Five Facts about Bequest Motives*

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Abstract

Rising differences in generational wealth and the economic effects of inheritances make it increasingly important to understand individuals' bequest motives. We document five novel empirical facts about individuals' preferences and expectations toward bequests using survey data spanning three decades. (1) Households with heirs exhibit stronger bequest preferences. (2) Bequest motives follow a U-shaped pattern over the life cycle. (3) The perceived importance of bequests rises sharply among the top two deciles of the wealth distribution. (4) Stock owners, particularly those who experience high market returns, report stronger bequest preferences. (5) Individuals systematically overestimate their bequests' likelihood and size. These stylized facts provide new benchmarks for evaluating economic models and suggest that alternatives to the static treatment of bequest motives may better reflect observed behavior. Finally, we examine the implications of these findings for wealth accumulation and portfolio choice within a canonical life-cycle model with precautionary savings.

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1 Introduction

Death is inevitable. Understanding individuals' bequest motives is crucially important in light of our aging population and the concentration of wealth in older generations (Chetty et al., 2014). According to estimates, inheritances account for at least 25% of individuals' wealth after parental death and bequests may increase absolute wealth inequality (Charles and Hurst, 2003; Reyna and Farley, 2006; Boserup et al., 2016). These intergenerational wealth transfers have significant economic implications, making it essential to incorporate realistic bequest motives into economic models.

Indeed, a large class of economic models studies the trade-offs that individuals make across time. Such "life-cycle models" help understand patterns of consumption, savings, portfolio choice, debt decisions, and human capital allocation at different ages. These models often include ingredients of decision-making such as individuals' risk tolerance (Gomes and Michaelides, 2005), their subjective discount factor (Laibson, 1997), and subjective beliefs about survival (Heimer et al., 2019). They also tend to incorporate preferences over leaving an inheritance to subsequent generations, termed a *bequest motive*.

However, despite their prevalence in life-cycle models, the literature often treats the bequest motive as an afterthought. Recent papers, when they incorporate a bequest motive, often merely follow the choices made by previous literature. For instance, Bommier et al. (2020) states, "There is no consensus on the formulation of v (known as a 'warm-glow' bequest function), but the form we have chosen is the same as in Cocco et al. (2005), Inkmann et al. (2011) and Yogo (2016)." The practice of using previously derived parameterizations extends back to at least Love (2013), which says: "When the [bequest] motive is operational, I follow Gomes and Michaelides (2005) and set the bequest parameter b = 2.5."

One must look even further back in the literature to find a non-referential discussion of modeling the bequest motive. For instance, Gomes and Michaelides (2005) states, "The importance of the bequest motive (b) is set at 2.5 ... this parameter choice is motivated by the desire to match the wealth accumulation profiles observed in the data." Notably, even the Gomes and Michaelides (2005) method of calibrating the bequest motive is less than ideal because individuals' ex-post outcomes—their accumulated wealth—determine the parameter choice. However, in a life-cycle model, as perhaps in real life, the bequest motive affects economic decision-making at each point in time of the life-cycle by looking forward toward expected wealth accumulation and desired levels of giving.

Nonetheless, the bequest motive has large effects on the decisions made by the model's representative agent, and consequently, the conclusions that can be drawn from classic economic models. Consider a simplified version of a life-cycle model where the agent chooses consumption and a portfolio allocation.[1] The agent has an uncertain income stream until retirement and accumulates wealth to consume post-retirement. Figure 1 compares the solution to the model when the agent has no bequest motive to the solution when the agent has a bequest "importance parameter" equal to 2.5, a common choice in the literature. The agent with the bequest motive has a noticeably different lifetime consumption profile; they accumulate $22,803 more wealth at retirement age, and an average of 9.3% lower portfolio allocation to stocks over all ages.

In this paper, our objective is to catalog empirical facts about bequest motives vital to the broad literature on inter-generational wealth transfers. These stylized facts can serve as benchmarks to assess models' predictions and help formulate realistic modeling. To do so, we turn to data from workhorse household surveys that have been available for as many as thirty years, namely the Survey of Consumer Finances (SCF) and the Health and Retirement Survey (HRS). These household surveys contain questions on expectations and preferences for bequests that the literature has long underutilized.

Our first set of findings uses thirty years of data from the SCF. Specifically, the SCF asks respondents how important it is to leave an inheritance. We interpret this question as similar to the bequest "importance" parameter in the warm-glow utility function frequently used in life-cycle models. Though such a categorical variable is difficult to directly map to a specific parameter value, such as 2.5, we can describe the cross-sectional and time-series properties of subjective bequest importance.

FACT 1: We start by showing that individuals with heirs have significantly larger preferences towards leaving a bequest. Respondents with heirs are 10 to 15 percentage points more likely to state that leaving an inheritance is either important or very important. Though this finding is seemingly obvious, it is crucially important to the life-cycle literature. Previous work has found that post-retirement consumption and saving rates are similar for those with and without heirs, leading researchers to doubt the essential nature of the bequest motive (Hurd, 1987). Our finding suggests that, since parents with heirs have larger bequest preferences, other differences between parents and non-parents, such as risk tolerance or intertemporal discount rates, must offset differences in bequest preferences and

[1] Appendix AI describes the model.

drive the observed similarity in late-in-life savings. Our finding also justifies incorporating heterogeneity in family status into economic models (e.g., Love, 2010; Choukhmane et al., 2025).

FACT 2: In the SCF data, we find that the subjective importance of leaving bequests is U-shaped over the life-cycle. Bequests are subjectively least important for people around the age of sixty. We suspect that the U-shape relates to the age and dependency of an individual's progeny. For example, a 60-year-old respondent might have a 35-year-old heir. The 35-year-old is in prime earnings years and has less need for an inheritance. Consistent with this rationale, Boar (2021) shows that parents accumulate savings to insure their children against income risk. In relation to life-cycle modeling, the bequest motive is always treated as static over the course of the life-cycle. However, our findings suggest that the importance of bequests should be time-dependent.

FACT 3: Our third finding is on the relationship between subjective bequest importance and personal wealth. We document a horizontal L-shaped relationship between personal wealth and subjective bequest importance. The bequest importance increases sharply at the top two deciles of the wealth distribution. For instance, 70% of SCF respondents in the top decile of net worth say that bequests are important. This compares to the approximately 50% of respondents at the median decile of net worth. The positive relationship holds even after controlling for a large set of demographic and health-related control variables. These findings provide evidence that bequests are potentially a luxury good most valued by wealthier individuals.

Indeed, some appealing applications of the life-cycle model treat bequests as a luxury good in order to match the distribution of late-in-life savings and overall wealth inequality (see e.g., De Nardi, 2004; Straub, 2021). In such papers, households with a bequest motive and high lifetime incomes choose a higher saving rate, accumulate large estates, and keep significant assets even at advanced ages. These households are likely to leave large bequests upon death. While these papers rationalize their bequest modeling choice by showing that it fits the data well, our work verifies this assumption by directly asking whether wealthy households have a larger bequest motive.

FACT 4: We also use the SCF to explore the relationship between bequest motives and stock market participation. We find that the subjective importance of leaving bequests is approximately 13% greater for stock owners than for people who do not own stocks. This relationship holds even after controlling for individuals' total net worth. Moreover, the relationship between bequest importance and stock

ownership emerges later in life, particularly among individuals who are at least sixty years old.

To further study the relationship between subjective bequest importance and the stock market, we estimate the effects of experienced stock market returns. We follow the approach of Malmendier and Nagel (2011) and estimate weighted regressions of the stock market returns experienced over the course of an individual's life. The regression methodology allows recent observations and those earlier in life to carry different weights in influencing current subjective bequest importance. Because the regressions control for year and age effects, the variation is based on cross-sectional differences in experienced returns and therefore offers a credible claim to identifying causal effects. Indeed, we find that larger experienced returns increase the subjective importance of leaving bequests. Individuals place more weight on recent stock market performance. We suspect that our results are evidence that windfalls increase individuals' benevolence and their preference to contribute to subsequent generations.

The positive relationship between subjective bequest importance and the stock market is relevant in the context of modeling bequests. Life-cycle models often include a portfolio allocation to a risky asset that is parameterized using the historical risk and return properties of the market equity portfolio. Individuals who experience periods of high stock market returns could be modeled to have larger bequest motives.

FACT 5: Unlike the SCF, the HRS contains survey questions on the expectations of leaving an inheritance. We find that individuals significantly overestimate their likelihood of leaving an inheritance. Almost 60% of individual respondents expect to leave an inheritance. However, approximately 55% actually leave an inheritance that has a non-zero dollar value. We find that this overestimation occurs across the distribution of household wealth. For instance, approximately 56% of people expect to leave at least ten thousand dollars but just around 40% actually do. Even individuals who expect to leave at least $100,000 or $500,000 (the dollar thresholds given in the HRS survey question) are less likely to actually leave these amounts.

Our findings from the HRS suggest that individuals have imperfect foresight over their late-in-life consumption and savings behavior. Typically, the representative agent in a life-cycle model is forward-looking. These models assume rational expectations, whereby the expected bequest equals the average realized bequest. Given our findings, a realistic version of the model could incorporate belief mis-calibration, for example, by modeling the agent as overconfident about their ability to save while retired.

In the last part of the paper, we consider how to incorporate these stylized facts in the context of a canonical life-cycle model with precautionary savings. Specifically, we consider modifications of the bequest motive that might make the model more realistic by incorporating the empirical properties of bequest preferences that we document. We compare the results of the model simulation to a baseline version that uses a "standard" bequest function and parameterization.

Our first attempt modifies a standard bequest functional form by allowing the strength of the bequest parameter to have a U-shape over the life-cycle. In this modification, because the agent also has a strong bequest motive in their younger years and the agent is forward-looking, they accumulate significantly more wealth than in the benchmark model. The second modification adjusts the bequest motive so that it is stronger when the agent owns stocks. Surprisingly, this results in less overall wealth accumulation—the agent saves more when young and they own more stocks, and then because they are risk averse, they rebalance their portfolio to have a greater allocation to the safe asset, which results in less overall wealth accumulation. Our last modification allows for homothetic preferences as in De Nardi et al. (2010). Doing so treats the bequest motive as a luxury good and helps match the finding that as people get wealthier, they value bequests more.

Related Literature

Several papers find that the assets of the elderly decrease slowly if at all. And, many people die with significant housing equity and liquid assets (Dynan et al., 2004; De Nardi et al., 2010). These puzzling findings on the savings behavior of the elderly have motivated researchers to incorporate a bequest motive into the life-cycle modeling paradigm. The representative agent in a strict form of the life-cycle model has perfect foresight. As such, the agent knows when they are going to die and has zero savings at the time of death. Even if the representative agent had an uncertain lifespan they would draw down their assets considerably post-retirement. The inconsistency between the model predictions and the real-world data can be addressed by incorporating a bequest motive.

Significant works propose theories of bequests to explain the amount of savings that people carry late into life. Becker suggests an altruistic motive—parents care about the well-being of their progeny. Other papers propose that parents promise bequests to influence the behavior of their beneficiaries (Bernheim et al., 1985; Cox, 1987; Groneck, 2017). However, early studies found scant evidence in support of bequest motives. Assuming that bequest motives are stronger for those with children, Hurd (1987) disputes the importance of bequest motives by

showing that people with children deaccumulate wealth faster than those without children. Hurd (1989) also argues that bequest motives are economically trivial in the context of a calibrated life-cycle model. Recent work lends support for a bequest motive, particularly among wealthier individuals (Ameriks et al., 2011; Koijen et al., 2016; Lockwood, 2018). De Nardi (2004) finds that an overlapping generations model that includes a bequest motive does a better job of matching the distribution of wealth accumulation.

Related to our work, Kvaerner (2022) also notes that the literature contains insufficient insight into individuals' bequest motives. As such, Kvaerner (2022) examines the impact of unexpected health shocks on individuals' consumption and savings behavior to gauge the size of bequest motives. He uses the empirical estimates of financial adjustments caused by health shocks to estimate the strength of the bequest parameter in a canonical model. He finds that bequest motives are substantial for the wealthier portion of the population. Our paper also finds that wealthier individuals have larger subjective bequest motives. However, while Kvaerner (2022) estimates the bequest parameter by using a literature-standard functional form for the bequest motive, our study proposes several realistic features of bequest motives that future modeling efforts should take into account.

More broadly, our paper relates to current literature striving to improve the realism of the workhorse life-cycle model. Such papers often break from the rational expectations paradigm by incorporating into the model subjective beliefs as opposed to objective probabilities (see survey papers, such as Koşar and O'Dea, 2023 and Heimer, 2024). For example, several papers study the effects of subjective beliefs about survival in the context of a life-cycle model (Wu et al., 2015; Groneck et al., 2016; Heimer et al., 2019; Caliendo et al., 2020; O'Dea and Sturrock, 2021). Caliendo et al. (2023) and An and Sachdeva (2022) consider subjective beliefs about retirement dates. Briggs et al. (2023) studies beliefs about non-payment risk in long-term care insurance products, while Velásquez-Giraldo (2024) shows that subjective beliefs about the stock market improve the fit of life-cycle models with portfolio choice. Beyond life-cycle models directly, the literature has begun to study the formation of beliefs about important economic variables such as inflation and climate change (D'Acunto et al., 2023; Dietrich et al., 2024).

Finally, recent papers have resolved to establish a set of facts about the personal behavior and beliefs of households to inform more realistic economic modeling of personal financial decision-making. Giglio et al. (2021) studies subjective beliefs about portfolios and Boehm et al. (2025) presents facts about the

marginal propensity to consume. Our paper follows this motif by identifying a set of subjective preferences and beliefs toward bequests that economic models and policy-makers should take into account.

2 Bequest Preferences

2.1 Survey of Consumer Finances

The first household-level dataset used in our study is the Survey of Consumer Finances (SCF). The SCF is a comprehensive survey conducted by the Board of Governors of the Federal Reserve System every three years. The SCF contains a thorough accounting of assets and liabilities for a representative sample of U.S. households. The SCF is a repeated cross-section that extends back to 1989, with the 2019 survey being the most recent vintage in our analysis.

The SCF contains two key variables that capture individuals' bequest motives. To the best of our knowledge, though these variables have been included in the SCF since its modern rendition, beginning in 1989, this paper is the first to feature them and among the first even to use them. Our first variable comes from the survey 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?

Though the question does not explicitly elicit preferences for bequests that can be mapped to dollar values, we view the question as offering crucial insight into how individuals feel about bequests when making economic decisions. There is substantial variation in people's responses. According to Figure 2, 24% percent of people say *very important*, 28% say *important*, 27% say *somewhat important*, and 16% say *not important*. We often convert this variable into a binary outcome for the convenience of conducting and presenting our empirical analysis. We group *very important* with *important* and *somewhat important* with *not important*. The SCF also indicates whether individuals have a different perspective on inheritances relative to their household partners. Very few partners disagree with one another. These results indicate that the significance of leaving an inheritance is acknowledged by many, but there is also substantial heterogeneity

The SCF also elicits people's intentions of leaving an inheritance, which we use to validate some of our findings. The question asks:

> Do you (and your husband/wife/partner/spouse) expect to leave a sizable estate to others?

with possible answers *yes*, *possibly*, and *no*. Though useful for robustness, our analysis does not focus on this question. Respondents could view bequests as highly important to their economic decision-making but not have sufficient assets to leave an estate one would consider "sizable." As such, the question potentially conflates personal wealth with bequest motives in a way we view as less informative relative to the subjective importance question above.

In addition, the SCF includes the demographic characteristics of respondents, of which the summary statistics are presented in Table 1. Variables include whether the respondent has children ("children", a dummy variable that takes the value of 1 if the respondent has children and 0 otherwise), the age of the respondent ("age"), the marital status of the respondent ("marital status", a dummy variable that takes the value of 1 if the respondent has a legal spouse and 0 otherwise), self-reported health status ("health status", ranging from 1 to 4, indicating excellent, good, fair, and poor, respectively), the expected longevity ("longevity_exp"). We also include the respondent's status as a smoker because it is a crucial health indicator, which therefore might affect bequest decisions.

