

Bequest intent and the moderating impact of estate planning and self-control on wealth
composition: A tax perspective

by

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B.S., Florida Agricultural & Mechanical University, 2010
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Abstract

While the relationship between bequest motive and wealth accumulation has been the focus of previous research, less is known about the relationship between bequest motive and wealth composition. Specifically, no research has been done to assess how bequest intent impacts the percentage of assets older adults hold in taxable assets e.g. investment accounts, real estate, and businesses, versus tax-deferred accounts, primarily qualified retirement plans and Individual Retirement Accounts (IRAs). This decision is critical as it can impact the amount of assets future generations assets receive on an after-tax basis. This dissertation examines the relationship between bequest intent and wealth composition, utilizing estate planning and self-control as moderating variables. These two factors are important as they represent external and internal tools, respectively, for translating bequest intent into action.

This study utilizes an empirical model based on the behavioral life cycle hypothesis (BLCH), which has been utilized to study saving and dissaving behavior. The study used data from the 2018 wave of the Health and Retirement Study (HRS). Utilizing a censored regression technique, the study analyzed the relationship between demographic, life cycle, and bequest-related factors and the percentage of total portfolio assets held in taxable accounts. The model found there to be a positive relationship in general between bequest intent and the percentage of portfolio assets in taxable accounts. In addition, self-control and a family history of estate planning were found to have a positive relationship with the percentage of assets held in taxable accounts; estate planning did not have a statistically significant relationship. No evidence was found to support a moderating effect for estate planning or self-control. The target audience for this study is financial planners, counselors, and attorneys, with implications that can help

highlight the importance of understanding bequest intent, managing and increasing self-control, and building a family legacy of estate planning.

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This study utilizes an empirical model based on the behavioral life cycle hypothesis (BLCH), which has been utilized to study saving and dissaving behavior. The study used data from the 2018 wave of the Health and Retirement Study (HRS). Utilizing a censored regression technique, the study analyzed the relationship between demographic, life cycle, and bequest-related factors and the percentage of total portfolio assets held in taxable accounts. The model generally found there to be a positive relationship between bequest intent and the percentage of portfolio assets in taxable accounts. In addition, self-control and a family history of estate planning were found to have a positive relationship with the percentage of assets held in taxable accounts; estate planning did not have a statistically significant relationship. No evidence was found to support a moderating effect for estate planning or self-control. The target audience for this study is financial planners, counselors, and attorneys, with implications that can help

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Dedication

I dedicate this manuscript to my grandmother, Ruth Strong. At a young age, you began calling me “Professor,” speaking a prophesy neither of us could see at the time. As I move towards the anniversary of your passing, I have tears that you could not see this time come to fruition. I also have joy and I am thankful that I am able to complete this task and bring your vision to reality.

Chapter 1 - Statement of the Problem

Bequest motive is considered one of the primary motivations for accumulating assets over a lifetime (Modigliani & Brumberg, 1954), providing a potential explanation for households' savings behaviors. Although some research has found evidence that most bequests are accidental (Gan et al., 2015), other studies have found support for bequest motive evidence including overlap with precautionary savings (Dynan et al., 2002), bequest motive among older households (Kopczuk & Lupton, 2007), and even the treatment of bequests as a luxury good (Lockwood, 2014).

Studies often look at the relationship between total assets and bequest motive (Choi & Wilmarth, 2019; Sommer & Lim, 2022a). While the relationship between bequest intent and various categories of assets has been included as part of other analyses (Fan & Chatterjee, 2019; Lee, 2000), it has only been the primary focus of one research study (Perelman & Pestieau, 1992) to the knowledge of the author. Prior research has not addressed wealth composition, what percentage of the total portfolio each category accounts for. Additionally, it has not explicitly considered the role of taxes in transferring wealth.

Taxation in the United States is determined by the source of income. Assets that are owned in a person's name are subject to capital gains taxes if they are sold for more than their purchase price (York, 2019). The length of time they are held determines how gains are taxed: assets held for less than a year are considered short-term gains and taxed as ordinary income tax rates while assets held for more than a year are considered long-term capital gains and taxed at preferential tax-rates as seen in Table 1.1 and Table 1.2. In contrast, IRAs distributions are generally taxed as ordinary income (Mortenson et al., 2019).

Table 1.1. 2023 Ordinary Income Tax Rates

Ordinary Income Tax Rates (2023)			
Rate	Single	Married, Filing Jointly	Heads of Households
10%	\$0 to \$11,000	\$0 to \$22,000	\$0 to \$15,700
12%	\$11,001 to \$44,725	\$22,001 to \$89,450	\$15,701 to \$59,850
22%	\$44,726 to \$95,375	\$89,451 to \$190,750	\$59,851 to \$95,350
24%	\$95,376 to \$182,100	\$190,751 to \$364,200	\$95,351 to \$182,100
32%	\$182,101 to \$231,250	\$364,201 to \$462,500	\$182,101 to \$231,250
35%	\$231,251 to \$578,125	\$462,501 to \$693,750	\$231,251 to \$578,125
37%	\$578,125 or more	\$693,751 or more	\$578,125 or more

Source: Internal Revenue Service

Table 1.2. 2023 Long-Term Capital Gain Tax Rates

Long-Term Capital Gain Tax Rates (2023)			
Rate	Single	Married, Filing Jointly	Heads of Households
0%	\$0 to \$44,625	\$0 to \$89,259	\$0 to \$59,750
15%	\$44,626 to \$492,300	\$89,260 to \$553,850	\$59,751 to \$523,050
20%	\$492,301 or more	\$553,851 or more	\$523,051 or more

Source: Internal Revenue Service

This difference becomes even more pronounced when assets are transferred due to death. In most states, assets that are held in an individual's name receive a step-up in cost basis for non-spouse beneficiaries, meaning the effective purchase price is changed to the current market value of the security (Kaplan, 2021). In addition, inherited property receives long-term capital gain treatment when sold. When assets in an IRA and other retirement plans are received due to death, they are typically transferred into an inherited IRA. After the passing of the SECURE Act of 2020, inherited IRAs became subject to a 10-year liquidation rule for most non-spouse adult beneficiaries, in addition to required minimum distributions (RMDs) over that period (Kaplan,

2020). Prior to this change, beneficiaries could “stretch IRAs” and distribute them over their lifetimes, with the only requirement being to take RMDs annually. Because of the difference in tax treatments, it is typically more beneficial to inherit taxable assets when compared to assets held in an IRA. For example, a \$100,000 bequest of taxable assets would receive a step-up in cost basis and long-term capital gains treatment, making tax impact minimal. In contrast, \$100,000 inherited in an IRA by an individual in the highest marginal tax bracket would be taxed 37%, turning a \$100,000 inheritance into \$63,000 on an after-tax basis. By studying how individuals with and without bequest intent hold assets in these distinct categories, it can help provide insight on whether individuals are considering taxes as part of their decisions to fulfill their bequest motive.

Estate planning is an action and a factor that might impact the ability of individuals to translate bequest motive into wealth, impacting wealth composition. Estate planning has been described as a two-part process: analysis, where current assets are catalogued and beneficiary needs are identified, and synthesis, where property is arranged and adapted towards those beneficiary needs (Stephenson, 1956). In executing this process, individuals examine and make projections about their property. In doing so, they have the opportunity to identify and address gaps through changes to their future actions, including how much and where they save. Lee (2000) found evidence that will holders on average had greater net worth and greater assets in several asset categories when compared to non-will holders. While the study addresses wealth composition in absolute terms, the next evolution is to understand the decision on a relative basis: are will adopters saving a greater percentage of their wealth to assets that are more attractive to inherit, from a tax perspective?

As the estate planning process is primarily concerned with the decisions about what happens at the end of an individual's life, it also brings to the surface thoughts about one's death, also known as mortality salience (Becker, 1973). Individuals generally take one of two approaches to protect themselves against thoughts of death: avoiding thoughts of death and seeking deeper meaning in death e.g., seeking value in their life beyond their lifetime (Pyszczynski et al., 1999). James (2016) proffered that the low adoption of wills and trusts could be an attempt to avoiding the mortality salience, while the act of estate planning allows individuals to create that value beyond life, symbolic immortality. If estate planning does help translate bequest intent into wealth that is more tax efficient, estate planning professionals can refocus estate planning on how it can impact savings and investments decisions during lifetime, potentially lowering mortality salience or motivating individuals to bypass avoidance and focus on symbolic immortality.

