, 2004). In other words, individuals with strong bequest expectations are less likely to contribute their wealth to charity, especially they prioritize family supports (James & Sharpe, 2007). In

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contrast, the charitable motive is oriented toward capital distribution, people with a charitable motive might be more willing to share the wealth, support social causes, and other philanthropic efforts (Bekkers & Wiepking, 2011). Those with charitable motive tend to emphasis on the entire social welfare beyond their own families (Schervish & Havens, 1997).

When bequest expectation and charitable motive is coexisted, individuals may face a complicated and complex decision-making process, and need to evaluate the “trade-offs” to maximize their utilities and satisfactions. As a result, individuals with different priorities (bequest vs. charitable) might utilize differing wealth management strategies to optimize their wealth composition and income dynamics to satisfy their priority goals. For example, individuals who invest in savings bonds and stocks might have different priorities, as savings bonds and stocks serve as different wealth management strategies. Generally, savings bonds are categorized as fixed income securities and individuals who invest in savings bonds might emphasize on stable coupon payments for current consumption needs; while stocks are generally categorized as equity securities and individuals who invest in stocks might prioritize future capital appreciation. Extend the consideration of this example to income dynamics, individuals who receive dividend income and capital gains may have different priorities, as varying income sources reflect different wealth management strategies.

From the empirical evidence, many studies suggested that bequest expectation and charitable motive are distinct motives, and individuals often favoring one over the other, which is significantly impact on individuals’ financial behaviors (Andreoni, 1989; Hurd & Smith, 2002; Kopczuk & Lupton, 2007). This paper uses data from 2022 through the Survey of Consumer Finances to examine bequest expectations in relations to charitable giving, wealth composition, and income dynamics. The estimations of a logit model show that individuals who make exclusive time donation have a greater bequest expectation than those who do not have any charitable donations. Meanwhile, individuals who possess dividend income have a weaker bequest expectation, but individuals who have income from sole proprietorship, capital gains, and alimony have a greater bequest expectation. Moreover, individuals who possess savings bonds and quasi-liquid retirement assets (like 401K) show a weaker bequest expectation, but individuals who own stocks and bonds have a greater bequest expectation.

Theoretical Framework

The “Theory of Social Interaction” was remarkably introduced by Gary Becker in 1974, and the theory well explains relationships and connections among people based on various social factors. It primarily focuses on how these interactions affect and influence individuals’ behaviors and decision making. For instance, how individuals’ values, beliefs, and expectations guide their behaviors and decision making. By examining these factors, the theory provides invaluable insights into how individuals make decisions when they are willing to transfer their assets or wealth. For example, whether to preserve wealth and leave wealth to their future generations, or distribute wealth, and contribute their accumulated wealth for philanthropic purposes.

When specifically apply to the theory to bequest expectation and charitable motive, it suggests that people’s wealth transfer decisions predominately determined by their relationships, connections, and interactions with their families and communities. For people who prioritize strengthening their family well-being as the most important goal, they may have essential bequest expectations, leave a sizeable bequest or inheritance to family relatives. If this is the case, people are likely to preserve their accumulated wealth to ensure that they have financial capability to achieve their bequest or inheritance goals. However, in most cases, people have limited financial resources, if leaving a bequest dominates their financial beliefs, they will have limited financial resources for their charitable motivations, especially for monetary donations. In contrast, for people who prioritize increasing community welfare or even the entire society welfare as the most critical goal, they might have strong and significant charitable motives. If this is the case, people are more likely to distribute their accumulated wealth to their communities and charities. And this giving behavior might limit their financial ability to leave a sizeable bequest or inheritance.