The final set of variables captures the finances of the respondents. We construct two measures of stock market participation to assess the relationship between portfolio holdings and bequest motives. The first measure captures direct stock ownership and is defined as an indicator for whether the household holds any individual stocks outside of retirement accounts. The second measure includes both direct stock holdings and indirect holdings through mutual funds and retirement accounts. The variable "networth" represents the net worth of the respondent, calculated using the debt and asset variables available in our Summary Extract Dataset.

2.2 FACT 1: Bequest Preferences and Heirs

We begin by examining whether individuals with heirs place greater importance on leaving a bequest. Figure 3, panel (a), presents graphical evidence from the SCF, showing the distribution of bequest importance by heir status. Individuals with heirs are substantially more likely to say that leaving an inheritance is "important" or "very important," while those without heirs are more likely to

report that bequests are unimportant. The difference is most pronounced at the bottom end of the response scale: roughly 18% of those with heirs rate bequests as "unimportant," compared to 25% of those without heirs. This sharp difference suggests that the presence of an heir is closely linked to having greater preferences for leaving bequests.

To formalize this relationship, we turn to regression evidence. Table 2 presents linear probability regressions where the dependent variable is an indicator for whether the respondent rates leaving a bequest as either "important" or "very important." The regression results show that the presence of an heir increases the likelihood of reporting a strong bequest motive by approximately 14 percentage points. We progressively incorporate a range of controls—starting with age, then adding marital status, and finally including measures of health-related characteristics (columns (1) through (4)). Despite this expanding set of controls, the coefficient on heir status remains remarkably stable, indicating a robust association across model specifications.

Interestingly, the relationship to heirs appears to operate as a discrete shift rather than a continuous gradient. Respondents with one heir report substantially stronger bequest motives than those with none, but additional heirs beyond the first are not associated with further increases in bequest importance (Figure 3, panel (b) and Table 2, columns (5) and (6)). This threshold pattern suggests that bequest motives may reflect a binary preference to leave something to someone rather than scaling linearly with the number of descendants. Such a pattern is consistent with warm-glow motives focused on the act of giving itself rather than on the aggregate utility of all recipients.

These findings carry important implications for modeling household decision-making. Early work by Hurd (1987) questioned the empirical relevance of bequest motives, noting similar wealth de-cumulation rates among individuals with and without children. Our results cast doubt on that interpretation by showing clear differences in stated preferences by heir status. At the same time, the apparent lack of marginal sensitivity to the number of heirs suggests that life-cycle models need not capture every detail of family size but should at least distinguish between having and not having heirs.

More generally, these results underscore the importance of incorporating family structure into models of intertemporal choice. As in Love (2010), where changes in marital status and the presence of children influence savings and portfolio allocations, we find that bequest preferences are strongly tied to household composition. The broader literature on household bargaining and intra-family

financial decision-making reinforces the value of embedding these family dynamics into economic models (e.g., Kim, 2021 and Ke, 2021). Our findings provide additional empirical support for this approach, highlighting the central role that heirs play in shaping intergenerational financial preferences.

2.3 FACT 2: Bequest Preferences over the life-cycle

We next study how bequest preferences vary with age. For ease of visualization, we convert the bequest importance variable into a binary indicator equal to one if the respondent reports that leaving an inheritance is either "important" or "very important," and zero otherwise. Figure 4 plots the average value of this binary variable by age, after residualizing it on a set of controls, and overlays a quadratic line of best fit. The results reveal a clear U-shaped pattern: the subjective importance of leaving a bequest declines from early adulthood through about age 60, and then rises again in older age. Specifically, the propensity to report that bequests are important falls by roughly 20 percentage points between the ages of 18 and 60, before rising by about 10 percentage points thereafter. This U-shape suggests that younger and older individuals are more likely to assign value to leaving an inheritance, whereas bequest motives wane during midlife.

To validate the U-shaped life-cycle pattern more formally, we estimate the following regression model:

$$bequest_dummy_{it} = \alpha + \beta_1 \cdot Age_{it} + \beta_2 \cdot Age_{it}^2 + \mathbf{X}_{it}'\gamma + \mu_{\text{Year}} + \varepsilon_{it}, \tag{1}$$

where the dependent variable is the same binary indicator defined above. We include both age and age-squared to allow for a non-linear relationship, as well as a set of controls for heir status, net worth (standardized), marital status, health status, smoking behavior, and subjective longevity. We also include survey year fixed effects and cluster standard errors by age and year.

Table 3 presents the results. Across all specifications, the coefficient on age-squared is positive and statistically significant, supporting the presence of a U-shaped relationship. The inclusion of controls for wealth and health does little to alter the shape or magnitude of the age coefficients, indicating that the pattern is not driven by age-related differences in these other variables. We also test for interactions between age and heir status and find no evidence that the life-cycle pattern of bequest motives differs by parental status. This null result suggests that the U-shape is not merely capturing when in the life cycle people tend to have children.

Finally, Figure A5 in the Appendix plots bequest preferences by age across different birth cohorts. The U-shaped pattern is evident within each cohort, though the level of bequest importance varies. Respondents born in the 1950s, for example, exhibit systematically lower preferences for bequests than earlier or later cohorts. These findings suggest that both life-cycle dynamics and cohort-level differences shape individuals' attitudes toward leaving an inheritance.

These results carry important implications for how bequest motives are incorporated into economic models. In many life-cycle models, bequest preferences are introduced through a static 'warm glow' utility function, where the strength of the bequest motive is assumed to be constant over the life course (Andreoni, 1989). Our findings suggest this approach may be overly simplistic. The U-shaped pattern we observe implies that bequest motives evolve meaningfully with age—declining through midlife and increasing again in later years.

Incorporating this age dependence into models may lead to more realistic predictions for savings and portfolio choices over the life cycle. For example, a model with a time-varying bequest motive may better capture patterns of late-life wealth retention or precautionary saving. More broadly, our findings suggest that life-cycle models aiming to evaluate retirement policies, estate taxation, or intergenerational transfers could allow for bequest preferences that are flexible rather than fixed.

The U-shaped age pattern we document may also reflect deeper intergenerational motives. Recent work by Boar (2021) introduces the concept of dynastic precautionary savings, wherein parents accumulate assets not merely for personal security, but as a form of insurance against the income risk faced by their children. Under this interpretation, the late-life rise in bequest importance may partly reflect parents' responses to unresolved uncertainty in their children's economic futures. Our findings are consistent with this idea: individuals may value bequests more in older age not solely for altruistic reasons, but because they serve as a hedge against future shocks borne by younger generations.

2.4 FACT 3: Bequest Preferences and the Wealth Distribution

We next examine how subjective bequest motives vary with household net worth. Panel (a) of Figure 5 plots both the mean importance of bequests and residualized regression coefficients across net worth deciles. The results display a clear horizontal L-shaped pattern: bequest importance is relatively stable in the lower seven deciles of the wealth distribution but increases sharply in the top three deciles, especially at the very top. Among respondents in the highest decile, nearly

75% report that leaving a bequest is "important" or "very important," compared to just over 50% at the median.

Panel (b) of the figure disaggregates these results by heir status. The L-shape is most pronounced among respondents with heirs, for whom bequest importance rises steeply in the upper part of the wealth distribution. In contrast, the pattern for respondents without heirs is flatter and even slightly declining in the middle deciles, with only a modest increase in the top decile. This suggests that the luxury-good nature of bequest motives is primarily concentrated among wealthy households with intended beneficiaries. These patterns hold even after adjusting for demographic and economic characteristics, as shown by the regression coefficients plotted on the right y-axis.

To test the strength and robustness of the wealth gradient in bequest motives, we turn to regression analysis. Table 4 reports results from estimating models that relate bequest importance to both continuous and discrete measures of net worth. In Columns (1) and (2), we use log net worth as the main regressor and find a statistically significant and positive relationship: a one-log-point increase in net worth is associated with a 1 to 1.3 percentage point increase in the probability of rating bequests as important.

In Columns (3) and (4), we interact log net worth with an indicator for having heirs. The results show that the positive relationship between wealth and bequest motives is concentrated among respondents with heirs. For those without heirs, the coefficient on log net worth is statistically indistinguishable from zero in column (3) and statistically significant but small in column (4). In contrast, for respondents with heirs, increases in net worth are associated with substantially higher reported bequest importance. This interaction confirms that the wealth-bequest gradient operates primarily through households with beneficiaries.

Columns (5) and (6) use net worth decile indicators to allow for a flexible, non-parametric estimation of the relationship. The results reveal a steep gradient in the upper part of the wealth distribution, with little difference across the bottom seven deciles and a sharp rise beginning in the eighth. The top decile shows the strongest effect, consistent with the patterns observed in Figure 5. These specifications reinforce the finding that the bequest motive strengthens markedly with wealth.

These findings validate a modeling assumption common in many life-cycle frameworks: that bequests act as a luxury good. Prior research by De Nardi (2004) and Straub (2021) embeds this idea directly into the structure of the bequest utility function. Wealthier households have a stronger desire to leave a bequest

and are more able to do so. Our empirical evidence supports this assumption by documenting that bequest preferences rise sharply with wealth.

These results also suggest that the motivation for bequests may change character across the wealth distribution. Among middle-wealth households, bequests may reflect precautionary intentions. In contrast, for high-wealth households, the bequest motive appears more consistent with a luxury motive or dynastic intent. Future modeling work may benefit from explicitly incorporating this nonlinearity, for example by making the marginal utility of bequests more sensitive to wealth accumulation at the top of the distribution.

2.5 FACT 4: Bequest Preferences and the Stock Market

We conclude our analysis of bequest preferences in the SCF by examining their relationship to stock market participation. This connection is important both theoretically and from a policy perspective. Stock ownership reflects risk tolerance and facilitates long-run wealth accumulation, two characteristics likely to influence individuals' attitudes toward intergenerational transfers. Moreover, given the historically high returns to capital, understanding the bequest preferences of stock-owning households is crucial for assessing how much of today's wealth concentration is likely to persist through inheritance.

To capture this relationship, we construct two measures of stock market participation. The first is a narrow definition based solely on direct stock holdings. The second is broader and includes indirect ownership through mutual funds, retirement accounts, and other investment vehicles.

We begin by examining how subjective bequest importance varies with age across stockholders and non-stockholders. Figure 6 plots the residualized mean of the bequest importance dummy—equal to one if the respondent reports that leaving an inheritance is "important" or "very important"—against age, separately for stock owners and non-owners.

The patterns differ meaningfully across age groups. Before age 40, bequest motives decline with age for both groups. But among stockholders, using both definitions of stock ownership, the level begins higher and the drop is steeper, suggesting a sharper reduction in intergenerational focus during early adulthood. Between ages 40 and 60, the trajectories converge: both stockholders and non-stockholders exhibit similar bequest preferences. After age 60, the patterns diverge again. Bequest importance rises more sharply among stockholders, creating a widening gap in late-life preferences. By age 80, the bequest importance rate is nearly 10 percentage points higher for stockholders than non-stockholders. This

V-shaped profile, with age-specific divergences in slope and level, suggests that stock ownership relates to the strength of bequest motives over the life cycle.

Table 5 formalizes the bequest preference differences for stockholders using linear probability models. The dependent variable is the same binary indicator for bequest importance, and we estimate specifications using the two definitions of stock market participation. Columns (1)–(3) focus on direct stock holdings, while Columns (4)–(6) use the inclusive measure. In both cases, stock ownership is positively and significantly associated with stronger bequest motives. Stockholders are 2 to 3 percentage points more likely to rate bequests as important. The relationship remains robust to controls for marital status, education, health, and other demographics. Crucially, the relation is also robust to controlling for net worth, a potentially confounding factor for stock ownership itself.

We also explore interactions between stock ownership and heir status, because the presence of heirs naturally heightens the bequest motive. The results, shown in Columns (3) and (6), suggest that the effect of stock ownership on bequest motives is concentrated among individuals with heirs. Among respondents without heirs, the estimated effects of stock ownership, captured by the uninteracted coefficients, are small and statistically insignificant. In contrast, the interaction between stock ownership and heir status is economically meaningful: for individuals with heirs, stock ownership is associated with an increase in bequest importance of roughly 3.5 percentage points. Although the interaction term narrowly misses conventional thresholds for statistical significance, the magnitude of the estimate suggests a meaningful difference. Moreover, the interaction is jointly significant with the main effect of heir status, reinforcing the interpretation that the effect of stock market participation on bequest motives is driven by preferences for giving to heirs. Taken together, the results support the view that stock ownership amplifies pre-existing preferences to leave an inheritance to heirs.

We next examine whether individuals' past experiences with the stock market shape their bequest motives. The idea that past financial outcomes leave a lasting impression on preferences and beliefs has been explored in prior research (e.g., Malmendier and Nagel, 2011), but has not yet been connected to intergenerational transfer motives. Moreover, connecting bequest motives to experienced returns serves to tighten the link between stock market participation and preferences to leave inheritances.

To explore this, we follow the empirical strategy of Malmendier and Nagel, 2011) and estimate an ordered probit model of subjective bequest importance using a weighted average of experienced stock returns. The weights decay over

time, allowing more recent returns to carry greater influence, though the estimated decay rate is flexible and determined from the data.

Formally, the main explanatory variable is a household-specific, return-weighted index of past real S&P 500 returns, with the weighting function governed by a single parameter λ. For each household-year observation, we estimate the following model:

$$y_{it} = \alpha + \beta A_{it}(\lambda) + \gamma' x_{it} + \epsilon_{it}. \tag{2}$$

where $A_{it}(\lambda)$ denotes the experience-weighted average of past stock market returns, and $\mathbf{x}_{it}$ includes the demographic and financial controls as well as year and age fixed effects. The model is estimated by maximum likelihood, and standard errors are adjusted for multiple imputations.

The estimation employs a parsimonious weighting specification that introduces just one additional parameter while offering flexibility to allow weights to change over time. In this manner, we permit the empirical data to determine the most suitable weighting scheme for explaining households' bequest importance. Specifically, for each household i in year t, we calculate the subsequent weighted average of past asset returns:

$$A_{it}(\lambda) = \sum_{k=1}^{age_{it}-1} w_{it}(k, \lambda) R_{t-k,} \tag{3}$$

where the weight is given by

$$w_{it}(k, \lambda) = \frac{(age_{it} - k)^{\lambda}}{\sum_{k=1}^{age_{it}-1} (age_{it} - k)^{\lambda}} \tag{4}$$

depending on the age of the household head at time t (age_{it}), the number of years elapsed since the return was realized (k), and a parameter λ, which governs the shape of the weighting function. The λ is estimated from the data. If $\lambda < 0$, the weighting function exhibits a consistent increase and convexity as the time lag k approaches age_{it}, assigning a higher weight to returns closer to birth compared to more recent returns. If $\lambda = 0$, the weights remain constant, and $A_{it}(\lambda)$ represents a simple average of past returns since birth. Conversely, for $\lambda > 0$, the weights decline as the lag k increases (concave for $\lambda < 1$, linear for $\lambda = 1$, and convex for $\lambda > 1$).