Self-control might also play a role in the ability to translate bequest intent into wealth. Previous studies have found evidence that self-control has a positive relationship with reduced spending (Rha et al., 2006) and increased savings behavior among older Americans (Asebedo et al., 2019). Shefrin and Thaler (1988) suggested that individuals might utilize rules to reduce the need for self-control e.g., contributing money to accounts that have restrictions. Contributing money to retirement plans could be a special case of this, as withdrawals are generally subject to taxation and might also incur early withdrawal penalties (Kaplan, 2020)

This study seeks to fill a gap in the literature, providing evidence of how bequest intent impacts individuals' portfolio composition from a tax perspective. By including estate planning and self-control as moderating factors, the study will gain clarity on their impact in this process. Estate planning is of particular interest as only 33 percent of adults identify as having a will

(Cobb, 2022) and only 17 percent of respondents who sought financial advice did so to address estate planning (Grable & Joo, 2003). If estate planning impacts the relationship between bequest motive and wealth composition, it supports the argument that it should be prioritized with greater importance in the financial planning process, as opposed to an act often taken primarily at older ages (James, 2015) or as a response to a life event (Palmer et al., 2006). Self-control has been identified as one of the traits that help reduce the barriers for making decisions that prioritize future state over present state (Shefrin & Thaler, 1988). As a substitution for self-control, individuals might utilize rules as a substitute (Shefrin & Thaler, 2004). For individuals with lower levels of self-control, this can make saving and investing dollars to accounts that have greater restrictions, like the taxes and withdrawal penalties associated with retirement plans, easier. Stated differently, it would likely take greater levels of self-control to save to and invest in taxable accounts, as they generally have lower barriers.

Purpose

The purpose of this dissertation is to investigate the relationship between bequest intent and wealth composition, extending on previous research (Lee, 2000; Perelman & Pestieau, 1992). There are two novel features of this study. First, the study will focus on the taxable nature of these assets, specifically whether the assets are taxable assets, primarily subject to capital gains treatment, or tax-deferred assets, primarily subject to ordinary income tax treatment. Second, the analysis will look at the percentage of assets in taxable assets; previous research has focused on the absolute value of assets in various categories.

Understanding how individuals structure their portfolios from an income tax perspective is critical in understanding the inheritance their heirs may receive, on an after-tax basis. This is because of the great expansion of the estate tax exemption, which ballooned from \$600,000 in

1981 to \$12,920,000 in 2023 (Internal Revenue Service, 2022; Soled, 2020). This has led to less than 1% of estates being assessed an estate tax (Tax Policy Center, 2022). In contrast, income tax can have very real implications, with distributions from retirement plans and IRAs generally being taxed as ordinary income while taxable assets receive a step-up in cost basis and long-term capital gains treatment, greatly reducing the tax impact on after-tax inheritance (Kaplan, 2021; Mortenson et al., 2019).

By studying the relationship between bequest intent and the composition of portfolio assets from an income tax perspective, there can be greater understanding of how bequest intent is potentially impacting portfolio decisions. In addition, this study examines how estate planning and self-control might function as external and internal mechanisms for helping transfer bequest intent into tax-efficient actions. Estate planning is the process of analyzing property, current and expected, and rearranging it for the benefit of future beneficiaries (Stephenson, 1956). In taking this action, individuals are using an external tool that can potentially help identify and translate bequest intent into actions. In contrast, self-control is an internal mechanism for helping prioritize the interests of future self over current self (Thaler & Shefrin, 1981). As retirement accounts have attributes that can reduce the amount of self-control required to save to them (Shefrin & Thaler, 1988), individuals with higher self-control should have greater willingness and ability maintain taxable assets. By studying the impact of bequest intent, estate planning, and self-control on how portfolio assets are structured from a tax perspective, this study can expand what we know about individuals' cumulative decisions on their portfolios and how it might potentially translate to the after-tax inheritance received, with implications on how financial planners, financial counselors, and attorneys guide their clients.

Description of Study

There are two research questions that guide this study: “what effect does bequest intent have on wealth composition?” and “do estate planning and self-control moderate the relationship between bequest intent and wealth composition?” Previous research has shown evidence of relationships between bequest motive, estate planning, and wealth composition (Lee, 2000; Perelman & Pestieau, 1992). This study will expound on previous works by categorizing wealth composition by expected tax rate and utilize estate planning and self-control as moderators.

The study used the behavioral life-cycle hypothesis (BLCH) as the theoretical framework, an extension of the life-cycle hypothesis (LCH). The LCH has been used in studies involving bequest motive (Dynan et al., 2002; Hurd, 1986, 2002; Lockwood, 2014). The BLCH adds additional constructs, including framing, self-control, and mental accounting, to provide additional context around the savings and dissaving behavior of individuals (Shefrin & Thaler, 1988). This study focused on the relationship between bequest motive and wealth composition, with self-control and estate planning as moderators. The hypotheses tested in the study are as follows:

H1: Bequest intent will have a positive relationship with the percentage of wealth held in taxable assets.

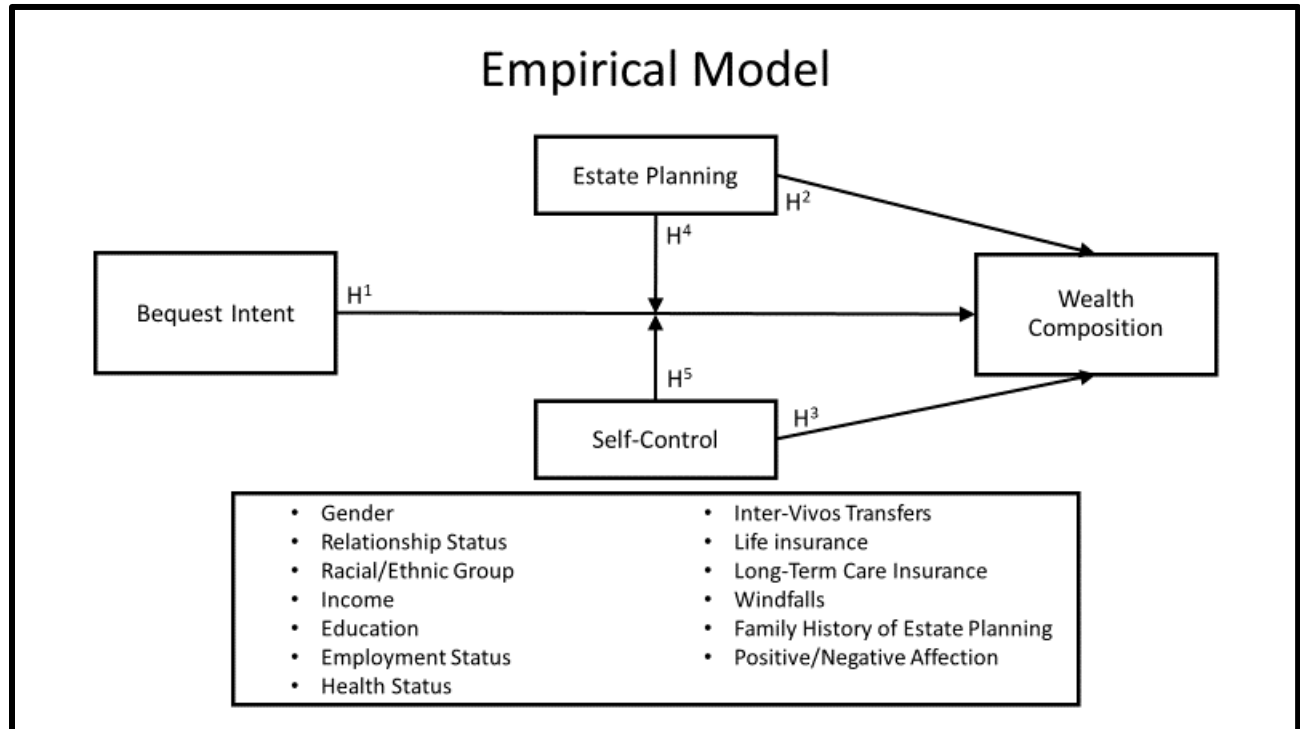
H2: Estate planning will have a positive relationship with the percentage of wealth held in taxable assets.

H3: Self-control will have a positive relationship with the percentage of wealth held in taxable assets.

H4: Estate planning will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

H5: Self-control will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

Figure 1.1. Empirical Model



Potential Implication and Summary

Understanding the relationship between bequest intent, estate planning, self-control and wealth composition has important implications for financial and legal professions, including financial planners, financial advisors, financial counselors, trust and estate attorneys, and life insurance agents. Research on the relationship between bequest motive and wealth composition can help determine if individuals with bequest intent save a greater percentage of their assets to categories which are subject to capital gains versus ordinary income, leading to a greater potential inheritance to their heirs on an after-tax basis. The additions of estate planning and self-

control moderators can help determine if the strength of the relationship between bequest intent and wealth composition is impacted by additional factors.