The Warm-Glow Giving Theory inherited the scientific framework from the Theory of Social Interaction. The theory is notably introduced by James Andreoni in 1990, and the theory explores how people gain emotional utilities and satisfactions from giving, regardless of actual outcomes they could obtain from giving behaviors. The theory explains that emotional satisfaction largely impacts people’s decisions about giving. Similar to The Theory of Social Interaction, if the primary anticipation is enhancing family relatives’ financial well-being, they might be with strong bequest expectation and choose to preserve their accumulated assets, and eventually, leave a sizeable bequest. However, if the primary motivation is influencing the community or even the entire society, they perhaps have a stronger charitable motive and choose to distribute their accumulated wealth, and ultimately, make more charitable donations, both on time and monetary donations.

The "Behavioral Life-Cycle Theory" was notably introduced by Hersh Shefrin and Richard Thaler back to 1988. The theory indicates that individuals tend to engage in mental accounting, which leads to treat wealth and income differently based on mental classifications (Shefrin & Thaler, 1988). As a result, individuals are predisposed to have varying consumption behaviors according to their mental wealth and income accounts.

When particularly apply to the theory to bequest expectation with wealth compositions, it reveals that individuals with "earmarked" assets, such as quasi-liquid retirement accounts might be have a lower bequest expectation, and this is because retirement accounts are psychologically "locked" for retirement or future consumptions, instead of for bequest purposes; while individuals with "discretionary assets", such as stocks and bonds might be have a stronger bequest expectation, and this is because these types of assets are psychologically "free", and frequently be treated as all-purpose financial wealth. As a result, individuals tend to more likely to transfer these "unrestricted" assets to family relatives. In essence, individuals' bequest expectation may vary systematically with wealth composition.

Regarding income dynamics, according to the Behavioral Life-Cycle theory, individuals tend to categorize income sources mentally based on timing, stability, and accessibility. When income is stable and occurs on a regular and recurrent basis, the income is likely to psychologically categorized as "current income". Typically, current income is often viewed as spendable, with higher marginal propensity to consume. As a result, individuals are expected to have a lower bequest intention when the income is accessible and stable. In contrast, when income is categorized as "less regular" or even "unrealized", such as capital gains, usually, it generated from investments and occurs in an irregular basis. This type of income is likely to be preserved as "accumulation" due to its stability and accessibility. Consequently, individuals are expected to have a stronger bequest intention when the income is less accessible and stable. In brief, income dynamics could play a crucial role in shaping the expectation to leave a bequest.

Hypothesis

Numerous studies have examined and explored the association between bequest expectation and charitable motive. For example, Schervish & Havens (1997) noted that individuals feel a strong sense of responsibility both to their family and community, which influences how they share their wealth. Several following studies confirmed that results. For example, James and Sharpe (2007) found that bequest expectation and charitable motive can be coexisted and indicated that individuals may prioritize family bequest or inheritance on early life cycle but become more inclined toward to charitable giving as they age. Additionally, James (2009) explored how individuals balanced their charitable and bequest expectations as their health and wealth status changed.

However, research directly connecting people who only donate their time with a strong bequest expectation is somewhat limited. Based on some classical theories, like *The Theory of Social Interaction and The Warm-Glow Giving theory*, individuals who donate time to charitable organizations genuinely care for others' well-being. And individuals gain utilities and satisfactions from their time donations. Similarly, *The Altruism Theory* indicates that people are driven by a nature desire to improve the lives of those they love, especially their family members (Cox, 1987 & Wilhelm, 1996). Therefore, sufficient theory backup to believe that individuals who engage in charitable time donations possess a stronger bequest expectation compared to those who do not participate in any charitable activities. If this is the case then, controlling wealth, insurance protections, and other demographic factors, the first hypothesis would hold.

Hypothesis 1: Individuals who engage in charitable time donations exhibit stronger bequest expectations than individuals who do not participate in any charitable activities.