Moreover, similar to how Malmendier and Nagel, 2011) estimate the effects of experienced returns on risk tolerance as surveyed by the SCF, we allow the

dependent variable to be the four ordered categorical values of bequest importance. Thus, we model the cumulative probability of these ordinal outcomes using an ordered probit model:

$$P(y_{it} \leq j | x_{it}, A_{it}(\lambda)) = \Phi(\alpha_j - \beta A_{it}(\lambda) - \gamma' x_{it}) \quad j \in \{1, 2, ..., 4\} \tag{5}$$

where y_{it} denotes the dependent variable bequest importance, categorized into four distinct groups, $y_{it} \in 1, 2, 3, 4$, $\Phi(\cdot)$ represents the cumulative standard normal distribution function, the α_j denote the cutoff points ($\alpha_1 < \alpha_2 < \alpha_3 < \alpha_4 = \infty$), $A_{it}(\lambda)$ represents the experienced stock market return, and the vector x_{it} are a set of control variables, encompassing income controls (log income, log income squared), liquid assets controls (log liquid assets and log liquid assets squared, both interacted with year dummies to allow year-specific slopes), demographics characteristics (the number of children and its square, the percentage of liquid assets invested in defined contribution plans or IRAs, dummies for retirement, completed high school education, completed college education, marital status, race, having a defined benefit pension plan, and having a defined contribution pension plan or IRA), age dummies, and year dummies. Differing from the standard ordered probit model, $\Phi(\cdot)$ does not map a linear function of explanatory variables into the response probability P due to the nonlinearity of $A_{it}(\lambda)$ concerning the weighting parameter λ.

We estimate the model using maximum likelihood, thereby deriving estimates for β, λ, γ, and the cutoff points. As the coefficient vector β lacks direct economic interpretation, our focus centers on the difference in fitted probabilities when we set the experienced return to its 10th and 90th percentiles, holding all other variables at their observed values within the sample. This difference is computed for each observation and then averaged across the entire sample. To facilitate the interpretation of these differences in fitted probabilities, we compare their magnitude with the unconditional frequencies representing the distribution of individuals across the four bequest importance categories.

Table 6 reports the results. We find that higher experienced returns significantly increase the likelihood that individuals rate bequests as "important" or "very important." Moreover, the effects are larger in column (2), which only differs from column (1) by incorporating the controls for liquid assets. Focusing on the estimates in column (2), moving from the 10th percentile to the 90th percentile of the experienced return distribution increases the probability of placing "very important" on bequests by approximately 4.4 percentage points. This effect is large relative to the unconditional mean of 33.4 percent.

The estimated decay parameter of $\lambda = 1.65$ (s.e. = 0.51) in column (1) and $\lambda = 1.73$ (s.e. = 0.42), in column (2), implies that individuals place greater weight on more recent stock market experiences. However, the positive and statistically significant influence of λ also suggests that older return experiences still shape preferences, which is consistent with financial experiences having a lasting imprint.

3 Bequest Expectations

3.1 The Health and Retirement Survey

Our second data set is the HRS, which is a longitudinal survey focusing on older age populations in the United States. The data provides comprehensive information on socio-economic status, family relationships, health indicators, and labor market participation. The study began with an initial cohort in 1992, comprising individuals born in 1923 or earlier. Subsequently, four additional cohorts were included to create a representative sample of elderly individuals nationwide. Generally, the survey is conducted biennially. The HRS includes both a "core" survey and an exit interview survey. The exit interview is a follow-up survey that the HRS administers after the death of its sample respondents. The exit interview is taken by 'proxy informants' who are close family members asked about deceased panel members.

Our analysis utilizes HRS data from nine exit interview waves conducted between 2002 and 2018. We use data from the exit interview on inheritances that include five specific components: (1) primary and secondary homes, (2) liquid assets, (3) life insurance, (4) estates in trust, and (5) inter vivos transfers shortly before death. Participants are asked questions regarding the value of each component and the intended recipient of the transfer. We follow Groneck (2017) to calculate the value of inheritances. If one of the children is designated as the recipient, the corresponding value is added to the related parent's total bequest amount. When no specific bequest is left, we assign a value of zero. For cases where the exact value is not provided, we utilize questions regarding a range of amounts to calculate the mean values of bequests.

We also explore respondents' subjective expectations of leaving an inheritance, which we obtain from the core interviews. We then match these responses with the HRS exit survey data using respondents' IDs. For participants who take part in multiple survey waves, we use responses from the final wave to determine their intention of leaving an inheritance. Since the last survey wave is closest to the time of death, it indicates the respondents' willingness to leave inheritances before

passing away. By combining these two datasets, we can analyze the relationship between their bequest behaviors and demographic characteristics. After merging the HRS core survey data with the exit survey data using the personal ID, our data sample contains 7,750 unique individuals.

Table 7 presents the summary statistics for our sample of HRS respondents. The first two sets of variables, the value of inheritance and the chances of leaving an inheritance, are of primary interest to our research. In our sample, 54.45% of respondents leave an inheritance of positive value, 40.63% leave bequests above $10,000, 25.86% bequeath more than $100,000, and 8.61% leave bequests surpassing $500,000. To examine potential differences between expected and actual bequest behavior, we also classify actual bequest behaviors into four categories based on the same bequest amount (any, 10k, 100k, and 500k) and construct a set of variables.

We obtained respondents' surveyed expectations of leaving an inheritance from the HRS core survey questionnaire. Respondents are asked about their probability of leaving bequests of various amounts (any, 10k, 100k, and 500k) to their children when they are alive on a scale from 0 to 100%. On average, respondents have a 60.34% probability of leaving bequests, a 56.22% probability of leaving bequests over $10,000, a 33.82% probability of leaving bequests over $100,000, and only a 12.54% probability of bequeathing more than $100,000. Overall, as the amount rises, the proportion to leave bequests and the perceived probability of leaving bequests over $10,000, $100,000, or $500,000 to heirs declines, and the chances of leaving bequests tends to be larger than the actual share of respondents that leave inheritances of a given value.

The third and fourth sets of variables comprise the bequest value and components of bequest value, including home value, liquid asset value, insurance value, trust value, and inter vivos transfers. The average total bequest value is around $185k, with the largest components being trust value, liquid asset value, and home value, whose mean values are $92,686, $46,861, and $41,113, respectively. The table also displays the corresponding likelihood of leaving a positive-valued bequest of a given type. We find that approximately 55% of respondents leave any bequests, 26% leave home bequests, 22% leave inter vivo transfers, 16% leave liquid asset bequests, 12% leave trust bequests, and 8% leave insurance bequests.

Figure 7 displays the distribution of bequest values. The graph highlights that within the surveyed group, 46% of respondents leave no bequest. Conditional on individuals who leave bequests, approximately 20% of respondents leave bequests below $8,000. In the top 10 percentile segments, there is a substantial

increase in the average value, ranging from $800,000 to $10,000,000. These findings indicate significant variation in bequest values among respondents, reflecting notable disparities in bequest outcomes and a significant fat tail.

Additionally, we conduct separate analyses of the five components of the bequests: primary and secondary homes, liquid assets, life insurance, estates in trust, and inter vivos transfers shortly before death. Figure A7 in the Appendix presents the distributions for each component.

3.2 FACT 5: Mis-calibrated Expectations of Bequests

This section studies individuals' expectations of leaving an inheritance. Before proceeding, Hurd and Smith (2001) originally use this HRS data to compare individuals' subjective probabilities of leaving a bequest to actual estate outcomes reported after death. They find that, conditional on survival and controlling for wealth and other demographic factors, these subjective expectations are generally well-calibrated: respondents who report a high probability of leaving a bequest are indeed more likely to do so. They also show that these expectations are stable over time and generally related to observable characteristics such as age, wealth, and marital status. As such, they conclude that subjective bequest probabilities contain meaningful information and reflect rational forward-looking behavior on the part of older households.

We build on their findings—using nearly two decades of observations—to explore whether there are systematic errors in people's expectations of leaving an inheritance, even if the average individual is reasonably well-calibrated. We start by showing the fraction of respondents who actually leave inheritances above a certain amount and those who expect to do so (Figure 8). More than 50% of the surveyed respondents leave inheritances, with 40% of the respondents leaving amounts exceeding $10,000. A noteworthy portion of respondents leave relatively substantial inheritances, as over 20% of the respondents leave amounts surpassing $100,000, and close to 10% of the respondents leave inheritances exceeding $500,000.

Figure 8 highlights the difference between the actual inheritances left by the surveyed respondents and their expectations of leaving inheritances while they were alive. We find persistent overestimation of actual bequests across the full range of dollar-value thresholds. Around 60% of the participants expect to leave some positive valued inheritance compared to the 55% who actually do. Over 50% of respondents expect to leave inheritances exceeding $10,000, but only 40% of respondents do. Similarly, the proportion of respondents indicating the

intention to leave $100,000 and $500,000 in the survey is significantly greater than the fraction of respondents who leave inheritances.

Confirming that the survey responses are sensible, both the actual likelihood of leaving inheritances and the respondents' expectations of doing so gradually decrease as the size of the inheritance increases. Nonetheless, we observe persistent differences between expectations and outcomes at each dollar-value level of bequests, indicating a prevailing inclination among individuals to overestimate the likelihood of leaving behind any inheritances. As a possible explanation for the overestimation of bequests, individuals might overestimate their future retirement income or underestimate their future retirement expenses. For instance, older adults may be prone to overestimating their health condition, leading to an underestimation of their future healthcare costs.[2]

Though we find that individuals consistently overestimate the likelihood of leaving an inheritance, even very large inheritances, the finding might be the result of respondents having a poor understanding of their finances or having difficulty expressing future outcomes as probabilities. To explore these alternative explanations for our findings, we study these expectations and actual bequests across the educational and wealth distribution.

Interestingly, we find that both education and wealth levels correlate positively with leaving an inheritance and the propensity to overestimate the likelihood of leaving an inheritance (Figures A8 and A9). First, the overestimation is particularly pronounced for individuals with at least twelve years of schooling. Since education levels likely correlate with an understanding of probabilities, difficulty in answering probabilistic survey questions is unlikely to explain the results. Second, the overestimation is confined to individuals in the top half of the wealth distribution. This finding suggests that people in the lower half of the wealth distribution, who presumably have less to bequeath, know that they are unlikely to leave an inheritance. On the other hand, people who have modest to large amounts of wealth appear to overestimate both whether they will leave an inheritance and how large it is going to be.

[2]Several papers document that the survival rate is overestimated by the elderly (e.g., Heimer et al., 2019).

4 Implications for Models of the Life-cycle

4.1 A Life-Cycle with Bequest Motives

In this section, we consider the implications of our empirical results on bequest motives in the context of a canonical life-cycle model. Appendix AI presents the model setup. The key ingredients are an uncertain income path during working years, a precautionary savings motive, and agents having a portfolio choice between a risky and risk-free asset. The model setup and its calibration are standard to the literature (see Table A1).

Life-cycle models often incorporate a bequest motive by assuming that the representative agent derives utility from leaving an inheritance to subsequent generations that is conveyed at the time of death. Popularized by Andreoni (1989), the bequest motive is often referred to as a 'warm-glow' utility function $B(X)$. We then choose the following functional form for $B(X)$:

$$B(X) = b(X/b)^{(1-\rho)}/(1-\rho) \tag{6}$$

where b captures the strength of the bequest motive and ρ is the risk aversion parameter, which determines the curvature of the utility function. We set the parameter b equal to 2.5. This choice of parameter value has been passed down through the literature. The choice of $b = 2.5$ originates from (Gomes and Michaelides, 2005) which determined the parameter value by matching wealth profiles over the life-cycle.

Before discussing possible modifications to the model that incorporate the stylized facts on bequest motives, we start by illustrating how a literature-standard bequest motive affects the financial decisions of the representative agent. Figure 1 presents the paths of consumption, savings, cash-on-hand (i.e., liquid wealth), and the portfolio share of the risky asset obtained from the solution to the dynamic life-cycle model. The figure presents the behavior of the agent when she has a bequest motive where $b = 2.5$ (the solid blue line) and when she has no bequest motive $b = 0$ (the dotted red line). In the model without bequest motives, both the consumption curve and the cash-on-hand curve demonstrate a U-shape trend, illustrating that individual consumption and cash-on-hand gradually increase during their working years and decrease during retirement. Individuals exhibit a positive savings rate until a few years before retirement. Following retirement the agent dissaves but at a slower rate in each subsequent year. Similarly, the allocation towards risky assets displays a comparable pattern to savings. However,

a key distinction lies in the behavior near the retirement age. Instead of a more rapid decline before retirement as observed in savings, the investment in risky assets rises sharply in the short term after retirement.

Nonetheless, the inclusion of a bequest motive markedly affects the agent's decision-making over the life-cycle. The representative agent with a bequest motive consumes less and saves more than the agent without a bequest motive. This difference begins at the start of the life-cycle. The agent with a bequest motive maintains greater levels of cash on hand than agents without bequest motives. And, the level difference increases as agents age. For example, the representative agent with bequest motives has at the age of 85 cash holdings that average $46,478 more than they would be without a bequest motive. The difference in average cash holdings is only $12,813 at age 45. Moreover, bequest motives cause the agent to reduce their allocation to the risky asset. The difference widens post-retirement: the agent with bequests reduces their allocation to the risky asset while the agent without bequests increases their risky asset allocation.

One noteworthy effect of bequest motives is that they affect large changes in savings rates and wealth accumulation that begin at the immediate start of the life-cycle. Because the utility of leaving a bequest is realized only in the last period of the life-cycle, and the probability of dying and leaving a bequest is low until late in life, the immediate effect on behavior suggests that the representative agent with bequests is extremely forward-looking. Though we document that bequest motives are U-shaped over the life cycle, this standard version of the model holds the importance of bequests (the parameter b) constant at all ages. Hence, the representative agent's extreme level of foresight toward leaving an inheritance might not be realistic.

4.2 Modifications to the Life-Cycle with Bequest Motives

In this section, we consider how the stylized facts that we document in the previous sections might affect the setup of the canonical model and its treatment of bequest motives. Before proceeding, we caveat the following analysis by discussing its limitations. In particular, the SCF asks respondents how important it is to leave an inheritance and allows for one of four categorical responses. As such, we are unable to map these categorical responses to a numerical value for the bequest parameter b. Consequently, the following exercise illustrates the *directional effects* of such model modifications but is not suited for studying quantitative effects, which we view as an important stream of future research.

We start by considering the stylized fact that subjective bequest importance is U-shaped over the life-cycle. To do so, we modify $B(X)$ so that b varies over the life-cycle:

$$B(X) = b_t(X/b_t)^{(1-\rho)}/(1-\rho) \tag{7}$$

where t is the age of the representative agent. Because we are unable to map the SCF responses to numerical values for b, we simply modify b_t to have a parabolic shape while preserving the mean value of 2.5. This modification results in younger individuals and older individuals having a larger value for b. The value of b is lowest at age 65.

Figure A1 presents the results of the model when using the modified bequest function (b_t) compared to the results when using the standard bequest motive (b). In the modified model with U-shaped bequest preferences, the representative agent places a high value on savings for bequests even at a young age. Consequently, the agent saves more (consumes less) at the start of the life-cycle. This increased savings results in a larger accumulation of wealth at retirement, as well as a larger amount of wealth at the time of death. The agent also allocates less of her portfolio to the risky asset because she already accumulates more wealth at younger ages.

Our next modification incorporates the stylized fact that stockholders view bequests as subjectively more important and that prior asset returns result in a larger bequest motive. To integrate the relation to stock market participation, it is important to note that the representative agent almost always owns some equity even though roughly half of all individuals actually do. This poses a challenge for life-cycle models more broadly (e.g., Gomes and Michaelides, 2005), and thus some models incorporate fixed costs of stock market participation (e.g., Vissing-Jørgensen, 2002; Haliassos and Michaelides, 2003), but it is beyond the scope of our work to rectify this shortcoming of the model.

We modify the life-cycle to allow the representative agent to make separate and distinct optimization decisions over her consumption choice and her portfolio choice. In doing so, we modify the bequest parameter so that it equals $b_w = a \cdot b_c$, where b_c is the bequest parameter for the consumption choice and b_w is the bequest parameter for portfolio choice. For values of $a > 0$, the agent cares more about leaving bequests when making a portfolio decision and less when making a consumption decision. This modification can be thought of as the representative agent having separate mental accounts over consumption and portfolio choice decisions (Thaler, 1985).