It is especially important to understand how estate planning impacts the relationship between bequest intent and wealth composition. Estate planning is currently undertaken by less than half of Americans (Cobb, 2022). The information from this study can be utilized to illuminate the differences in wealth composition for individuals based on their level of bequest intent, providing better understanding of current behavior. To the extent estate planning impacts wealth composition, it provides support for the potential that the act of estate planning can impact other financial planning decisions, including saving and investing over one's lifetime. This might help reduce mortality salience, improving the potential adoption of estate planning.

It can also provide clarity on how self-control changes the relationship between bequest intent and wealth composition. While self-control has been shown in prior research to have a positive relationship with wealth creation (Griesdorn & Durband, 2016), the study could provide guidance on its impact of how that wealth is structured from a tax-perspective. If self-control does in fact impact the amount of assets saved to taxable accounts, it suggests that professional advisors working with clients should spend time understanding and increasing the level of self-control of their clients, helping them better translate bequest intentions to actual inheritance, on an after-tax basis.

Chapter 2 - Review of Literature

This literature review features six sections. The first section provides background on bequests and their relationship with taxes. The second section reviews the behavioral life-cycle hypothesis, the framework that backs this study, The third section provides an overview of the recent studies on the independent variable, bequest intent. The fourth and fifth sections summarize the literature on the two moderators, estate planning and self-control, respectively.

Historical Context of Bequest and Taxes

Braun (2010) defined a bequest as “a freely chosen transmission of an object justly acquired (either through original appropriation or transfer) that interferes with no other person’s right of self-ownership” (p. 698). The desire or motivation to make a bequest goes back centuries. In the story of the “Prodigal Son,” an allegory from the King James Bible, the father expressed a desire to give the entirety of his property to his oldest son (Luke 15: 11-32).

Bequest motivation has been studied in modern day efforts to explain the spending and saving patterns of individuals. Keynes (1936) identified eight motives for saving income: desire to leave a bequest, precautionary saving, anticipated future expenses, greater utility from higher future consumption, gradually improving lifestyle, greater independence, a significant investment in a future business opportunity, and avoiding the pain of spending. Modigliani and Brumberg (1954) later revised this list to four motives: bequests, consumption smoothing, precautionary savings, and uncertainty. While bequest motive has been removed to simplify explanations of consumption (Ando & Modigliani, 1963), more recent studies have found support for bequest intent as a factor in individuals’ consumption and savings patterns (Dynan et al., 2002; Erixson & Ohlsson, 2019; Francesconi et al., 2015; Jürges, 2001).

One significant factor that can impact the value of a bequest is taxes, which can reduce the ultimate gift received by an individual. While the United States has gone through several iterations of estate and inheritance taxes going back to the late 1700s, the modern estate tax was implemented via the Revenue Act of 1916 (Metrejean & Metrejean, 2009), including an initial estate tax exemption of \$50,000 (Soled, 2020). The system underwent an overhaul in 1976, with the major change being the unification of taxes on gifts during lifetime and estate taxes (Joulfaian, 2016). The next significant update occurred just five years later via the Economic Recovery Tax Act of 1981, which included a 100% marital deduction for assets transferred to a spouse (Moore, 2013) and an increase of the estate tax exemption to \$600,000 (Soled, 2020). The estate tax exemption has continued to increase substantially over the last four decades, with the 2023 estate tax exemption set at \$12,920,000 (Internal Revenue Service, 2022). This expansion of estate tax exemption has reduced the number of estates that are taxable. Data from the Tax Policy Center (2022) found that only 0.09% of estate tax returns filed for deaths in 2020 were subject to estate tax.

With the significant increase in the estate tax exemption, the more relevant tax for most Americans with respect to inherited assets is now income tax. Assets held in an individual's name receive a step-up in cost basis which means the effective purchase price is changed to the current market value of the security and any gains are treated as long-term capital gains (Kaplan, 2021). Assets in retirement accounts are generally transferred into inherited IRAs and subject to ordinary income tax upon distribution (Mortenson et al., 2019). As most Americans do not die with an estate large enough to incur estate taxes, the structure of their wealth and the percentage of their assets subject to capital gains tax compared to income tax, has become a more important factor in terms of how much after-tax wealth is transferred to heirs.

Theoretical Framework

Modigliani and Brumberg (1954) developed the life-cycle hypothesis of saving (LCH), with the intention of explaining lifetime consumption. Ando and Modigliani (1963) expanded on the original LCH to make it appropriate for cross-sectional and times series analysis. The life-cycle hypothesis was originally conceived as a specialized utility function of consumption, with individuals having four primary motives for saving: bequests, smoothing consumption, potential emergencies, and general uncertainty (Modigliani & Brumberg, 1954). Modigliani (1966) outlined the theory's central hypothesis as follows: "consumption and saving decisions of households at each of time reflect a more or less conscious attempt at achieving preferred distribution of consumption over the life cycle, to the constraint imposed by the resources accruing to the hold over its lifetime" (p. 162) Personal characteristics like age, income, and household makeup have been shown to have an association with changes in net worth, one metric that has been used to measure lifetime consumption and savings (Hanna & Prather, 1989). In addition, Lawson and Heckman (2017) found that life expectancy had a positive relationship with savings behavior.

The behavioral life-cycle hypothesis (BLCH) is an extension of life-cycle hypothesis of saving, adding the additional constructs of self-control, mental accounting, and framing in an effort to improve its explanatory power (Shefrin & Thaler, 1988). Thaler and Shefin (1981) describe self-control as the conflict between two identities in one individual: a present-focused doer and future-focused planner. For individuals to execute decisions as the planner like saving for future spending, they must enact willpower, which has a cost and requires self-control (Thaler & Shefrin, 1981). The use of self-control mechanisms has also been shown to have positive associations with saving (Rha et al., 2006). In a study of baby boomers, locus of control

and self-mastery (measures of self-control) were found to be predictors of increased net worth (Griesdorn & Durband, 2016).

One of the ways individuals enact self-control is to put in place rules in the present that alter the opportunity set for future decisions (Shefrin & Thaler, 1988). Mental accounting is the assigning of activities (receipt of income, saving/investing, and spending) to specific categories; the use of these categories impacts how frequently activity is reviewed, how and if activities are combined or separated, and how decision-making is assessed (Thaler, 1999). Income is typically split into two categories, current income, and future income: labor income is typically considered current income while bonuses and large, unexpected windfalls are most often coded as future income (Thaler, 1990). These rules can be internal, decided by the individual, or dictated by external factors like the taxation of retirement accounts (Shefrin & Thaler, 1988). Budgeting rules are often used to restrict what current and future income can be spent on, further limiting how that income is utilized for future purchases (Zhang & Sussman, 2018). Households tend to match current expenses mostly with current income (Shefrin & Thaler, 2004).

Tversky and Kahneman (1981) noted that the presentation, or framing, of the options and outcomes of a decision can impact the option that is selected. In terms of BLCH, the way distinct types of wealth are described can dictate their likelihood of being saved (spent) (Shefrin & Thaler, 1988, p. 610). In addition to savings, framing impacts how investments choices are evaluated, with investors often looking at options compared to their alternatives or a given reference point, not holistically (Thaler, 1999, p. 186). Framing can also include the combining (often losses) or separating (often gains) of similar events or activities to maximize pleasure; this is known as hedonic framing or editing (Zhang & Sussman, 2018).

Bequest Motive & Intent

Modigliani and Brumberg (1954) highlighted “the desire to add to the estate for the benefit of one’s heirs” as one of four primary savings motivations. This concept is often identified as bequest motive. While bequest motive’s largest effect is likely savings, it can impact several views and behaviors including time horizon, aggregate consumption, marginal propensity to consume from specific categories, and gifting to family during life (Hurd, 2002).

Studies on the existence of bequest motive have had mixed results, with one researcher frequently finding opposition to the potential for bequest motive. Hurd (1986) initially found no evidence for a bequest motive, noting that households with living children had less wealth to bequeath than households with no living children. In later work, Hurd (1989) found small evidence for a bequest motive, when housing wealth is included as part of bequeathable wealth. Hurd (2002) revisited his conclusion once again, finding that there was no support for an intentional bequest motive, suggesting most bequests are accidental.

More recent work by Gan et al. (2015) assessed the presence of bequest motive in older single adults, with data from the Assets and Health Dynamics (AHEAD) panel. Analyzing the marginal utility of bequests in a life-cycle model, the study found that life expectancy, adjusted for a measure of optimism, was a better predictor of actual wealth. It also found that optimism translated into a larger time discount factor, suggesting individuals maintain wealth in response to a longer expected life and that most bequests are “accidental,” an imperfect match between life expectancy and lifetime.