Conversely, individuals who make monetary donations may exhibit a weaker or more attenuated bequest expectation compared to those who solely donate their time. As mentioned before, the bequest expectation and charitable motive represent two distinct approaches for wealth management (Hurd, 1989). As individuals who have stronger bequest expectations may primarily focus on wealth preservation, to ensure that future generations will experience enhanced well-being from their inheritance. In contrast, individuals with a stronger charitable motive may primarily focus on wealth distribution to enhance the welfare of communities or even society as a whole. It is well understood that most individuals possess limited financial resources; thus, if they prioritize the well-being of communities and society, their allocations to family members may be constrained. If this is the case then, controlling wealth, insurance protections, and other demographic factors, the second hypothesis would hold.

Hypothesis 2: Individuals who make monetary donations exhibit weaker bequest expectations compared to those who solely donate their time.

Furthermore, individuals may concurrently contribute their time and make monetary donations. This behavior raises questions regarding its impact on their bequest expectation. Specifically, does the combination of time and monetary contributions alter the extent or nature of their desire to leave financial resources to future generations? To answer this question, this paper compares the individuals who make inclusive monetary and time donations with the individuals who make time donations exclusively. Extensive research indicates that individuals who make monetary donations with a stronger charitable commitment than individuals who are exclusive time donor (Piferi & Lawler, 2006, Brown & Ferris, 2007, Bekkers & Wiepking, 2011). Owing to their significant dedication to charitable causes, financial benefactors may exhibit a greater propensity to distribute their wealth within their communities rather than conserving it solely for the benefit of future generations. This shift in philanthropic intent underscores a preference for immediate societal impact over intergenerational wealth preservation. If this is the case then, controlling wealth, insurance protections, and other demographic factors, the second hypothesis would hold.

Hypothesis 3: Individuals who donate money and time inclusively exhibit weaker bequest expectations compared to those who solely donate their time.

Literature and empirical evidence that examine the association between wealth composition and bequest expectations are somewhat limited. Typically, pervious research studies examined the association between wealth and bequest expectations broadly. For example, previous research analyzed this association by using total wealth, housing wealth versus non-housing wealth, or financial wealth versus non-financial wealth. No literature or empirical studies specifically focused on “wealth composition”, such as certificate of deposit, mutual funds, savings bonds, stocks, directly held bonds, cash value whole life insurance, etc. According to the “Behavioral Life-Cycle Theory”, this paper predicts that individuals’ bequest expectation may vary systematically with wealth composition. Furthermore, individuals with “unrestricted” wealth tend to have a stronger bequest expectation.

Hypothesis 4: Bequest expectations vary systematically with wealth composition, such that individuals holding discretionary assets exhibit stronger bequest expectations than those holding earmarked assets.

Similar to wealth composition question, previous research rarely focused on the association between bequest expectations and income dynamics. Many empirical studies utilized total income or logged total income to examine the association between “income” and bequest expectations (Anderson et al., 2024; Hurd & Smith, 2002; Begley, 2017). However, no literature or empirical studies specifically focused on “income dynamics”, such as income from sole proprietorship, income from non-taxable investments, interest income, dividends, capital gains, business income, etc. As indicated by the “Behavioral Life-Cycle Theory”, due to mental accounting, individuals perceive income differently depending on its source, which in turn leads to varying consumption behaviors across different types of income. Based on the theory, this paper predicts that individuals with spendable income can lead a higher marginal propensity to consume, which could result in a lower bequest expectation.

Hypothesis 5: Bequest expectations vary with income dynamics, such that individuals holding current and regular income exhibit weaker bequest expectations than those holding future and unstable income.

Data and Variables

This study utilized the data from 2022 Survey of Consumer Finances (SCF). SCF is a nationally representative and conducted by the Federal Reserve Board with detailed information for financial characteristics, behavior, and attitudes of U.S. households. In this study, the analytic sample includes 4,564 respondents, and weights are applied to the data analysis (regression analysis).