When the stockholding agent has larger bequest motives, we find that the agent accumulates significantly less wealth than in the standard model (Figure

A3). Counter-intuitively, the agent accumulates less wealth because it increases her propensity to save at all ages. Because the agent saves a larger share of period incomes, and because the agent is risk-averse, she reduces her allocation to the risky asset. The reduction in holdings of the risky asset then results in less wealth accumulation over the life-cycle.

The final modification that we consider is the non-homothetic preference modification that has been employed in papers such as De Nardi (2004). In this modification, $B(X)$ is defined as:

$$B(X) = b(X/b)^{(1-\Sigma)}/(1-\Sigma) \tag{8}$$

where Σ is allowed to differ from ρ. This formulation has the effect of making the marginal benefit of the bequest motive decline with increased wealth by less than the decline in the marginal utility of consumption. This effectively makes leaving a bequest a luxury good.

Figure A2 shows the results of estimating the model with the modified bequest function. In separate simulations, we set Σ equal to either 4 or 2. These values are less than the standard calibration of ρ equal to 6. We find that the representative agent accumulates significantly more wealth than in the benchmark model. Moreover, wealth accumulation increases by more for smaller values of Σ. The representative agent also leaves a significantly larger inheritance at the time of death. The increase in wealth accumulation stems from a larger savings rate in the years leading to retirement, as well as a greater allocation to the risky asset. One appealing feature of the model results is that the consumption profile post-retirement is more realistic: the agent has a smaller decrease in consumption post-retirement, while also leaving a larger inheritance.

5 Conclusion

Bequest motives play a crucial role in intertemporal economic decision-making, yet their empirical properties remain underexplored. This paper documents five key facts about individuals' expectations and preferences toward bequests using overlooked survey questions in two well-known public data sets—the SCF and HRS. Specifically, (1) households with heirs exhibit stronger bequest preferences, (2) bequest motives follow a U-shaped pattern over the life cycle, (3) the perceived importance of bequests rises sharply among the top two deciles of the wealth distribution, (4) stock owners—particularly those who experience high market

returns—report stronger bequest preferences, and (5) individuals systematically overestimate both the likelihood and size of their bequests.

Standard economic models often treat bequest motives as static parameters, frequently adopting functional forms and calibrations passed down through the literature without empirical validation. In particular, life-cycle models, which are widely used to study consumption, savings, and portfolio choice over time, and are standard for economic policy analysis, typically assume a fixed bequest motive that does not evolve with age, wealth, or financial experiences. Our results suggest that alternative approaches—such as allowing bequest motives to vary over the life cycle, incorporating their relationship with stock ownership and experienced returns, and treating bequests as a luxury good—could improve the realism of these models.

Beyond their modeling implications, our findings contribute to a broader understanding of intergenerational wealth dynamics. As aging populations hold an increasing share of wealth, how individuals form and act upon bequest motives will shape economic outcomes in the coming decades. Future research should further investigate the determinants of bequest preferences, their implications for economic policy, and how they interact with broader demographic trends.

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Figures and Tables

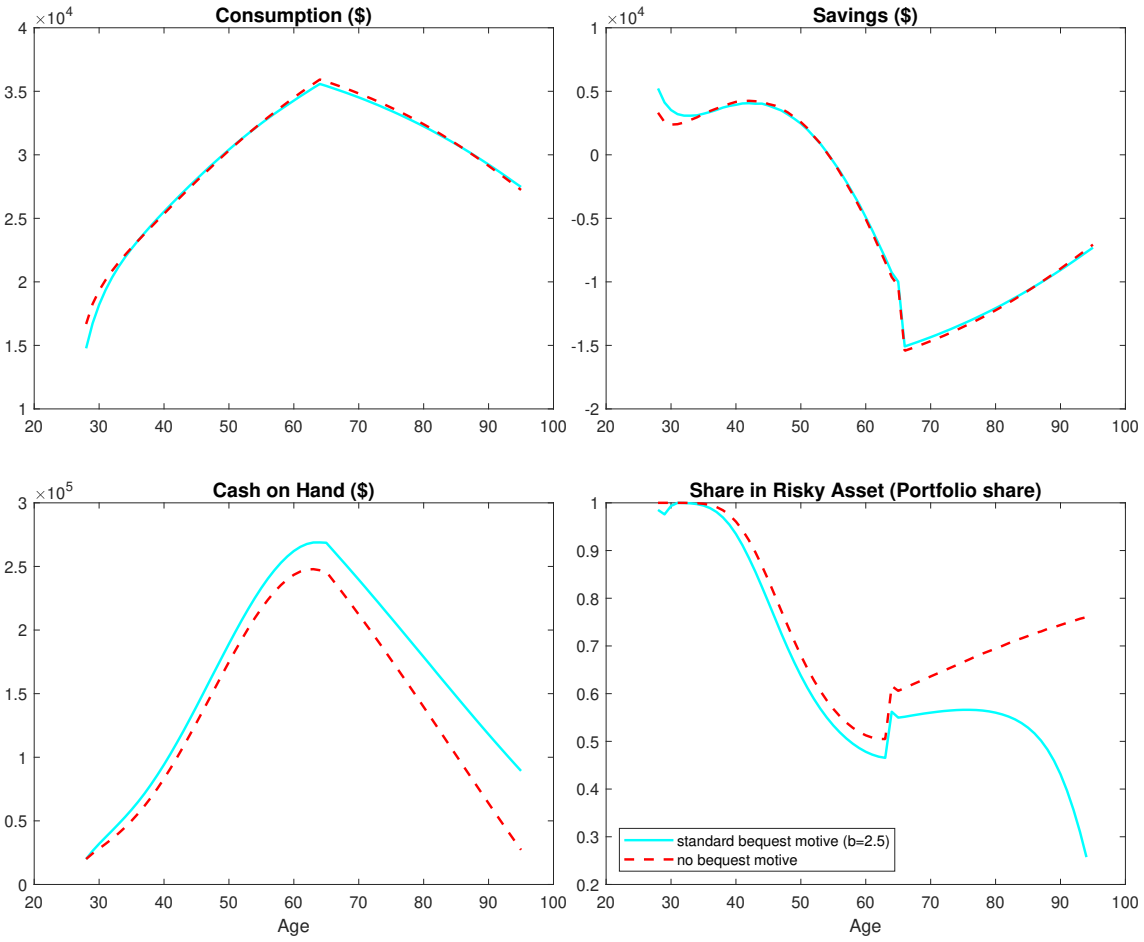


Figure 1: Life-cycle results: with standard bequest motives versus without bequest motives. This figure presents the paths of consumption, savings, cash-on-hand, and the portfolio share of the risky asset obtained from the solution to the standard dynamic life-cycle model.

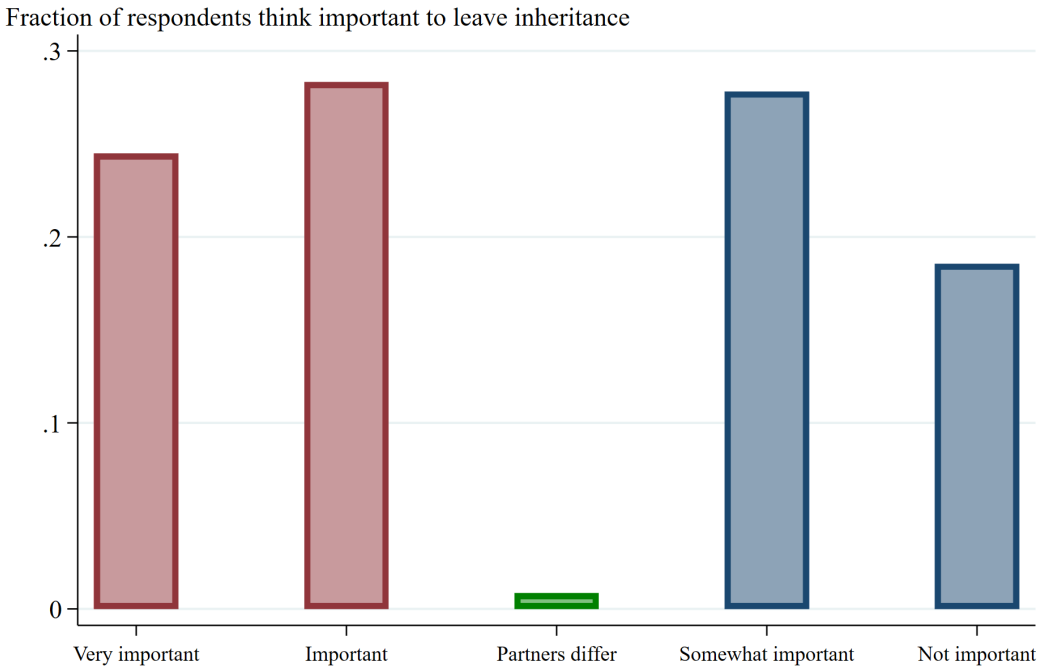
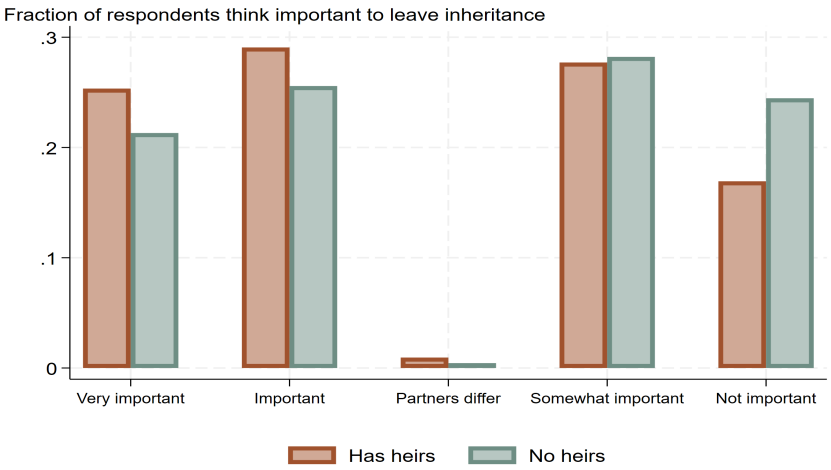
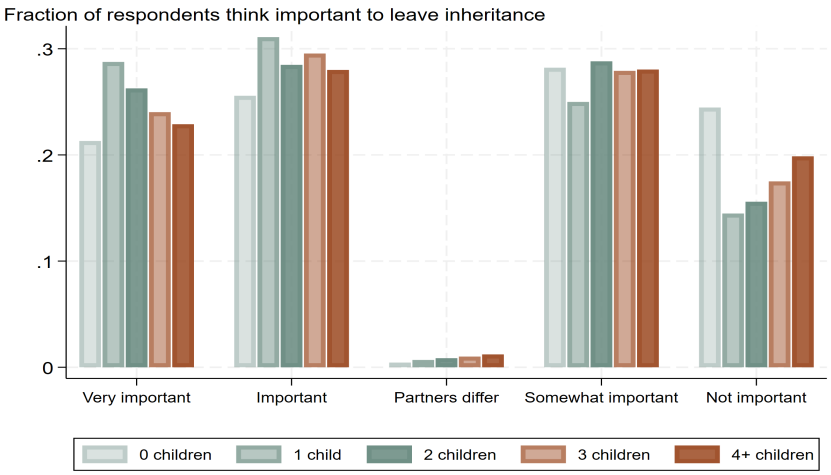


Figure 2: This figure displays the distribution of survey responses regarding the importance of leaving an inheritance, based on data from the SCF. Respondents are asked to rate the importance of leaving an inheritance on a five-point scale: "Very important," "Important," "Partners differ," "Somewhat important," and "Not important." The y-axis shows the fraction of respondents, and the x-axis shows the five response categories. The bars are colored to distinguish between categories, with red bars for "Very important" and "Important," green for "Partners differ," and blue for "Somewhat important" and "Not important."



(a) Heirs and fraction of respondents think important to leave inheritance



(b) Number of children and fraction of respondents who think important to leave inheritance

Figure 3: Panel (a) compares the fraction of respondents who consider leaving inheritances important, grouped by whether they have heirs (shown in brown) versus those without heirs (shown in teal). The y-axis shows the fraction of respondents on a scale from 0 to 0.3, while the x-axis displays five importance categories: "Very important," "Important," "Partners differ," "Somewhat important," and "Not important." Panel (b) examines the same question about the importance of leaving an inheritance but segments respondents by number of children (0 children through 4+ children, shown in different colored bars). The sample includes respondents from the SCF, with responses measured on the five-point importance scale regarding attitudes toward leaving inheritances.

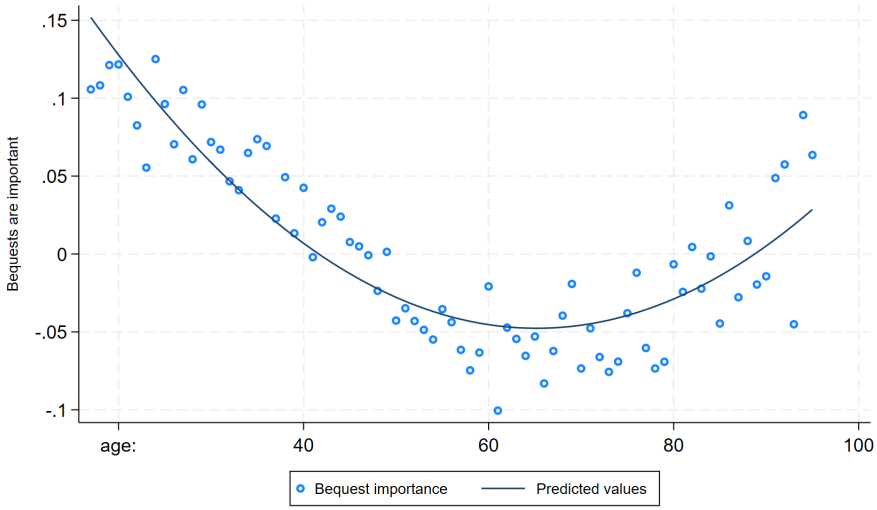
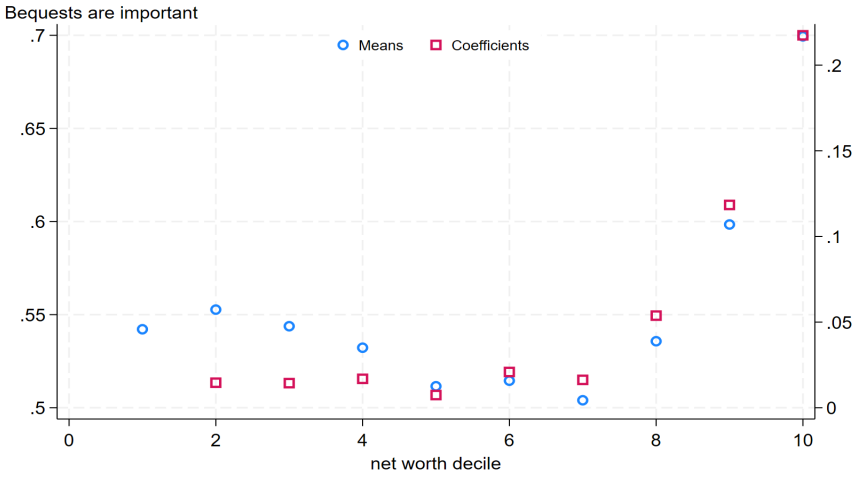
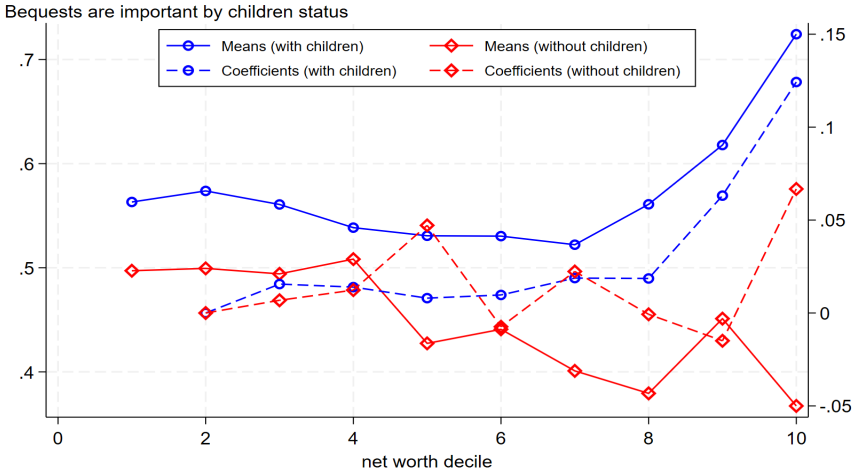


Figure 4: This figure displays the relationship between bequest importance and age using data from the SCF. The x-axis shows age ranging from approximately 25 to 100 years, and the y-axis shows the residualized bequest importance values ranging from -0.1 to 0.15. Blue circles represent individual data points, and a fitted curve (solid black line) shows the predicted relationship between the two variables.