In contrast, Bernheim et. al (1984, 1985) found evidence for bequest motive, specifically a strategic exchange motive where individuals utilized the promise of bequest as way to extract desirable behavior from potential beneficiaries. A study on the use of annuities among older

Americans suggested that bequest motive could explain part of the lower-than-expected adoption of annuities (Friedman & Warshawsky, 1985). In a study of French households, Perelman and Pestieau (1992) found support for the existence of bequest intent, with households showing a mix of motivations for their desire to bequest. In a sample of Swedish households, evidence was found to support unequal bequests based on probability of providing informal healthcare and biological child status (Erixson & Ohlsson, 2019). Considering the breadth of researchers and studies that find support for bequest motive, it seems reasonable to make the focal point of this study.

Bequest Motive Models

Studies suggest a few models that underpin bequest motive including exchange, altruism, and precautionary/accidental. The exchange model has its beginnings in “The Rotten Kid” theorem (Becker, 1974). This theorem suggests that a self-interested child would act in the best interest of the family and choose to maximize their utility based on a greater benefit from family head. This theory rests on the family head’s desire for the family’s utility to be maximized, requiring a level of altruism towards family members. The explanation was extended, describing that family heads would hold on to wealth later in life, with the goal of extracting more ideal behavior from descendants (Becker, 1991). Bernheim et al. (1985) extended exchange theory further by removing the altruism required by the “Rotten kid Theorem,” suggesting family heads might utilize bequest to extract behavior of particular benefit like additional engagement or late in life care. More recent studies have found support for or evidence consistent with an exchange model in parents (Brown, 2006; Hamaaki et al., 2019; Light & McGarry, 2004; Wilhelm, 1996).

In contrast to the exchange, the altruism model offers that bequests are motivated by concern for a future generation (Barro, 1974). Becker and Tomes (1986) extended the discussion,

providing an overview of how altruism impacts all gifts, inter vivos and end-of-life. Their analysis suggests concern for children and subsequent generations is a primary factor for all investments, with parents attempting to maximize utility for themselves as well as their children. Investments are primarily in human capital, which trail off as the rate of return on human capital approaches the rate of return on assets. At this point, investments in human capital switch to investments or gifts of assets, linked to the rate of return on assets. Thus, differences in the gifting behavior of the wealthy are mostly based on differentials in income and assets compared to their non-wealthy counterparts.

Altruism is typically identified by individuals leaving unequal bequests between descendants (Erixson & Ohlsson, 2019). Wilhelm (1996) found that 88 percent of bequests are nearly equal. This in line with other research studies that find that the majority of bequests are made equally (Bernheim & Severinov, 2003; Francesconi et al., 2015; Menchik, 1980). Research on inter vivos gifting offers a potential answer. McGarry (1999) found evidence that parents tend to make lifetime gifts to their children unequally, based on need, while end-of-life gifts are made equally.

The third reason behind bequest motive is precautionary savings or accidental bequests. Specifically, mortality risk can play a role in bequests (Hurd, 1986). As death is uncertain, individuals may choose to consume savings at a rate that does not deplete their assets prior to their death. In this way, any bequest would not represent bequest intent but a happenstance gift, of a remainder estate based on odds. Previous studies have proffered that bequest motive overlaps and is a secondary motive to precautionary savings, making it difficult to distinguish the two (Dynan et al., 2000, 2002).

Bequest Intention Measures

Bequest intention has been measured in a few different ways. In a study of Western German households, Jürges (2001) assessed bequest motive by an objective measure (answering yes to a question on saving assets to leave to descendants via will) and a subjective measure (number of children). The study found that the subjective measure was not statistically different from individuals that had no children. The objective measure showed evidence of individuals with a bequest motive being more likely to be in higher quartiles of wealth than the lowest. Other studies have taken a similar approach to the subjective measure, using parental status and marriage as proxy for bequest motive (Gan et al., 2015; Sauter et al., 2015).

An alternative method for measuring bequest intent has been the expectation of leaving a bequest. In a study using data from the Survey of Health, Ageing and Retirement in Europe (SHARE), Horioka and Ventura (2022) used probability of leaving a bequest of 150,000 euros or more as a measure for bequest intent. Fan and Chatterjee (2019) took a similar approach, utilizing the HRS nested questions on bequest expectations to determine how expectations at different levels of bequests (\$500,000, \$100,000, \$10,000, or any) highlighted generational and personality differences. Yan and James (2023) took this a step further, integrating three of the questions to show distinction of bequest expectations between \$10,000 and \$100,000, between \$100,000 and \$500,000, and above \$500,000. Of the above-mentioned approaches, the objective measure and use of bequest expectations seem to be most convincing but there is an opportunity to evaluate different approaches (binary, categorical, and expected bequest) amount to determine if the different measures provide meaningfully different results.

Bequests and Wealth Composition

The relationship between bequest intent and wealth has been analyzed in previous studies. Goetting (1996) utilized a structural equation modeling approach to study respondents to the Aging and Health Dynamics (AHEAD) study and analyze the factors associated with likelihood of leaving a bequest. Wealth, amongst other variables, was found to have a positive relationship with expectation of leaving a bequest. McGarry (1999) studied bequest expectations and inter vivos transfers, using data from the HRS and AHEAD studies, with the desire of understanding if respondents changed their propensity to give equally during life and at death. Results of the study found that respondents in lower wealth quartiles were less likely to leave a bequest than those in the highest quartile; there was, however, no statistical difference in their likelihood of leaving an equal bequest by wealth quartile, with most respondents leaving equal bequests. Fan and Chatterjee (2019) found that several assets, including business equity, retirement accounts, cash, investments, and primary residence were positively associated with probability of leaving a bequest. Sommer and Lim (2022a) found that a decline in assets was associated with a decline in bequest expectations.

In addition to wealth, insurance can play a role in how individuals plan for bequest intent. In a study using panel data from the English Longitudinal Study of Ageing (ELSA), Inkmann and Michaelides (2012) found evidence that lower income households with lower expected life expectancies purchased term insurance policies with the intent of leaving them as bequests. Studies in other geographies like Germany (Sauter et al., 2015) and Malaysia (Mahdzan & Victorian, 2013) agree that there is a positive relationship between bequest intent and life insurance ownership. Marital status may impact this relationship. In a study of retired couples, Hubener et al. (2014) contend that life insurance ownership is intended as a replacement for

income for the spouse and not a bequest. Nam and Hanna (2019) evidenced a positive relationship between term life insurance and bequest intent among single-parent household. Life insurance also can impact wealth. Heo et al (2013) identified a positive relationship between net worth and life insurance, purporting that life insurance is a complement to investment assets.

Bequest motive also impacts long-term care insurance and annuity decisions. Based on simulations using data from the HRS, Lockwood (2014) purports that bequest motive can help explain why individuals choose to keep more money in investment assets, or self-insure, versus purchasing long-term care insurance. Gottlieb and Mitchell (2020) found that only 11.8 percent of older adults held long-term care insurance, with respondents who were more likely to make decisions in a vacuum, also known as narrow framing, being even less likely to hold long-term care insurance. A study from Chatterjee and Fan (2017) utilizing HRS data calls this into question, finding support for a positive relationship between bequest motive and holding long-term care insurance.

Previous studies agree the presence of bequest motive plays a significant role in the low adoption rate of annuities (Alexandrova & Gatzert, 2019; Lockwood, 2012; Pashchenko, 2013). This makes sense as annuities are described in terms of their ability to create an income stream and reduce the likelihood of running out of money during one's lifetime (Salisbury & Nenkov, 2016). The income focus of annuities might cause individuals to see their purchase as a reduction in potential bequests. Two experimental studies (Williams & James, 2019; Yan & James, 2021) contended that highlighting bequest provisions in annuities has the potential to increase their adoption.

Bequests and Family Dynamics

One key factor that can impact bequest intent is a family history of inheritance. DeBoer and Hoang (2017) found that receipt of inheritance was positively associated with probability of leaving a planned bequest. Stark and Nicinska (2015) found similar results using panel data from Survey on Health, Ageing, and Retirement in Europe (SHARE), focusing specifically on respondents who inherited assets from parents and parents-in-law. The results suggest the possibility that bequest motive can become a family expectation, transfer from generation to generation. A study of actual inheritance data of French families through the nineteenth and early twentieth century found that individuals who had received an inheritance had a greater probability of bequeathing assets and distributed more assets to their heirs (Arrondel & Grange, 2014)

Family relationships can also impact bequest intent. Kopczuk and Lupton (2007) identified a positive relationship negative relationship between children's financial status and bequest motive. Respondents with children who had similar or better financial status were less likely to have a bequest motive. Sommer and Lim (2022b) found evidence that positive relationships between parents and children had a positive relationship with bequest intent; in contrast, negative relationships between parents and children showed no evidence of an impact on bequest intent. Erixson and Ohlsson (2019) found support for three characteristics in parent-child relationships that were positively related to bequest size: caregiver status, being a daughter (compared to being a son) with children, and being a biological or adopted child (compared to being a stepchild).