The dependent variable is the “bequest expectation”, this study employed the question: “The importance of leaving an estate” as a proxy for bequest expectation. There are four responses in the survey as: “not important”; “somewhat important”; “important”; and “very important”. If respondents chose “not important” and “somewhat important”, the value is coded as 0, which represents a weak bequest expectation; if respondents chose “important” and “very important”, the value is coded as 1, which represents a strong bequest expectation.

The study includes charitable behavior, wealth composition, income dynamics, and demographic as independent variables. Charitable behavior is a categorical variable, which consists of four groups, and they are monetary donations only, time donations only, both monetary and time donations, and neither monetary donations nor time donations.

Wealth composition matrix includes a comprehensive set of asset categories: certificates of deposit, mutual funds, savings bonds, stocks, directly held bonds, cash value of whole life insurance, annuities and trusts, quasi-liquid retirement assets, other miscellaneous financial assets, vehicles, residential property, non-residential property, business, and other miscellaneous non-financial assets. Each asset category is represented as a dummy variable, coded as 1 if the respondents hold the asset; coded as 0 if the respondents do not hold the asset.

Like wealth composition matrix, income matrix consists of a comprehensive set of income categories: income from sole proprietorship, income from non-taxable investments, other interest income, dividends, capital gains, business income, unemployment income, alimony, social security income, welfare, and income from pension or IRAs. Each income category is represented as a binary variable, coded as 1 if the respondents have this income; coded as 0 if the respondents do not have this income. Demographic matrix contains a variety of variables: respondents' age, gender, educational attainments, ethnicity, marital status, homeownership, life insurance coverage, total wealth and income, savings habit, if received inheritance, household size, risk tolerance, objective and subjective financial knowledge, and retirement income coverage (current or anticipated).

Model

This paper estimates the following logistic regression model via maximum likelihood:

$$BE^* = \beta_0 + \sum_{i=1}^{3} \beta_i * CB_i + \sum_{j=1}^{14} \beta_j * WC_j + \sum_{k=1}^{11} \beta_k * IN_k + \sum_{l=1}^{34} \beta_k * DV_l + e$$

$$BE = 1 \text{ if } BE^* > 0$$

$$BE = 0 \text{ if } BE^* \leq 0$$

Where BE^* is the unobserved latent variable measuring the underlying propensity or motivation to leave a bequest. The matrix *CB* contains charitable behavior variables and include monetary donations only, time donations only, both monetary donations and time donations, and neither monetary donations nor time donations. The matrix *WC* consists of a comprehensive set of wealth categories: certificates of deposit, mutual funds, savings bonds, stocks, directly held bonds, cash value of whole life insurance, annuities and trusts, quasi-liquid retirement assets, other miscellaneous financial assets, vehicles, residential property, non-residential property, business, and other miscellaneous non-financial assets. The matrix *IN* includes of an extensive set of income categories: income from sole proprietorship, income from non-taxable investments, other interest income, dividends, capital gains, business income, unemployment income, alimony, social security income, welfare, and income from pension or IRAs. And The matrix *DV* consists of a broad-ranging set of demographic information.

Conclusion

The results indicate that exclusive-time donors might gain more utilities and satisfaction from leaving a sizeable bequest instead of monetary contributions to charities. This is an important contribution to current literature.

Individuals with dividend income tend to have weaker bequest intentions, possibly due to a focus on present consumption as dividend income is a type of current income and be more "spendable". In contrast, individuals who possess capital gains, income from sole proprietorship, and alimony income show a stronger bequest expectation, which reflects a focus on wealth accumulation and family support.

Wealth composition will shape bequest intentions. The results exhibit that individuals show a stronger bequest expectation by holding stocks and bonds, but a weaker bequest expectation if individuals hold savings bonds and quasi-liquid retirement assets. It reflects that the varying bequest intentions between "restricted' and "unrestricted" wealth. Typically, "restricted" wealth is "locked" for specific purposes, such as retirement consumptions; while "unrestricted" wealth is more flexible for other financial goals, such as leaving a bequest.

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