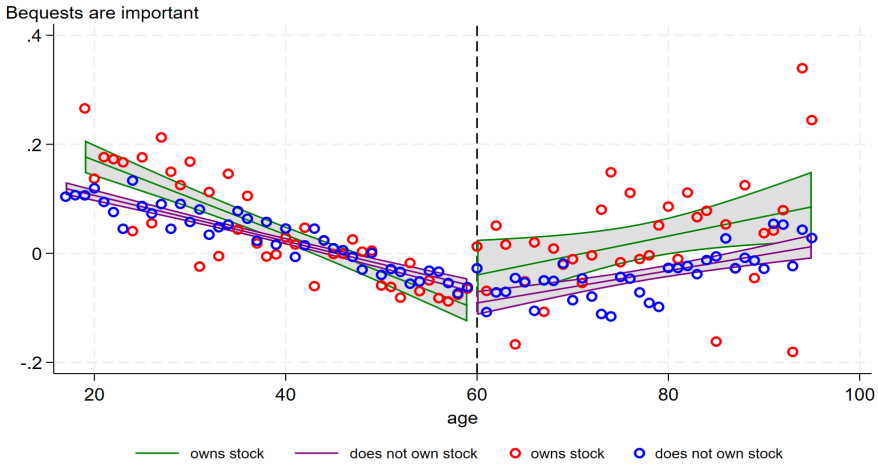


(a) Bequest importance across net worth deciles: means and coefficients

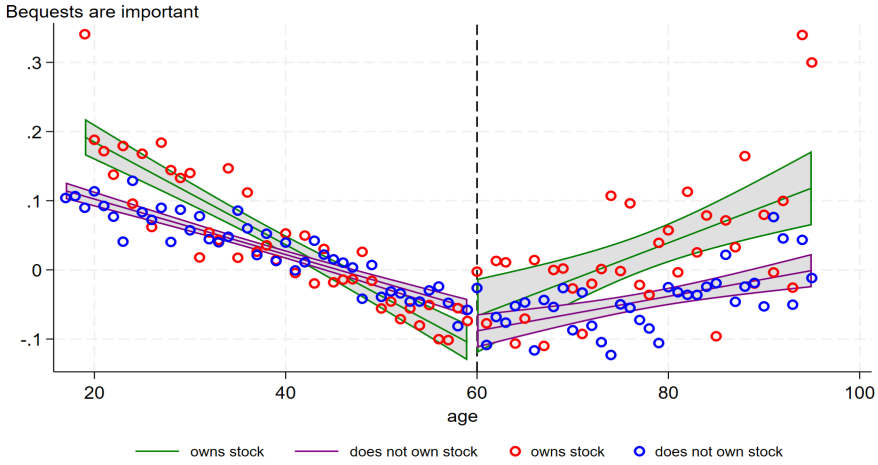


(b) Heirs and bequest importance across net worth deciles: means and coefficients

Figure 5: The figure displays the relationship between net worth deciles and bequest importance using Survey of Consumer Finances (SCF) data. Panel (a) presents two data series across net worth deciles 1-10: means (shown as circles, measured on the left y-axis as proportion of respondents valuing bequests as important) and regression coefficients (shown as squares, measured on the right y-axis). Panel (b) separates the analysis by children status, displaying four data series: means for households with children (solid blue line with circles) and without children (solid red line with diamonds), and corresponding regression coefficients for households with children (dashed blue line with circles) and without children (dashed red line with diamonds). Both panels use net worth deciles on the x-axis, with the left y-axis showing the proportion of respondents considering bequests important (scale 0.4-0.7) and the right y-axis displaying regression coefficients (scale -0.05 to 0.15). These regressions control for demographic and economic characteristics.



(a) Direct stock ownership and bequest preferences by age



(b) Broad stock ownership and bequest preferences by age

Figure 6: Panel (a) displays the relationship between age (x-axis, ranging from approximately 20 to 100 years) and bequest importance preferences (y-axis) for respondents grouped by direct stock ownership status. Direct stock owners are represented by green trend lines and red circular markers, while non-direct stock owners are shown with purple trend lines and blue circular markers. Panel (b) presents the same age-bequest importance relationship using a broader stock ownership definition that includes direct holdings plus indirect holdings through mutual funds, pension plans, and other investment vehicles. The bequest importance measure is derived from the SCF. Both panels include fitted trend lines with confidence intervals (shaded areas) for each ownership group. The sample consists of SCF respondents with available data on stock ownership status and bequest preferences across the specified age range.

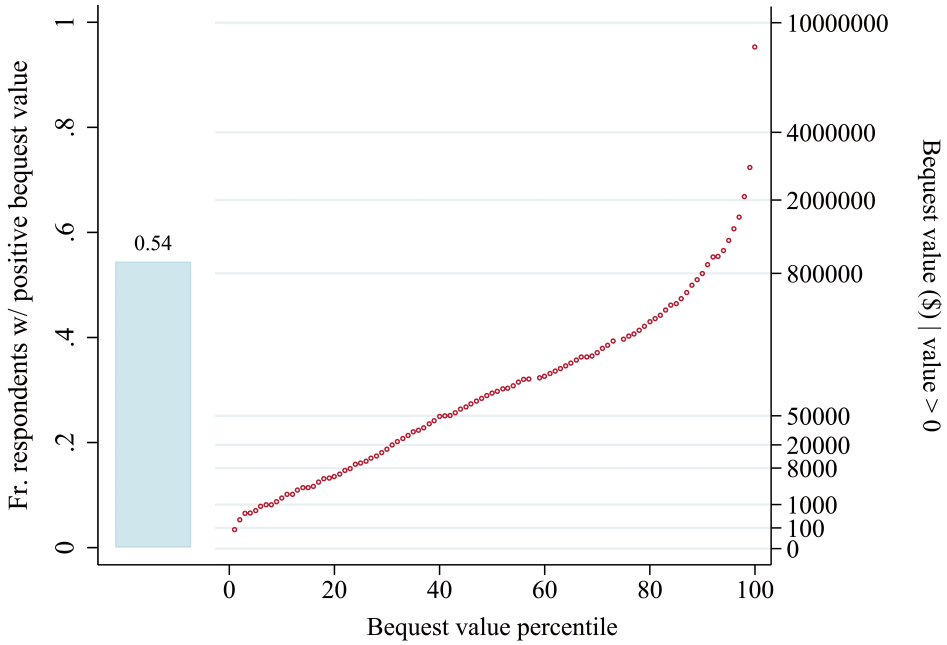


Figure 7: This figure shows the ratio of respondents with positive bequest value (y-axis on the left side) and the distribution of the bequest value (y-axis on the right side). The data on bequest value are derived from the HRS. We can find that around 54% respondents have positive bequest values, which range from about $100 to $8,000,000. The median amount of the positive bequest is approximately $70,000.

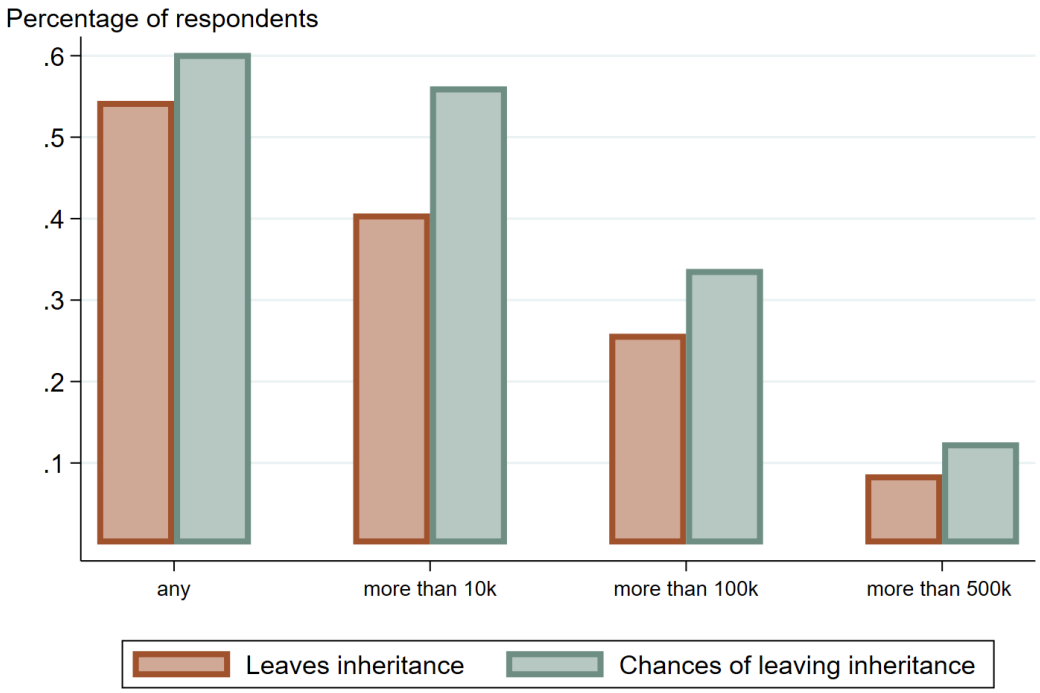


Figure 8: This figure compares the percentage of respondents who leave inheritances versus those who report chances of leaving inheritances, using data from the HRS. The chart displays four inheritance amount categories on the x-axis: "any," "more than 10k," "more than 100k," and "more than 500k." The y-axis shows the percentage of respondents, including both the percentage of respondents who actually leave an inheritance and the percentage who believe they might leave an inheritance. The chance of leaving an inheritance is defined as the probability of leaving any bequest. Two sets of bars are presented for each category: brown bars representing respondents who leave inheritances and green bars representing respondents who report chances of leaving inheritances.

Variable	(1) N	(2) Mean	(3) Median	(4) Std dev.
Bequest related variables...				
bequest_dummy				
1(very important)	265,150	0.281	0	0.449
1(important)	265,150	0.278	0	0.448
1(somewhat important)	265,150	0.272	0	0.445
1(not important)	265,150	0.170	0	0.375
bequest_intention				
1(yes)	267,651	0.407	0	0.491
1(possibly)	267,651	0.221	0	0.415
1(no)	267,651	0.372	0	0.483
Demographic variables...				
children	267,765	0.813	1.00	0.39
age	267,765	51.21	51.00	16.24
marital status				
1(married)	232,520	0.575	1	0.494
1(separated)	232,520	0.030	0	0.172
1(divorced)	232,520	0.145	0	0.352
1(widowed)	232,520	0.073	0	0.261
1(never married)	232,520	0.176	0	0.381
health status	267,765	3.064	3	0.825
longevity_exp	232,520	83.447	85	11.640
smoke	232,520	0.193	0	0.395
spouse_smoke	148,620	0.134	0	0.341
Financial variables...				
stkprt	267,765	0.274	0.00	0.45
stkmu	267,765	0.339	0.00	0.47
networth	267,765	10,366,186	223,823	56,977,560

Table 1: This table exhibits summary statistics for variables used in our analysis, sourced from the SCF dataset. The first set of variables, which includes "bequest_dummy" and "bequest_intention", represents survey responses to the bequest. "bequest_dummy" is equal to 1 if the respondent reports that leaving an inheritance is either important or very important, and equal to 0 if their response indicates it as somewhat important or not important. "bequest_intention" captures respondents' intentions to leave sizable bequests to heirs. The value is 1 when the answer to this question is yes, 3 when it is possibly, and 5 when it is no. The second set of variables shows the demographic characteristics of respondents, such as whether the respondent has children ("children", a dummy variable that takes the value of 1 if the respondent has children and 0 otherwise), the age of the respondent ("age"), the marital status of the respondent ("marital status", a dummy variable that takes the value of 1 if the respondent has a legal spouse and 0 otherwise), self-reported health status ("health status", ranging from 1 to 4, indicating excellent, good, fair, and poor, respectively), the expected longevity ("longevity_exp"). Additionally, "smoke" and "spouse_smoke" are included, representing whether the respondent or the respondent's spouse currently smokes, respectively, taking the value of 1 if yes and 5 otherwise. The third set of variables displays the financial condition of the respondents, including stock holdings ("stkprt", a binary variable for direct stock ownership, excluding indirect ownership through mutual funds, taking the value of 1 if the respondent directly owns stocks and 0 otherwise; "stkmu", a separate measure for overall stock ownership, including both direct and indirect holdings, taking the value of 1 if the respondent owns stocks and 0 otherwise) and net worth ("networth").