Summary

Bequest motive has been linked to several demographic factors. McGarry (1999) found that the probability of leaving a bequest was positively associated with age, education, income, and wealth while being negatively associated with being Nonwhite, married, and having more children. Age, wealth, and having more children were found to have a positive association with unequal bequests; being female and being a widower were negatively associated with unequal bequests (Erixson & Ohlsson, 2019). Goetting (1996) found wealth, being a man, and being White to be positively with chances of leaving a financial bequest.

While the body of literature is robust on bequest motive, the study of how it impacts the composition of wealth from a tax perspective is still yet to be explored. Several factors, including exposure to estate planning, family relationship dynamics, and demographic variables might impact this relationship. By analyzing the relationship between bequest motive and portfolio composition from a tax perspective, this study can provide further insight into how individuals translate their intent into savings and investments.

Estate Planning

Estate planning is the action or process of determining how property is to be dispositioned after one's natural life and certifying the decision in a way that is legally binding. Often considered the core of an estate plan, "a will is a legal document that directs the distribution of a decedent's property after death" (Kim & Stebbins, 2021, p. 403). In addition to distribution of property, wills can provide additional information including identifying who will oversee the affairs of the deceased, guardianship instructions, and burial and funeral directions. In addition to wills, trust can play an important role in an estate plan. A trust is a legal arrangement where a trustee maintain property for a beneficiary (Feder & Sitkoff, 2016, p. 5). A

trust can be used in a similar fashion to a will, documenting an individual's desires for how property is to be distributed (Palmer et al., 2006, p. 286). Because of its unique features, trusts may serve as substitutes or complements to wills.

The study of estate planning is important because it is not done frequently. A recent Gallup poll found that 46 percent of adults have a will (Jones, 2021). James (2015) found that among the elderly, the percentage of individuals with a will or trust dropped over a 14-year period ending in 2012. A more recent study suggests that while only 33 percent of adults have a will or trust, COVID-19 has increased the salience and likelihood of individuals having a will or trust, especially in younger adults (Cobb, 2022).

Several factors have been linked to estate planning. Goetting and Martin (2001) assessed the characteristics of older adults and found that education, income, being white, and the expectation of leaving a bequest were positively associated with having a written will. A study focused on life events found similar patterns; the study also found positive relationship between estate planning and receiving a cancer diagnosis, an increase in assets, becoming a widow, and retirement (Palmer et al., 2006). Tilse et al. (2016) performed a similar study on a population of Australian households, which have a greater propensity for drafting and changing wills than other Western nations. The study found that age and increase in estate value were the most significant predictors. When asked about events that triggered will-making, efforts to get organized, having children, and acquiring assets were the three primary reasons for drafting a will.

Additional factors were also shown to have a relationship with estate planning including homeownership, religion, and having children at home. Choi et al. (2019) studied whether race and ethnicity moderated the relationship bequest and charitable expectations and found support

for the view that being Black or Hispanic weakens the relationship. Income, wealth, holding insurance (long-term care and life), age, being female, widowhood, and education were also found to have positive relationships with estate planning. Later research found that status of relationships among older adults was associated with estate planning: widows had greater odds of holding a will and/or trust than those who remained married and while all other relationship paths had lower odds (Choi & Carr, 2022). Gender was also found to play a role, moderating these relationships.

Lee (2000) looked at the relationship estate planning and the intended recipients of bequests, including family members (children and grandchildren) and charitable organizations. As part of the study, an analysis was performed comparing will holders and non-will holders. The results found that will holders were more likely to have higher liquid assets, illiquid assets, housing equity, net worth, and household income. Perelman and Pestieau (1992) utilized positive responses to questions on will-holding status, limiting savings distributions to maintain bequest to heirs, and plans to transfer assets during life to children and grandchildren as markers of bequest intent. This measure of bequest intent was then utilized to analyze a sample of French households with heads who were 61 years of age and the composition of their wealth. The study's analysis found a positive relationship between bequest intent and wealth in all four categories: liquid financial assets, all other financial assets, primary housing, and all other properties. The unique contributions of the proposed will be the focus on the taxable nature of the portfolio assets and looking at the percentage of assets held in a specific account instead of the absolute value.

While previous literature has identified a relationship between bequest intent and estate planning (Choi, McDonough, et al., 2019; Lee, 2000), the current study was structured with the

assumption that estate planning is an action and bequest intent is a motivation. In taking the action to build an estate plan, individuals might stimulate this motivation, strengthening the relationship between bequest intent and the structuring of portfolio assets.

Self-Control

The discussion of self-control goes back centuries. The philosopher Aristotle described self-control as the exercise of actions based in rational choices, not desires (Kalis, 2018). The exercise of self-control is not costless, however, as mental effort is required in the way of willpower to focus attention on the prudent choice (James, 1918). In their description of the BLCH, Shefrin and Thaler (1988) posited that an individual's ability to engage willpower could impact their propensity to spend and save. By adjusting incentives or implementing rules, individuals enact self-control to reduce current spending and increase saving, a deferral of current income for future consumption (Thaler & Shefrin, 1981).

Previous research has shown a relationship between self-control and consumption and savings behavior. Griesdorn and Durband (2016) utilized data from the National Longitudinal Survey of Youth (NLSY79) to study the impact of self-control on wealth creation in a study of young baby boomers. Retirement planning, locus of control, and self-mastery variables were used as proxies for self-control. These variables were added to an Ordinary Least Squares (OLS) regression model used to predict the change in net worth for households from 1994 to 2008. The addition of the three self-control proxies was found to be statistically significant and provided additional explanatory power.

Using data from the Survey of Consumer Finances (SCF), Rha et al. (2006) studied the impact of self-control on the attributes of savers compared to non-savers. Self-control was coded based on whether respondents had savings rules. Respondents who spent less money than their

income in the previous year were coded as savers; respondents who spent at a level equal or greater to their income in the previous year were coded as non-savers. Using a logit regression analysis, savers were found to be more likely to have higher levels of self-control. In addition, savers were more likely to have higher levels of financial assets, be homeowners, have higher income, have a longer planning horizon, and be more willing to take greater risk.

In a study focused on personality, Asebedo et al. (2019) analyzed the relationship between finance self-efficacy and savings behavior, using data from the 2008 and 2012 waves of the HRS. Responses on an 11-point scale about how much control respondents feel they have over their financial situation to measure financial self-efficacy; the lowest two values of responses were combined into one category. Using structural equation modeling (SEM), the study found a positive relationship between financial self-efficacy and savings behavior, measured by change in net worth from 2008 to 2012.

Experimental research has shown self-control impacts on a broader range of financial behaviors. Strömbäck et al. (2017) surveyed a web-survey of 2,063 Swedish adults to study self-control's relationships with savings behavior, financial behaviors, and financial well-being. An OLS regression found a positive relationship between self-control and savings consistently over the previous six months. The OLS regression was then expanded to include an index including all items in the Financial Behavior Management Scale, with the results providing evidence of a positive relationship between self-control and general financial behaviors. Considering previous findings on the relationship between self-control and positive financial behaviors, including savings, it would be expected that self-control can impact the ability of individuals to translate their bequest into wealth to fund intended bequests.

Chapter 3 - Methodology

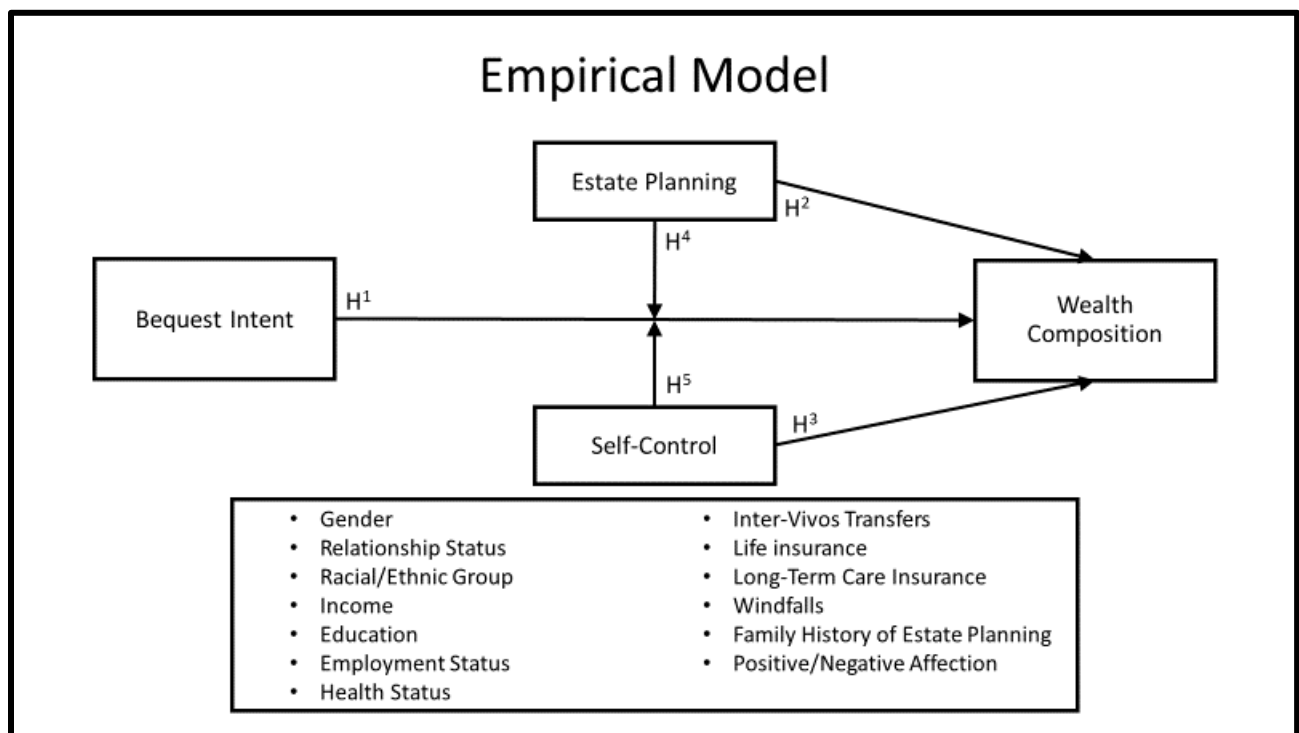
Overview

This study examined the relationship between bequest intention and portfolio composition. Specifically, the study explored whether bequest intent has a relationship with the percentage of wealth invested in taxable assets compared to tax-deferred assets. In addition, the study investigated whether estate planning, measured by the adoption of a will or trust, and self-control moderated that relationship.

Hypotheses

One model for evaluating the spending and saving behaviors of individuals is the BLCH (Shefrin & Thaler, 1988). The model in Figure 3.1 is an adaptation of this framework and the basis for this study.

Figure 3.1. Empirical Model



The hypotheses for the study are as follows:

H1: Bequest intent will have a positive relationship with the percentage of wealth held in taxable assets.

H2: Estate planning will have a positive relationship with the percentage of wealth held in taxable assets.

H3: Self-control will have a positive relationship with the percentage of wealth held in taxable assets.

H4: Estate planning will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

H5: Self-control will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

Data & Sample

This study utilized data from the Health and Retirement study (HRS), which is a nationally representative, longitudinal panel study of Americans over the age of 50 (Fisher & Ryan, 2018). The HRS is “the largest dataset by far for investigating work, aging, and retirement in the United States,” is managed under a joint agreement from the National Institute on Aging and the University of Michigan (Fisher & Ryan, 2018, p. 1). The primary funding for the study is provided by National Institute of Aging and the Social Security Administration; other significant sponsors include the Department of Labor’s Pension and Welfare Benefits Administration, the Department of Health and Human Services Assistant Secretary for Planning and Evaluation, and the State of Florida (Weir, 2023). The HRS was designed to replace two longitudinal studies with aging cohorts, while providing more robust information on the labor, health, and retirement outcomes of older Americans (Gustman et al., 1995). The study uses a steady-state design, expanding the sample every 6 years with a new cohort to maintain continuity (Sonnegga et al.,

2014). The study includes an “oversample of Blacks, Hispanics (primarily Mexican Americans), and Florida Residents” and includes data “at the household financial unit level of analysis for many of the economic and family variables in addition to a wealth of individual level data about demographics, employment, health, and well-being” (Fisher & Ryan, 2018, p. 2).

The HRS was utilized in this study because of its focus on bequest intention and estate planning. A recent study found that the percentage of Americans with a will generally increases with age, with only 20% of respondents from 18- to 29-year-olds reporting that they had a will while 76% of respondents 65 years of age or older reporting that they had a will (Jones, 2021). As the HRS provides a robust sample of older Americans, it provides a unique opportunity to study a population that is likely to have a sufficient number of respondents who have executed wills and/or trusts. In addition, the study’s robust information on income and assets offers the opportunity to study the structure of respondent’s balances sheets.

The HRS has been used in many research projects on bequest intentions and expectations (Cox & Stark, 2005; Fan & Chatterjee, 2019; Francesconi et al., 2015; Goetting, 1996; Kopczuk & Lupton, 2007; Lee, 2000; McGarry, 1999; Sommer & Lim, 2022a, 2022b, 2022c). In addition, the data has been utilized on many occasions in studies on estate planning (Choi, Kim, et al., 2019; Choi, McDonough, et al., 2019; Choi & Carr, 2022; James, 2015; Koss & Baker, 2018; Palmer et al., 2006). Studies utilizing HRS data have also examined savings and dissaving behavior of older adults (Asebedo & Browning, 2020; Hurd & Rohwedder, 2015; Mitchell et al., 2022; Yilmazer & Scharff, 2014).

The HRS is generally recognized as having good data (Venti, 2011), with its bracketing and imputation schemes credited for providing improved responses rates and quality of data, especially for asset data (Smith, 1995). There can be challenges with the data as it is self-

reported, like other national surveys. This includes self-reporting bias, non-response bias, and representativeness.

Data for respondents to the 2018 wave was utilized and combined with the full wave RAND file for this analysis. This wave was chosen to utilize the most recent data available while also avoiding the impact of the COVID-19 pandemic on financial behaviors and estate planning. Corcoran and Waddell (2020) found that consumer expenditures declined 13.2% in April 2020 as personal income jumped 10.5%, leading to a drastic change in savings rate. A 2021 estate planning survey saw the number of adults 55 years of age and older with estate planning documents decline from 60% in 2019 to 44% in 2021.

The sample was restricted to participants who were 50 years of age or older, who completed the Leave-Behind Psychosocial and Lifestyle Questionnaire, and who responded to the self-control question. Missing data for remaining cases was replaced through multiple imputation. The sample size was reduced from 17,146 to 4,534 by limiting the sample to respondents who were over the age of 50, whose level of education attainment was reported, who had portfolio assets, and who completed the leave behind questionnaire, specifically the question on self-control.

The sample was further restricted to respondents who had some percentage of assets in a tax-deferred account, resulting in an analytical sample of 2,526. The restriction was added as more than 44% of the initial sample (2,008 respondents) did not have any assets in a tax-deferred account. A study by the U.S. Bureau of Labor Statistics suggests only 66% of US private sector workers have access to a defined contribution plan at their workplace, with even fewer civilian (62%) and state and local government workers (39%) having access to a defined contribution plan (2021). Combined with previous research that identified a positive relationship between

having an employer-sponsored retirement plan and IRA ownership (Magwegwe & Lim, 2021), workers who do not have tax-deferred accounts might simply not have access to or knowledge of retirement accounts.

Variables

Dependent Variable: Wealth Composition

Wealth composition was measured by calculating the percentage of total portfolio assets each category represented. First, asset categories were created by summing all values for the following asset types: real estate, business/farm, IRAs, defined contribution plans, stocks/stock mutual funds, bonds/bond funds (corporate, municipal, government, or foreign), short-term bonds (CDs, government savings bonds, or treasury bills), and cash (checking account/savings account/money market fund). Primary residence and vehicles were not included as they are generally not held for investment purposes. Second, each category was then summed to create a “total portfolio assets” figure. The following categories were combined then combined to calculate a new category, taxable assets: stocks/stock mutual funds, bonds/bond funds (corporate, municipal, government, or foreign), CDs/government savings bonds/treasury bills, real estate, business/farm, and cash. IRAs and defined contribution plans were combined to create the category tax-deferred assets. These figures were utilized in the primary analysis to assess whether there are significant differences in the way respondents saved, based on their expected tax status.