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
Has heirs (=1)	0.129***	0.141***	0.141***	0.139***		
	(0.00651)	(0.00787)	(0.00807)	(0.00739)		
Number of children (1)					0.161***	0.166***
					(0.00650)	(0.00851)
Number of children (2)					0.126***	0.139***
					(0.00533)	(0.00553)
Number of children (3)					0.125***	0.138***
					(0.00906)	(0.00968)
Number of children (4 and more)					0.104***	0.107***
					(0.0121)	(0.0133)
marital status		x	x	x		x
health status			x	x		x
smoker			x	x		x
expected longevity				x		x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	265150	230447	230447	230447	265150	230447
R^2	0.0214	0.0236	0.0242	0.0282	0.0225	0.0294

Table 2: The data utilized in this table are sourced from the Survey of Consumer Finances. The dependent variable *bequest important* equals one if the respondent reports that leaving an inheritance is either important or very important, zero if their response is somewhat important or not important. The independent variables include an indicator for having family heirs and indicators for the number of children. The child-group variable is coded as a set of dummy variables where zero children is the omitted category, with separate indicators for having 1, 2, 3, and 4 or more children. The regressions control for various combinations of marital status, health status, smoking status, and expected longevity, as well as age and year fixed effects. Standard errors corrected for multiple imputations are in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)
Age$^2\times$100	0.00712***	0.00609**	0.00626**	0.00654***
	(0.00200)	(0.00193)	(0.00195)	(0.00187)
Age	-0.0104***	-0.00943***	-0.00969***	-0.0109***
	(0.00216)	(0.00216)	(0.00218)	(0.00214)
Net worth (Z)			0.238***	0.236***
			(0.0191)	(0.0185)
Has heirs (=1)				0.145***
				(0.0381)
(Age$^2\times$100)$\times$(Has heirs)				0.00144
				(0.00163)
Age$\times$(Has heirs)				-0.000841
				(0.00160)
marital status	x	x	x	x
health status		x	x	x
smoker		x	x	x
expected longevity		x	x	x
year FE	x	x	x	x
Observations	230447	230447	230447	230447
R^2	0.0120	0.0171	0.0181	0.0276

Table 3: This table uses data from the Survey of Consumer Finances waves 1989 through 2019. The table reports OLS regression coefficients where the dependent variable *bequest important* equals one if the respondent reports that leaving an inheritance is either important or very important, zero otherwise. The independent variables are respondent age, age squared, an indicator for having family heirs, household net worth (normalized so that one unit equals one standard deviation), and an interaction term between age squared and the indicator for having family heirs. Regressions control marital status, health indicators, and the respondent's subjective longevity. Standard errors corrected for multiple imputations are in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
$log(networth)$	0.0103***	0.0129***	0.00385	0.00517**		
	(0.00218)	(0.00206)	(0.00229)	(0.00218)		
Has heirs (=1)			0.0233	0.00920		
			(0.0311)	(0.0298)		
$log(networth) \times$(Has heirs)			0.0113***	0.0123***		
			(0.00270)	(0.00265)		
networth_xtile 2					0.0131	0.0135
					(0.00763)	(0.00824)
networth_xtile 3					0.0179	0.0211
					(0.0130)	(0.0128)
networth_xtile 4					0.0116	0.0178
					(0.0112)	(0.0112)
networth_xtile 5					0.0102	0.0198**
					(0.00965)	(0.00841)
networth_xtile 6					0.0243*	0.0378**
					(0.0129)	(0.0129)
networth_xtile 7					0.0301	0.0445**
					(0.0193)	(0.0184)
networth_xtile 8					0.0710***	0.0878***
					(0.0183)	(0.0177)
networth_xtile 9					0.135***	0.151***
					(0.0176)	(0.0184)
networth_xtile 10					0.244***	0.259***
					(0.0238)	(0.0248)
marital status	x	x	x	x	x	x
health status		x		x		x
smoker		x		x		x
expected longevity		x		x		x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	209044	209044	209044	209044	230447	230447
R^2	0.0169	0.0228	0.0277	0.0331	0.0173	0.0228

Table 4: The data utilized in this table are cross-section data extracted from the Survey of Consumer Finances. The dependent variable *bequest important* equals one if the respondent indicates that leaving an inheritance is important or very important, and zero if their response is somewhat important or not important. The main independent variables include the logarithm of net worth, net worth decile indicators, an indicator for having family heirs, and an interaction term between the logarithm of net worth and the indicator for having family heirs. The net worth decile variables are coded as a set of dummy variables where the first decile is the omitted category, with separate indicators for deciles 2 through 10. The regressions control for marital status and three additional health-related variables (health status, smoking status, and expected longevity), as well as age and year fixed effects. Standard errors corrected for multiple imputation are in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
Directly owns stocks (=1)	0.0247*	0.0273**	0.0000307			
	(0.0112)	(0.0110)	(0.0147)			
Owns stocks (=1)				0.0234***	0.0269***	-0.00108
				(0.00664)	(0.00647)	(0.0151)
Net worth (Z)		0.223***	0.220***		0.221***	0.217***
		(0.0174)	(0.0172)		(0.0176)	(0.0173)
Has heirs (=1)		0.141***	0.134***		0.141***	0.133***
		(0.00753)	(0.00548)		(0.00740)	(0.00548)
(Directly owns stocks)×(Has heirs)			0.0354			
			(0.0247)			
(Owns stocks)×(Has heirs)						0.0364
						(0.0233)
marital status	x	x	x	x	x	x
health status	x	x	x	x	x	x
smoker	x	x	x	x	x	x
expected longevity	x	x	x	x	x	x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	230447	230447	230447	230447	230447	230447
R^2	0.0193	0.0296	0.0298	0.0193	0.0297	0.0299

Table 5: The data utilized in this table are sourced from the Survey of Consumer Finances. The table displays the results of ordinary least squares regression. The dependent variable, *bequest important*, equals one if the respondent deems leaving an inheritance important or very important, and zero if the response indicates it as somewhat important or not important. The independent variables include a binary variable for direct stock ownership (excluding indirect ownership through mutual funds), a separate measure for overall stock ownership (including both direct and indirect holdings), an indicator for family heirs, and household net worth (normalized to one standard deviation per unit). The regressions control for marital status and three other health controls. Columns (1)-(3) examine direct stock ownership, while columns (4)-(6) analyze overall stock ownership. Columns (3) and (6) introduce interaction terms between stock ownership and heir status. All models include age and year fixed effects. Standard errors, adjusted for multiple imputations, are reported in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)
Ordered Probit coefficient estimates:		
Experienced stock return coefficient β	2.950***	3.456***
	(1.12)	(1.13)
Weighting parameter λ	1.653***	1.734***
	(0.51)	(0.42)
Income controls	x	x
Liquid assets controls		x
Demographics controls	x	x
Age dummies	x	x
Year dummies	x	x
Average of fitted probability difference between 90th and 10th percentile of experienced return:		
Very important	0.0362	0.0442
[unconditional freq.= 0.334]	(0.01615)	(0.01733)
Important	0.0092	0.0111
[unconditional freq.= 0.412]	(0.00088)	(0.00059)
Somewhat important	-0.0147	-0.0179
[unconditional freq.= 0.202]	(0.00784)	(0.00860)
Not important	-0.0308	-0.0374
[unconditional freq.= 0.052]	(0.00917)	(0.00914)
Observations	40,933	40,933
Pseudo R^2	0.012	0.013

Table 6: This table examines how experienced stock market returns influence individuals' stated importance of leaving bequests, based on an ordered probit model estimated via maximum likelihood. The dependent variable ranges from 1 ("not important") to 4 ("very important"). The main regressor is the experienced stock return, based on inflation-adjusted S&P 500 returns. All models use SCF sampling weights, with standard errors corrected for multiple imputation and potential likelihood misspecification. Column (1) reports baseline results; Column (2) adds controls for liquid assets, measured as the log and squared log of liquid assets interacted with year dummies. Other controls include age and year fixed effects, number of children (and its square), marital and retirement status, race, education, and pension participation indicators (defined benefit, defined contribution, and IRA). The share of liquid assets held in retirement accounts is also controlled for. The reported average probability differences reflect how the predicted likelihood of each bequest importance category shifts between the 90th and 10th percentiles of the experienced return distribution.

Variable	(1) N	(2) Mean	(3) Median	(4) Std dev.
Leaves an inheritance upon death...				
any inheritance	7,750	54.45	100.00	49.81
inheritance more than 10k	7,750	40.63	0.00	49.12
inheritance more than 100k	7,750	25.86	0.00	43.79
inheritance more than 500k	7,750	8.61	0.00	28.05
Expected chances of having bequests...				
any bequests	7,671	60.34	80.00	42.20
bequests more than 10k	7,671	56.22	75.00	43.73
bequests more than 100k	7,478	33.82	0.00	42.63
bequests more than 500k	7,403	12.54	0.00	28.94
Value of inheritance and different components...				
total inheritance value	7,750	185,971	1,000	862,790
home value	7,750	41,113	0.00	121,914
liquid asset value	7,750	46,861	0.00	266,707
insurance value	7,750	2,768	0.00	35,531
trust value	7,750	92,686	0.00	741,182
inter vivo transfers	7,750	2,543	0.00	18,841
Whether leaves inheritance and its components...				
1 (inheritance)	7,750	0.55	1.00	0.50
1 (home)	7,750	0.26	0.00	0.44
1 (liquid)	7,750	0.16	0.00	0.36
1 (insurance)	7,750	0.08	0.00	0.26
1 (trust)	7,750	0.12	0.00	0.32
1 (inter vivo transfers)	7,750	0.22	0.00	0.41
Demographic variables...				
gender				
1(male)	7,750	0.468	0.00	0.499
race				
1(white)	7,750	0.809	1.00	0.393
1(black)	7,750	0.156	0.00	0.363
1(other)	7,750	0.035	0.00	0.183
marital status				
1(married)	7,712	0.406	0.00	0.491
1(partnered)	7,712	0.028	0.00	0.164
1(single)	7,712	0.566	1.00	0.496
health status	7,750	2.322	2.00	1.108
children	7,482	0.917	1.00	0.277
age	7,747	79.37	81.00	11.07
years of education	7,740	11.77	12.00	3.30
wealth	7,750	335,058	96,000	1,072,744

Table 7: This table exhibits summary statistics for variables used in our analysis, drawn from the HRS dataset. The first set of variables measures whether a respondent left an inheritance or an inheritance greater than a certain amount (10k, 100k, and 500k), taking the value of 100 if leaves and 0 otherwise. The second set of variables, expected chances of leaving bequests, illustrates the perceived chances respondents have of leaving any inheritance and leaving an inheritance of more than a certain amount (precisely, 10k, 100k, and 500k), ranging from 0 to 100. The third set of variables shows the total bequest value and its components, including home value, liquid asset value, insurance value, trust value, and inter vivos transfers. The fourth set of variables displays binary indicators for leaving an inheritance and its components. The final set of variables includes demographic variables, such as gender, race, years of education, and total wealth amount ($).

Online Appendix:

Five Facts about Bequest Motives

(intended for online publication)

AI A Life-cycle model

AI.1 Model Setup

The following life-cycle model is the same as in Heimer et al. (2019), which is based on the works of Carroll (2011) and Love (2013). In this framework, agents make decisions within discrete time, where time is denoted by $t = 0, 1, 2, 3,$ $...T_{retire}, ..., T$, with T_{retire} representing the retirement age. Agents maximize their expected discounted utility stream by determining consumption, asset allocation, and bequest allocation over discrete time periods. Recursively, this framework can be written as follows:

$$V_t^*(X_t, P_t) = \underset{C_t, \phi_t}{max}\{u(C_t) + \beta s_{t+1|t}\mathbf{E_t}[V_{t+1}^*(X_{t+1}, P_{t+1})] + ... \\ ...\beta(1 - s_{t+1|t})\mathbf{E_t}[B_{t+1}(R_{t+1}(X_t - C_t))]\} \quad \text{(A1)}$$

where C_t refers to consumption in period t, ϕ_t is the share of wealth in risky assets, P_t is permanent income, and X_t is cash on hand (wealth). The agent's bequest motive is expressed by $B_t(X_t)$, which is referred to as 'warm glow' as in Andreoni (1989). R_t denotes the gross rate of portfolio returns, which is determined by the weighted combination of the return on risky assets (R_t^r) and the return on risk-free assets (R^f), formulated as $R_t = \phi_t R_t^r + (1 - \phi_t)R^f$. The evolution of cash on hand is described by the equation $X_t = R_t(X_{t-1} - C_{t-1}) + Y_t$, where R_t, the gross rate of portfolio returns, is the weighted return of the risky and the risk-free assets, formulated as $R_t = \phi_t R_t^r + (1 - \phi_t)R^f$. We pay attention to two parameters, β, representing the time discount factor or rate of time preference, $s_{t+1|t}$, denoting the conditional survival probability for transitioning from period t to period $t + 1$, given that age t has been reached.

Drawing from Carroll (2011), the income generation process is delineated as follows: Income Y_t is a result of combining various factors. It begins with the previous period's permanent income P_{t-1} and incorporates an adjustment based on the age-earnings profile denoted by G_t. Additionally, it considers a log-normal distributed shock N_t and a transitory shock Θ_t. In this way, the evolution of income is described by the equation:

Following Carroll (2011), income Y_t is a result of combining permanent income P_t, an adjustment based on the age-earnings profile G_t, a log-normal distributed shock N_t and a transitory shock Θ_t. In this way, income evolves

according to the equation:

$$Y_t = P_{t-1} G_t N_t \Theta_t \tag{A2}$$

The permanent income is captured by the relationship:

$$P_t = P_{t-1} G_t N_t \tag{A3}$$

We parameterize the utility function by selecting $u(C) = C^{1-\rho}/(1-\rho)$, and the bequest motive function by choosing $B(X) = b(X/b)^{(1-\rho)}/(1-\rho)$, where ρ denotes the curvature of the utility function. To numerically address the consumer's problem, we employ the method of endogenous grid points, as elucidated by Carroll (2011) and Love (2013), which allows us to find solutions to the consumer's optimization problem efficiently.

AI.2 Calibration

To demonstrate how bequest motives influence household choices across the life cycle, we conduct a comparative analysis of solutions derived from the dynamic life-cycle model when agents make decisions with standard bequest motives versus without bequest motives. This comparison is established by examining two different calibrations of the model's bequest motives, specifically when the bequest parameter b is set to 2.5 (with bequest motives, following Gomes and Michaelides (2005)) and when it is set to 0 (without bequest motives). Through this comparison, we aim to reveal the impact of bequest motives on individuals' financial decisions throughout their life cycle.

We choose parameter values that align with existing research on life-cycle behavior that attempts to match the hump shape in consumption over the life cycle (e.g., Gourinchas and Parker (2002)). We choose parameters based on prior literature. We use a coefficient of relative risk aversion ρ of 6 and a rate of time preference β of 0.98. To capture the influence of bequest motives, we set the Bequest parameter to 2.5. Additionally, we assign the risk-free rate as 2%, the excess return as 4%, and the standard deviation of the risky asset as 18%. A summary of our parameter selection is presented in Table A1.

Following Love (2013) and Carroll and Samwick (1997), we utilize data from the Panel Study of Income Dynamics (PSID) covering the period 1970 to 2007 to calibrate the income process for our model. While various aspects of the life cycle are influenced by factors like family composition and marital status (as discussed in Love (2010), and Hubener et al. (2016)), our baseline calibration is centered on the average U.S. individual's life-cycle income. Specifically, we focus

on individuals living in a married household. Notably, we allow for a nonzero correlation between permanent income and excess returns while individuals are in the working phase and set this correlation to zero during retirement.

Parameter	**Value**	**Parameter**	**Value**
Risk aversion (ρ)	6	Retirement age (T^R)	65
Discount factor (β)	0.98	Maximum age (T)	95
Risk-free rate (R^f)	0.02	Uncertain income in retirement?	no
Equity premium ($R_t^e - R^f$)	0.04	Bequest parameter (b)	2.5

Table A1: Parameter of standard dynamic life-cycle model: This table presents the parameters used in our standard dynamic life-cycle model. We estimate the parameters β and ρ, and set the value of other parameters according to our framework.