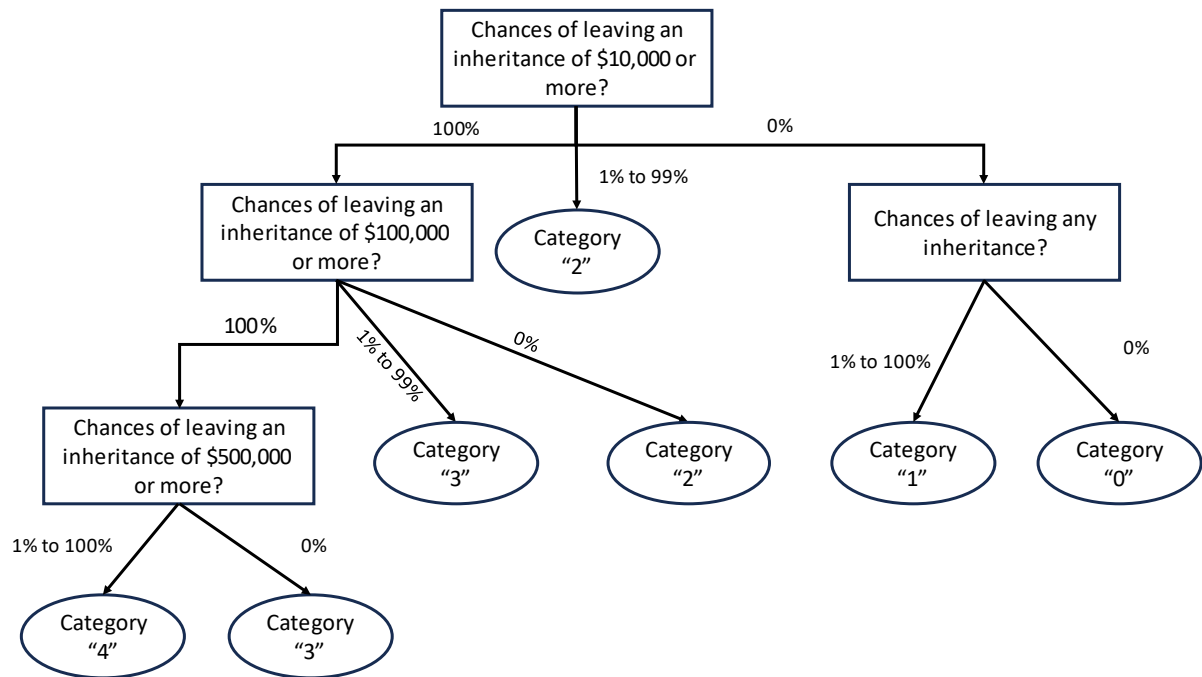
Key Independent Variables

Bequest expectations were calculated based on responses to a set of nested questions. A respondent first identifies their chances of leaving any inheritance, with potential responses ranging from 0 to 100. If their response is greater than 0, they are then asked their chances of

leaving an inheritance of \$10,000 or more. Similar logic is used for subsequent responses of leaving an inheritance of \$100,000 or more and leaving an inheritance of \$500,000 or more, respectively. Based on the responses to the series of questions, three types of variables (i.e., binary, categorical, and continuous) were created and used in the analysis for a robustness check.

First, a binary variable was created indicating 1 as reporting a positive chance of leaving any inheritance and 0 as reporting zero chance of leaving any inheritance. Second, a categorical variable was created from 0 to 4. Respondents who self-identified as having no chances of leaving an inheritance were coded as 0. Remaining respondents were assigned to the highest category where they identified having any probability of leaving an inheritance, as long as they identified as having a certain probability of leaving an inheritance in a previous category. For example, all responses from 1 to 99 to the question of leaving any inheritance were coded as 1. Responses of 100 were coded as 1 if they noted 0 chance of leaving \$10,000 or more in inheritance and 2 if their responses were from 1 to 99 on chances of leaving an inheritance of \$10,000 or more. A layout of this decision tree can be found in Figure 3.2.

Figure 3.2. Bequest Expectation Categorical Variable



Lastly, expected bequest was calculated, using an approach similar to Sommer and Lim (2022a) and Fan and Chatterjee (2019). This calculation was created by multiplying the probability of a bequest a respondent identifies by the largest value in their bequest range. For example, a respondent who self-identified as having a 10 percent chance of leaving an inheritance between \$1 and \$10,000 would be assigned an expected minimum bequest of \$1,000, the product of 10 percent and \$10,000.

Moderator Variables

Estate planning was measured by the question “Do you currently have a will that is written and witnessed?” The four potential responses include: yes, will; yes, will and trust; no will, but have trust; and no will. The first three responses were coded as a “1” for having performed estate planning and the final response was coded as a “0” for not performing estate planning.

Self-control was coded based on responses to the question “how would you rate the amount of control you have over your financial situation these days?” Responses range from 0 to 10, with 0 representing “no control at all” and 10 representing “very much control.”

Control variables

Control variables included in the analysis were categorized into a few subgroups: socio-demographic, life-cycle variables, bequest-related, and family-related variables. Socio-demographic variables were included in the analysis to understand the characteristics of the population. Life-cycle variables were included as they are expected to have a relationship with how individuals consume and save income. Bequest-related variables are included as they are expected to have a relationship with bequest motive. Family-related variables are included as they are anticipated to have a relationship with the strength of bequest motive.

Socio-demographic variables

Sex/Gender is defined as “1” for female respondents and “0” for male respondents. Relationship status was defined by the following categories, assigned the categorical values in parentheses: married (1), partnered (2), divorced/separated (3), widowed (4), and single (5). For the analysis, married was utilized as the reference group.

Race/ethnicity was measured by combining a question on race “What race do you consider yourself to be?” with a question on ethnicity “Do you consider yourself Hispanic or Latino?” These questions were used to define four groups in a nominal variable: White (non-Hispanic), Black (non-Hispanic), Latino/Hispanic, and Other (American Indian, Alaska Native, Asian, Native Hawaiian, Pacific Islander, or something else). Education is an ordinal variable created from a variable in the RAND file. Respondents who were coded into one of five groups: Less than High School, High School Diploma/GED, Some College, College Degree, and

Graduate/Professional Degree. Employment status was coded based on a variable in the RAND file. Responses were coded as a nominal variable based on four distinct categories: Employed, Unemployed, Retired, and Disabled. All other responses were coded as missing.

Life Cycle Variables

Age was coded based on a variable available in the RAND file. Based on the HRS's intended population, all respondents with ages less than 50 years old were excluded from the sample. To capture a potential non-linear relationship, age was squared, and this variable was also included in the analysis. Health status was measured by the question "Would you say your health is excellent, very good, good, fair, or poor?" The response was originally coded such that excellent was originally coded as a "1" and poor was coded as "5." Coding was reversed so that poor is now coded as "1" and excellent is coded as "5."

Income was tabulated by summing income from the following categories: wages, salary, tips, bonus, commission, professional trade/practice, self-employment, annuities, pensions, and social security. In addition, income from investment including business/farm, rental property, stocks, bonds, bank accounts, and CDs are included as well as any IRA withdrawals. A separate analysis for income earners will also be run, focused on high-income earners. This analysis is being intended as a robustness check, as high-income earners are expected to be more sensitive to taxation.

Planning horizon was measured by the question "In planning your family's saving and spending, which of the following time periods is most important to you?" The following responses were available: the next few months, the next year, the next few years, the next 5-10 years, or longer than 10 years. These responses were coded in this order from 1 to 5, such that a higher value can be interpreted as a longer time horizon.

Bequest-Related Variables

Inter-vivos transfers were coded as a binary variable. An affirmative response to providing \$500 or more in financial help or the deeding of a property to a child or grandchild in the past two years is coded as “1”. A negative response to both questions is coded as “0.” Life insurance is coded as a binary variable. If life insurance is present, it is coded as a “1.”. The absence of life insurance is coded as a “0.” Long-term care insurance is coded as a binary variable. If long-term care insurance is present, it is coded as a “1.”. The absence of long-term care insurance is coded as a “0.”

Windfall is measured by identifying respondents who responded yes to the question “Have you ever received \$10,000 or more in money or property in the form of an inheritance, a trust fund, or an insurance settlement?” Responses that are identified as insurance settlement, pension settlement, lawsuit, or other were included; responses identified as inheritance or gift are excluded. The value of the lump sum is then coded under windfall.

Charitable bequest intent is coded by a binary variable. Yes responses to the question “Have you made provisions for any charities in your will or trust?” were coded as “1”; no responses were coded as “0.” Family history of estate planning was measured who responded yes to the question “Have you ever received \$10,000 or more in money or property in the form of an inheritance, a trust fund, or an insurance settlement?” Respondents who responded that they received inheritance or gift from a parent, sibling, or other relative were coded as “1;” all other responses were coded as “0”.