AI.3 Model Results

This section presents the results of estimating the life-cycle model described in the previous subsection. Section 4 describes several plausible modifications to the modeling of bequest motives within the context of the dynamic model. We present these results here:

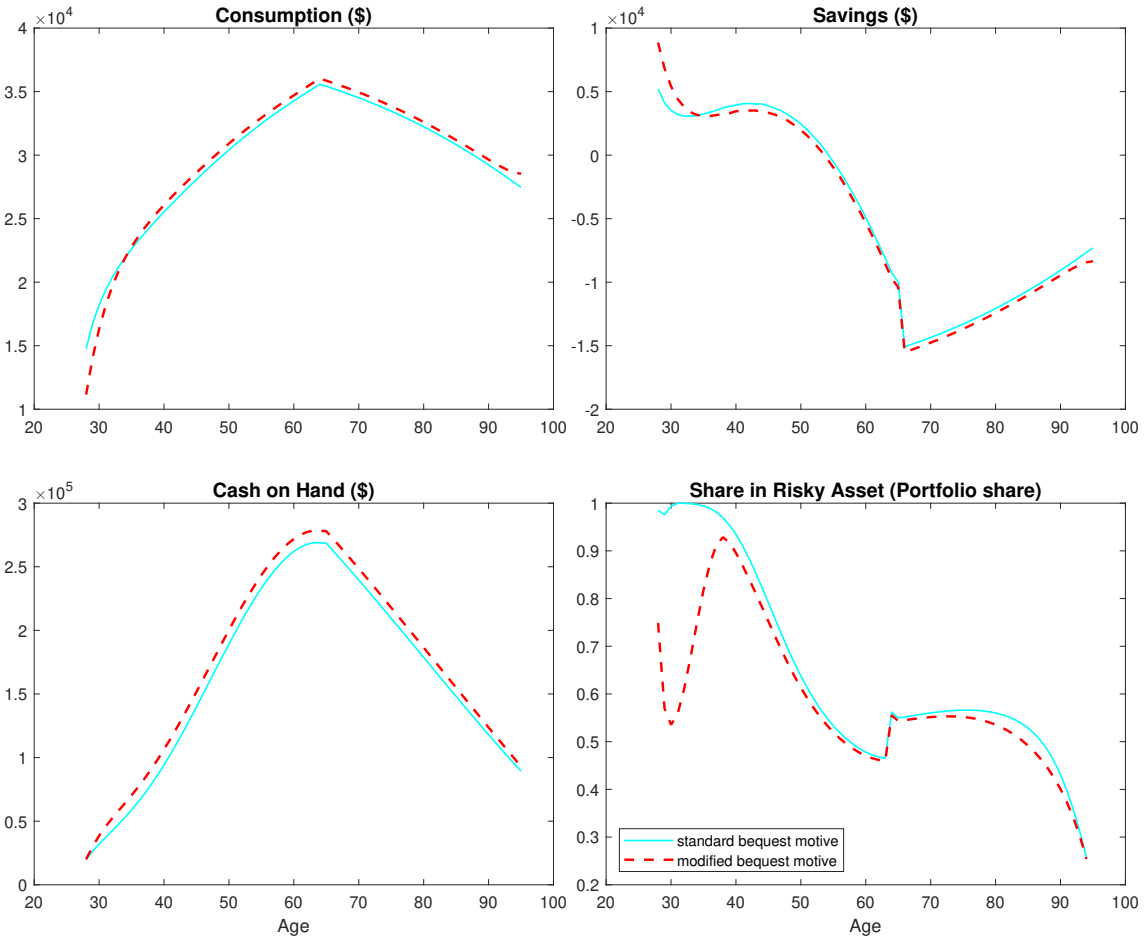


Figure A1: This figure presents the paths of consumption, savings, cash-on-hand, and the portfolio share of the risky asset obtained when bequest preferences are U-shaped over the life-cycle.

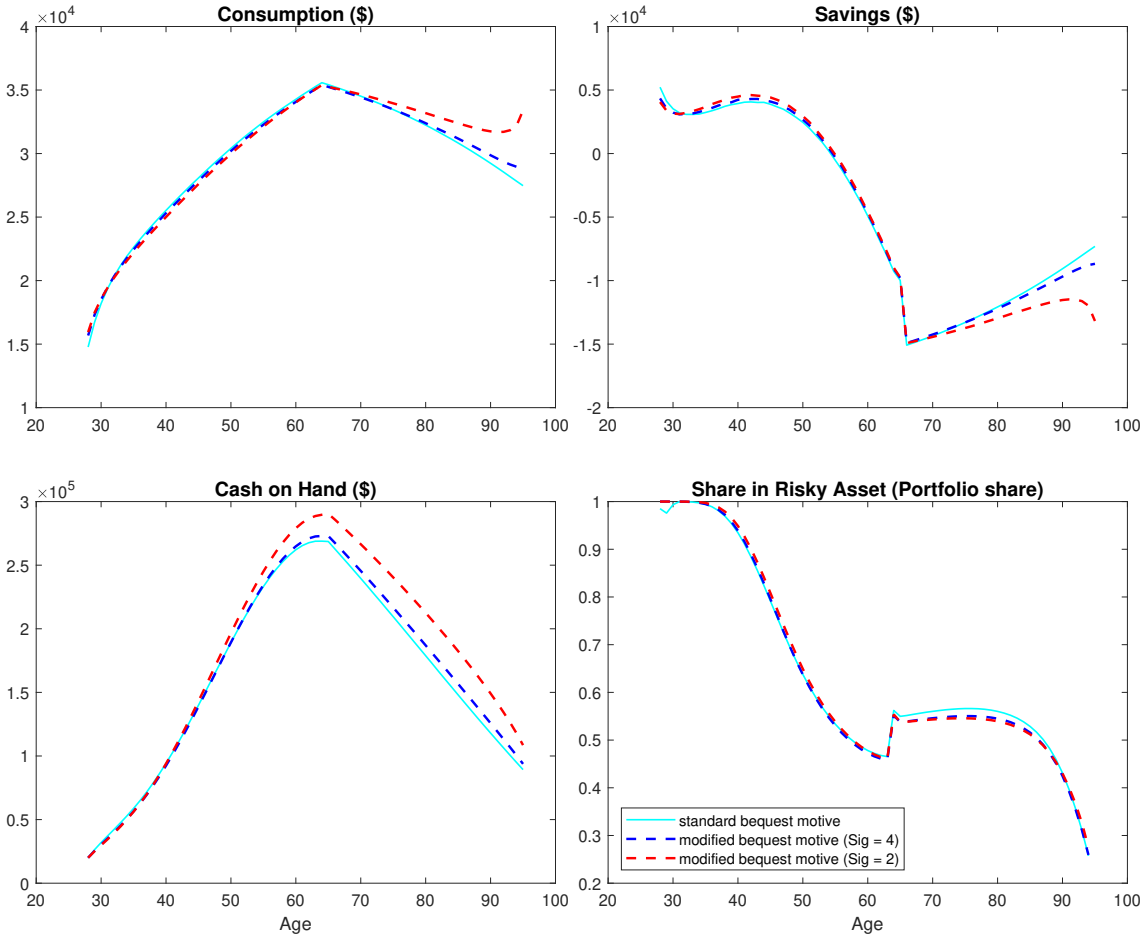


Figure A2: This figure presents the paths of consumption, savings, cash-on-hand, and the portfolio share of the risky asset obtained when bequest preferences are a luxury good.

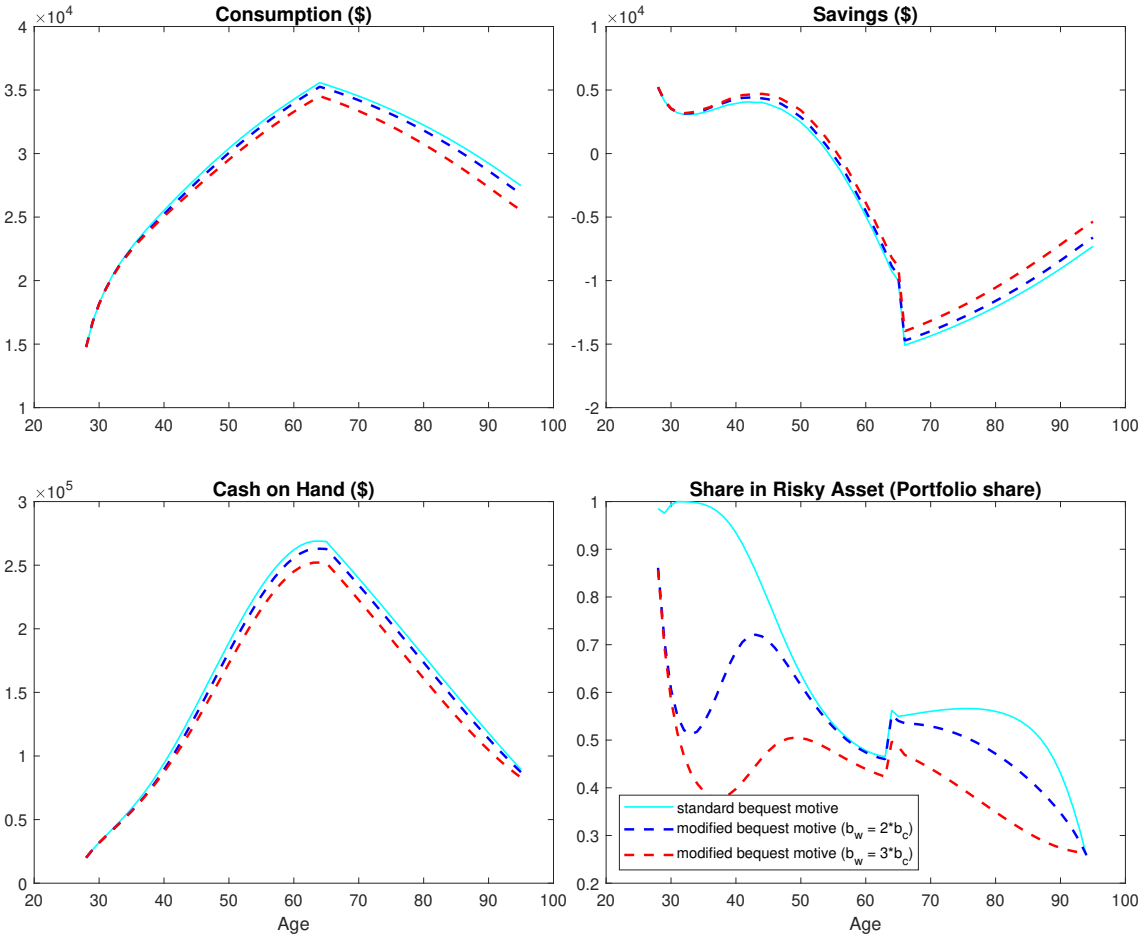


Figure A3: This figure presents the paths of consumption, savings, cash-on-hand, and the portfolio share of the risky asset obtained when stockholders have larger bequest preferences.

AII Robustness of Bequest Preferences

This section of the appendix presents tables and figures that support results on bequest preferences from the SCF. The section starts with alternative tests of the relation between bequest preferences and heirs. It then explores the U-shaped life-cycle relation to bequest preferences across different birth cohorts and with stated bequest intentions, an alternative question in the SCF. Finally, we show that some of the key relations in the data—namely, the heightened bequest motives of the wealthy and stock market participants—also apply to their stated expectations of leaving an inheritance.

dep var: bequest importance (1-4)	(1)	(2)
Number of children (1)	0.0953***	0.0940**
	(0.00866)	(0.00914)
Number of children (2)	0.0844***	0.0871***
	(0.00742)	(0.00717)
Number of children (3)	0.0796***	0.0763***
	(0.0115)	(0.00990)
Number of children (4 and more)	0.0879***	0.0732***
	(0.0134)	(0.0112)
marital status		x
health status		x
smoker		x
expected longevity		x
age FE	x	x
year FE	x	x
Observations	265150	230447
R^2	0.0178	0.0245

Table A2: The data utilized in this table are sourced from the Survey of Consumer Finances. The dependent variable *bequest important* equals one if the respondent reports that leaving bequests is either important or very important, zero if their response is somewhat important or not important. The independent variables include indicators for the number of children living with respondents. The child group variable is coded as a set of dummy variables where zero children is the omitted category, with separate indicators for having 1, 2, 3, and 4 or more co-resident children. The regressions control for various combinations of marital status, health status, smoking status, and expected longevity, as well as age and year fixed effects. Standard errors corrected for multiple imputations are in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

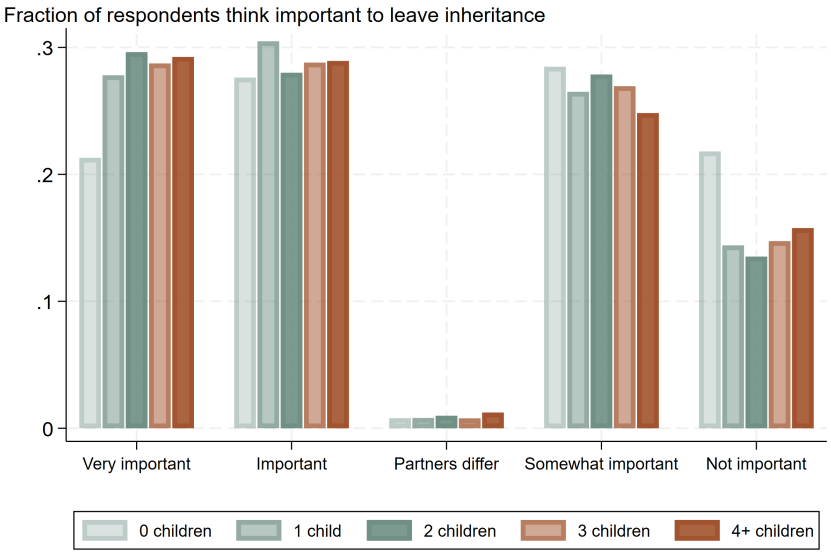


Figure A4: This figure displays the fraction of respondents who consider leaving inheritances important, segmented by the number of children living with parents. The y-axis shows the fraction of respondents on a scale from 0 to 0.3, while the x-axis presents five importance categories: "Very important," "Important," "Partners differ," "Somewhat important," and "Not important." Respondents are grouped into five categories based on the number of children: 0 children (light gray), 1 child (medium gray), 2 children (dark gray), 3 children (light brown), and 4+ children (dark brown). Each importance category contains five bars representing the different child count groups. The data utilized in this figure are sourced from the SCF.

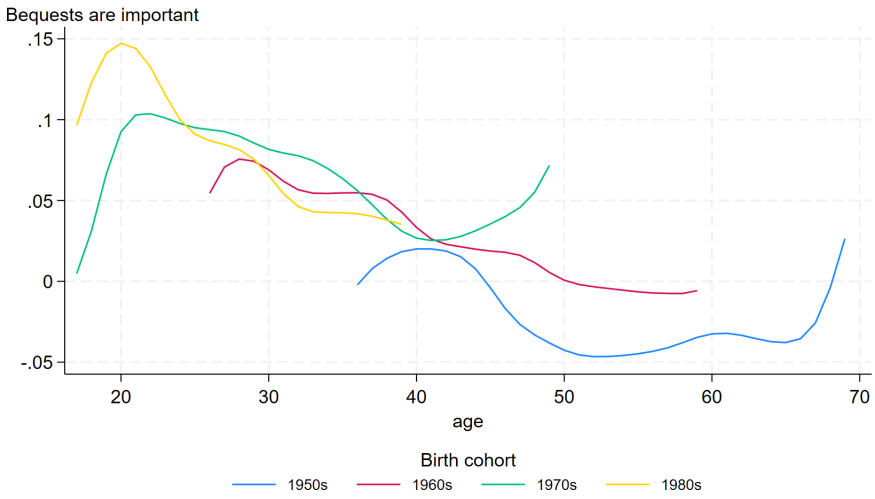


Figure A5: This figure displays the importance of bequests across age for different birth cohorts using data from the SCF. The x-axis shows age ranging from approximately 20 to 70 years, and the y-axis shows bequest importance. Four birth cohorts are represented by different colored lines: 1950s (blue), 1960s (red), 1970s (green), and 1980s (orange). Each line shows how the importance of bequest varies with age within that particular birth cohort.

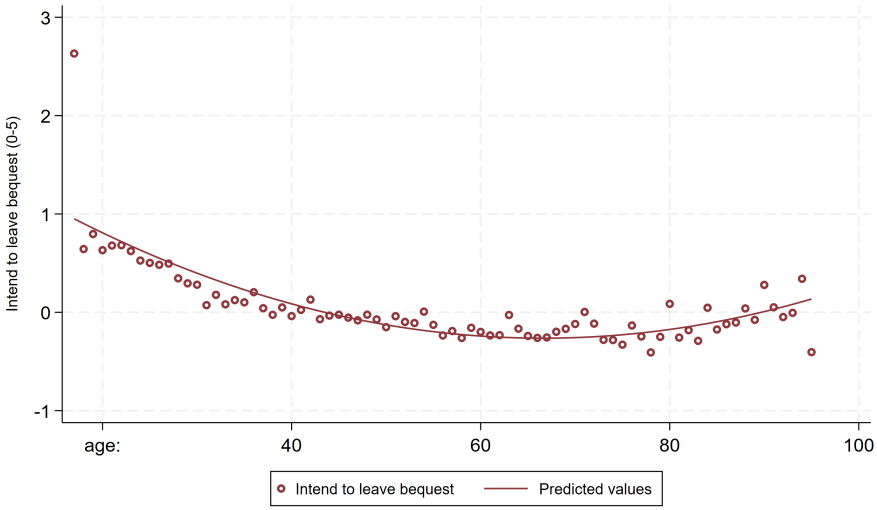


Figure A6: This figure displays the relationship between intention to leave bequests and age using data from the SCF. The x-axis shows age, ranging from approximately 25 to 100, and the y-axis shows residualized bequest intention. Red circles represent individual data points, and a fitted curve (solid red line) shows the predicted relationship between the two variables.

AIII Robustness of Model Specifications

This section of the appendix presents robustness checks for the main empirical results reported in Tables 2-5 using alternative econometric specifications. Our baseline analysis employs linear probability models (OLS) with binary dependent variables that distinguish between respondents who consider bequests "important" or "very important" versus those who rate them as "somewhat important" or "not important." To ensure our findings are not sensitive to this particular specification choice, we re-estimate our key regressions using ordered probit models that exploit the full four-category nature of the bequest importance variable from the SCF.

The ordered probit framework naturally accommodates the ordinal structure of responses ranging from "not important" to "very important" and provides a more flexible approach to modeling the underlying latent preferences for bequests. This specification allows us to test whether our main findings remain robust under alternative modeling assumptions. These tests are in the following tables: the relationships between bequest preferences and heir status (Table A3), the U-shaped life-cycle pattern (Table A4), the wealth gradient (Table A5), and the connection to stock market participation (Table A6).

Across all specifications, the ordered probit results confirm that our key empirical patterns are not artifacts of the binary transformation used in our main analysis. This consistency across different econometric approaches strengthens confidence in the substantive conclusions about bequest motives documented throughout the paper.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
Has heirs (=1)	0.345***	0.373***	0.376***	0.375***		
	(0.01582)	(0.01616)	(0.01666)	(0.01636)		
Number of children (1)					0.401***	0.419***
					(0.01838)	(0.01965)
Number of children (2)					0.357***	0.391***
					(0.01670)	(0.01652)
Number of children (3)					0.329***	0.370***
					(0.02110)	(0.02180)
Number of children (4 and more)					0.285***	0.302***
					(0.02365)	(0.02440)
marital status		x	x	x		x
health status			x	x		x
smoker			x	x		x
expected longevity				x		x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	265,150	230,447	230,447	230,447	265,150	230,447

Table A3: This table presents ordered probit regression results examining the relationship between having heirs and the importance of leaving a bequest. The dependent variable is an ordered categorical variable ranging from 1 to 4, where 1 indicates "not important," 2 indicates "somewhat important," 3 indicates "important," and 4 indicates "very important" for leaving an inheritance. The data are sourced from the Survey of Consumer Finances. The key independent variables include an indicator for having family heirs and categorical variables for the number of children (1, 2, 3, and 4 or more children), with zero children as the omitted reference category. Age is included as a continuous control variable. The regressions control for various combinations of marital status, health status, smoking status, and expected longevity, as well as age and year fixed effects. Standard errors corrected for multiple imputations are reported in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)
Age$^2\times$100	0.01652***	0.01474***	0.01636***	0.02655***
	(0.00412)	(0.00428)	(0.00307)	(0.00423)
Age	-0.02555***	-0.02405***	-0.02208***	-0.03776***
	(0.00440)	(0.00452)	(0.00324)	(0.00455)
Net worth (Z)			0.10831***	0.10370***
			(0.00967)	(0.00966)
Has heirs (=1)				-0.08236
				(0.09360)
(Age$^2\times$100)$\times$(Has heirs)				-0.01134***
				(0.00353)
Age$\times$(Has heirs)				0.01720***
				(0.00379)
marital status	x	x	x	x
health status		x	x	x
smoker		x	x	x
expected longevity		x	x	x
year FE	x	x	x	x
Observations	230,447	230,447	230,447	230,447

Table A4: This table presents ordered probit regression results examining the relationship between age and the importance of leaving a bequest. The dependent variable is an ordered categorical variable ranging from 1 to 4, where 1 indicates "not important," 2 indicates "somewhat important," 3 indicates "important," and 4 indicates "very important" for leaving an inheritance. The data are sourced from the Survey of Consumer Finances. The key independent variables include age and age-squared (multiplied by 100 for easier interpretation), normalized net worth (Z-score), an indicator for having family heirs, and interaction terms between the age variables and the heir indicator in column (4). The regressions control for marital status, health status, smoking status, expected longevity, and year fixed effects. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
$log(networth)$	0.03885***	0.04285***	0.01584***	0.01756***		
	(0.00426)	(0.00389)	(0.00547)	(0.00519)		
Has heirs (=1)			-0.01565	-0.03775		
			(0.05127)	(0.04886)		
$log(networth) \times$(Has heirs)			0.03784***	0.03956***		
			(0.00436)	(0.00429)		
networth_xtile 2					0.01666	0.01726
					(0.01775)	(0.01806)
networth_xtile 3					0.05362*	0.05879**
					(0.03064)	(0.02984)
networth_xtile 4					0.05281*	0.06203**
					(0.03125)	(0.02988)
networth_xtile 5					0.07951***	0.09475***
					(0.02799)	(0.02489)
networth_xtile 6					0.11631***	0.13732***
					(0.03034)	(0.02992)
networth_xtile 7					0.15060***	0.17452***
					(0.03877)	(0.03612)
networth_xtile 8					0.25278***	0.27785***
					(0.04510)	(0.04251)
networth_xtile 9					0.43248***	0.45702***
					(0.04562)	(0.04502)
networth_xtile 10					0.71216***	0.73460***
					(0.05654)	(0.05538)
marital status	x	x	x	x	x	x
health status		x		x		x
smoker		x		x		x
expected longevity		x		x		x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	209,044	209,044	209,044	209,044	230,447	230,447

Table A5: This table presents ordered probit regression results examining the relationship between net worth and the importance of leaving a bequest. The dependent variable is an ordered categorical variable ranging from 1 to 4, where 1 indicates "not important," 2 indicates "somewhat important," 3 indicates "important," and 4 indicates "very important" for leaving an inheritance. The data are sourced from the Survey of Consumer Finances. The key independent variables include the logarithm of net worth in columns (1)-(4), net worth decile indicators in columns (5)-(6), an indicator for having family heirs, and an interaction term between log(networth) and having heirs in columns (3)-(4). The net worth decile variables are coded as a set of dummy variables where the first decile is the omitted category, with separate indicators for deciles 2 through 10. The regressions control for marital status, health status, smoking status, expected longevity, as well as age and year fixed effects. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

dep var: bequest importance (1-4)	(1)	(2)	(3)	(4)	(5)	(6)
Directly owns stocks (=1)	0.08357***	0.19435***	-0.00275			
	(0.02353)	(0.01604)	(0.01996)			
Owns stocks (=1)				0.08464***	0.19785***	0.00801
				(0.01378)	(0.01112)	(0.01718)
Net worth (Z)		0.09073***	0.08822***		0.09092***	0.08829***
		(0.00892)	(0.00887)		(0.00938)	(0.00935)
Has heirs (=1)		0.44559***	0.39133***		0.45025***	0.38130***
		(0.01465)	(0.01746)		(0.01469)	(0.01728)
(Directly owns stocks)×(Has heirs)			0.23862***			
			(0.02551)			
(Owns stocks)×(Has heirs)						0.23273***
						(0.02288)
marital status	x	x	x	x	x	x
health status	x	x	x	x	x	x
smoker	x	x	x	x	x	x
expected longevity	x	x	x	x	x	x
age FE	x	x	x	x	x	x
year FE	x	x	x	x	x	x
Observations	230,447	230,447	230,447	230,447	230,447	230,447

Table A6: This table presents ordered probit regression results examining the relationship between stock ownership and the importance of leaving a bequest. The dependent variable is an ordered categorical variable ranging from 1 to 4, where 1 indicates "not important," 2 indicates "somewhat important," 3 indicates "important," and 4 indicates "very important" for leaving an inheritance. The data are sourced from the Survey of Consumer Finances. The key independent variables include indicators for direct stock ownership (stkprt) in columns (1)-(3), overall stock ownership including mutual funds (stkmu) in columns (4)-(6), normalized net worth (Z-score), an indicator for having family heirs, and interaction terms between stock ownership variables and having heirs in columns (3) and (6). The regressions control for marital status, health status, smoking status, expected longevity, as well as age and year fixed effects. ***, **, and * denote statistical significance at the 1, 5, and 10% levels, respectively.

AIV Robustness of Bequest Expectations

This section presents figures that support results on bequest expectations from the HRS in Section 3. The section first shows figures that decompose actual bequests left at death of the primary respondent. Then, we present figures that document heterogeneity in the miscalibration of bequests. We show that the overestimation of bequest values occurs mainly from higher eduction and wealthier individuals.

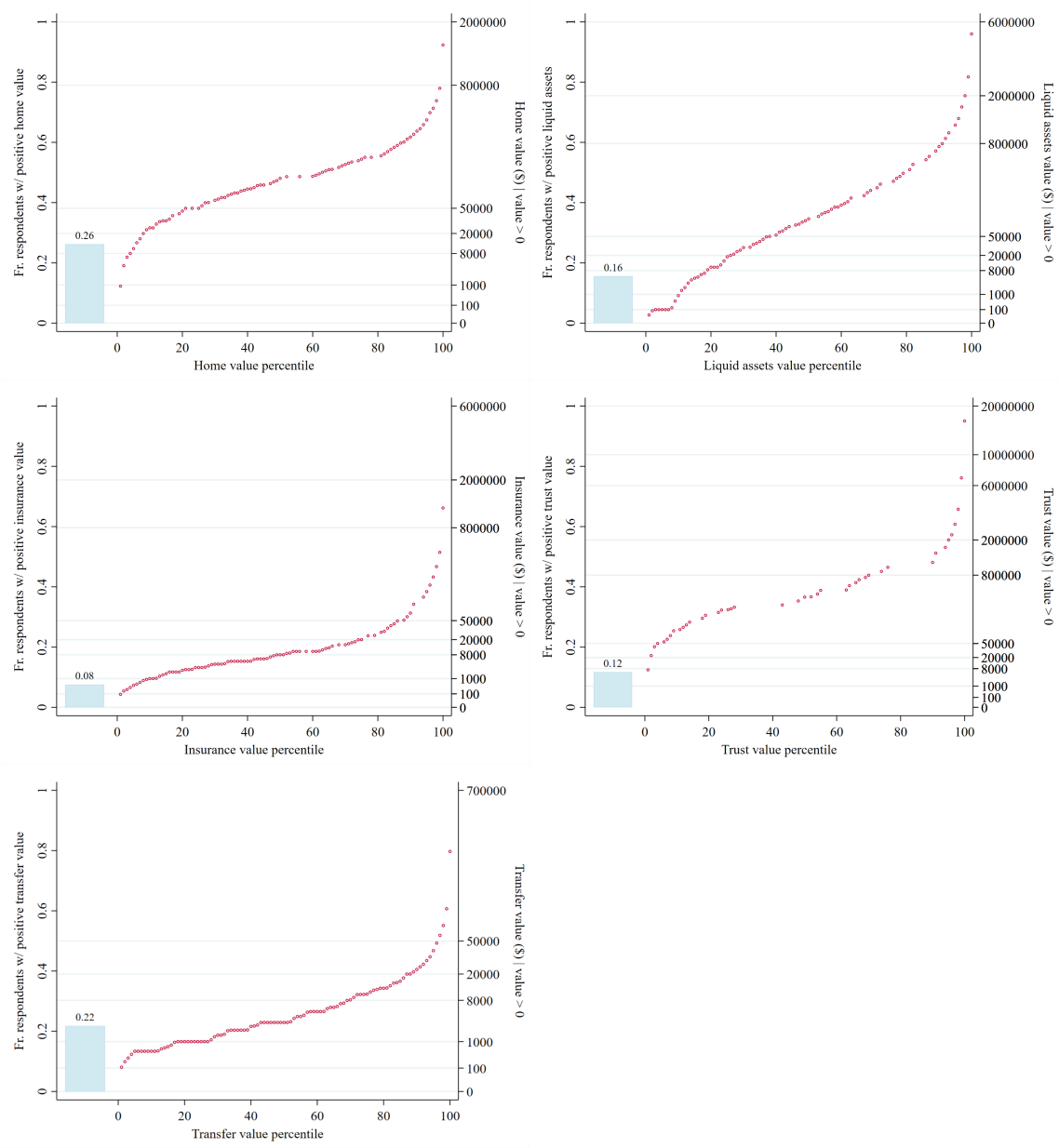


Figure A7: This figure shows the ratio of respondents with positive bequest values and the distribution of the bequest value for the five components of bequests. The data utilized in this figure are sourced from the HRS.

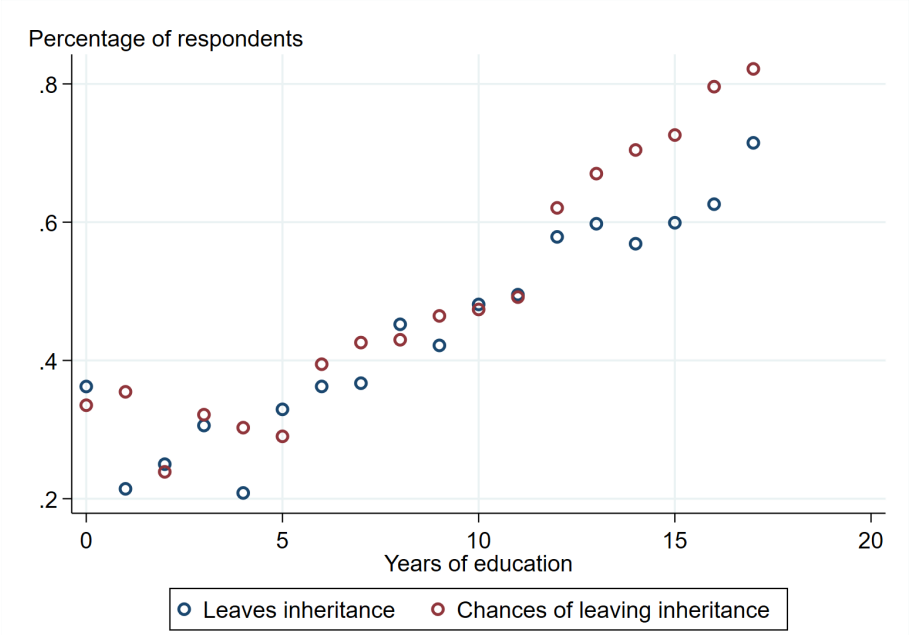


Figure A8: This figure displays the relationship between years of education and bequest-related outcomes using data from the HRS. The x-axis shows years of education ranging from 0 to 20 years, and the y-axis shows the percentage of respondents, including both the percentage of respondents who actually leave an inheritance and the percentage who believe they might leave an inheritance. The chance of leaving an inheritance is defined as the probability of leaving any bequest. Two sets of data points are presented: blue circles representing respondents who leave an inheritance and red circles representing respondents who report a chance of leaving an inheritance.



Figure A9: This figure displays the relationship between wealth deciles and bequest-related outcomes using data from the HRS. The x-axis shows wealth deciles ranging from 1 to 10, representing respondents categorized into ten groups based on their wealth levels. The y-axis shows the percentage of respondents, including both the percentage of respondents who actually leave an inheritance and the percentage who believe they might leave an inheritance. The chance of leaving an inheritance is defined as the probability of leaving any bequest. Two sets of data points are presented: blue circles representing respondents who leave an inheritance and red circles representing respondents who report chances of leaving an inheritance.