Family-Related Variables

Parental status was measured by whether individuals have any *living* children. Respondents with living children were coded as 1. All other responses were coded as 0. To

measure familial relationships between children and parents, positive and negative affection was measured using the approach outlined by Sommer and Lim (2022b). A positive affection scale was created by totaling the scores for responses to three questions: “How much do they really understand the way you feel about things,” “How much can you rely on them if you have a serious problem,” and “How much can you open up to them if you need to talk about your worries?” These questions originally coded from 1 (a lot) to 4 (not at all). In creating the scale, these items were reverse coded, such that a higher score would be associated with greater positive affection. If more than one response was missing in the underlying questions, the entire scale was marked as missing.

A similar approach was used for negative affection, using the following four questions: “How often do they make too many demands on you,” “How much do they criticize you,” “How much do they let you down when you are counting on them,” and “How much do they get on your nerves?” Responses were reverse coded for negative affection as well, such that a higher score would be associated with greater negative affection. For negative affection, if more than two responses were missing in the underlying questions, the entire scale was marked as missing.

Data Analysis

This study utilized a censored regression model to study wealth composition, the percentage of taxable assets that make up of total portfolio assets serving as the dependent variable. Censored regression models go back to Tobin’s discussion of dependents variables where, “the variable has a lower, or upper, limit and takes on the limiting value for a substantial number of respondents” (1958, p. 24). Different censored regression models are available to address specific issues. This includes the Tobit model, designed to address corner solutions where there is bunching around a specific upper or lower limit and the Heckman selection

method, which was developed to address truncated data, where all true values of a dependent variable cannot be observed (Wooldridge, 2016). A general censored regression model was selected for this analysis for two primary reasons. First, the data was nearly continuous variables with clear boundaries and bunching at the lower and upper limits of 0% and 100%, respectively. This analysis could be executed with a two-limit Tobit function. Second, Stata did not support the use of multiple imputation (MI) with Tobit function. As this analysis had a small sample size and there were some variables with significant missing data, the decision was to utilize the generalized censored regression model which allowed for the use of multiple imputation.

First, an initial model was utilized, excluding all moderating related variables. To assess the impact of the estate planning and self-control variables, both were added to the initial model. Next, interaction terms were added to assess any potential moderating effect. As a robustness check, bequest intent was assessed using binary, categorical, and continuous measures. Additional analysis was run on three specific topics of interest: the impact of affection, income, and wealth. For affection, the sample was restricted to respondents that were parents, with indexes for positive and negative affection from children added to the model. For income, the sample was restricted to respondents at or above the 50th percentile of income. For wealth, the sample was restricted to respondents at or above the 50th percentile of total portfolio assets. All analyses were conducted utilizing STATA SE 18.0.

Chapter 4 - Findings & Results

Descriptive Statistics

The initial sample consisted of 4,534 older adults, taking the full sample, restricting it to participants who were 50 years of age or older, who had portfolio assets, and who completed the self-control question in the Leave-Behind Psychosocial and Lifestyle Questionnaire. The initial sample had a mean age of 69. The majority of the sample was female (58.7%), married (61.0%), white (74.0%), employed (69.4%), with completion of some level of college education (60.8%). In addition, most respondents identified as having good or better health status (78.8%), a planning horizon of greater than a year (76.0%), were parents with living children (91.2%) and held life insurance (62.3%). Most respondents had not made an inter vivos transfer (65.0%), did not hold long-term care insurance (86.3%), and did not have a family history of estate planning (96.0%). The median for the percentage of taxable assets that made up total portfolio assets was 89.8%. The median self-control and life expectancy for the sample were 8 (out of a range of 0-10) and 7.7, respectively. The median income and expected bequest were \$37,832 and \$9,000, respectively. A summary of these statistics can be found in Tables 4.1 and 4.2.

Table 4.1. Sample Characteristics of Categorical Variables

	Initial Sample (<i>n</i> =4,534)	Analytical Sample (<i>n</i> =2,526)
Bequest Intent (Binary)		
No	5.9%	1.5%
Yes	94.1%	98.5%
Bequest Intent (Category)		
Category 0	5.9%	1.5%
Category 1	4.6%	2.5%
Category 2	50.5%	46.6%
Category 3	18.6%	21.3%
Category 4	20.5%	28.1%

Table 4.1. Sample Characteristics of Categorical Variables (Continued)

	Initial Sample (<i>n</i> = 4,534)	Analytical Sample (<i>n</i> = 2,526)
Estate Planning		
No	45.7%	35.8%
Yes	54.3%	64.2%
Demographic Variables		
Gender		
Female	58.7%	56.3%
Male	41.3%	43.7%
Marital Status		
Married	61.0%	71.4%
Partnered	4.8%	4.1%
Separated/Divorced	12.9%	9.0%
Widowed	16.7%	12.0%
Single	4.7%	3.4%
Race/Ethnicity		
White	74.0%	81.0%
Black	13.4%	8.4%
Hispanic	8.3%	6.5%
Other	4.3%	4.1%
Highest Level of Education		
Less than High School	7.7%	3.3%
High School Diploma/GED	31.4%	25.7%
Some College	28.5%	27.5%
College Degree	20.1%	26.6%
Graduate/Professional Degree	12.3%	16.9%
Life-Cycle Hypothesis		
Employment Status		
Employed	69.4%	63.8%
Unemployed	30.6%	36.2%
Health Status		
Poor	4.3%	2.5%
Fair	16.9%	11.5%
Good	35.3%	34.7%
Very Good	34.2%	40.0%
Excellent	9.3%	11.4%

Table 4.1. Sample Characteristics of Categorical Variables (Continued)

	Initial Sample (<i>n</i> =4,534)	Analytical Sample (<i>n</i> =2,526)
Life-Cycle Hypothesis		
Planning Horizon		
Next few months	11.5%	7.2%
Next year	12.6%	9.9%
Next few years	28.3%	28.9%
5 to 10 years	33.5%	37.9%
More than 10 years	14.2%	16.2%
Bequest-Related		
Parents with Living Children		
No	8.8%	9.1%
Yes	91.2%	90.9%
Inter Vivos Transfer		
No	65.0%	58.2%
Yes	35.0%	41.8%
Life Insurance Holder		
No	37.7%	35.3%
Yes	62.3%	64.7%
Long-Term Care Insurance Holder		
No	86.3%	82.6%
Yes	13.7%	17.4%
Family History of Estate Planning		
No	96.0%	95.0%
Yes	4.0%	5.0%

Table 4.2. Sample Characteristics of Continuous Variables – Initial Sample

	<i>n</i>	Std. Dev.	Mean	Median	Min.	Max
Taxable Account % of Portfolio	4,534	38.7%	66.7%	89.8%	0%	100%
Expected Bequest	4,534	\$157,649	\$92,369	\$9,000	\$0	\$500,000
Self-Control	4,534	2.3	7.7	8.0	0	10.0
Life-Cycle Hypothesis						
Age	4,534	10.4	68.8	68.0	50	102
Income	4,534	\$140,028	\$73,581	\$37,832	\$0	\$3,051,243
Self-Reported Life Expectancy	4,534	6.8	8.9	7.7	0	35
Bequest-Related						
Windfall	4,534	\$4,920,099	\$243,557	\$0	\$0	\$100,000,000

Next, an analytical sample was created, restricting sample to those respondents who had some percentage of their total portfolio assets in a tax-deferred account. There were a few significant differences in the initial and analytical sample. Respondents in the analytical sample were more likely to have an estate plan (64.2% compared to 54.3%), to be married (71.4% compared to 61.0%), and to have completed at least some level of college (71.0% compared to 60.8%). Additionally, the median percentage of assets held in taxable accounts (33.8%) was significantly lower for the analytical sample. Finally, the median income for the analytical sample (\$65,915) was higher than the median income for the initial sample (\$37,832). Descriptive statistics for the analytical sample can be found in Tables 4.1 and 4.3, respectively.

Table 4.3. Sample Characteristics of Continuous Variables – Analytical Sample

	<i>n</i>	Std. Dev.	Mean	Median	Min.	Max
Taxable Account % of Portfolio	2,526	33.2%	40.3%	33.8%	0%	99.8%
Expected Bequest	2,526	\$176,765	\$123,867	\$10,000	\$0	\$500,000
Self-Control	2,526	2.0	8.0	8.0	0	10.0
Life-Cycle Hypothesis						
Age	2,526	10.2	68.2	67.0	50	101
Income	2,526	\$173,541	\$102,404	\$65,915	\$0	\$3,051,243
Self-Reported Life Expectancy	2,526	6.7	9.4	8.4	0	34
Bequest-Related						
Windfall	2,526	\$4,868,845	\$238,462	\$0	\$0	\$100,000,000

Multivariate Analysis Results

The multivariate analysis consists of four analyses: primary analysis, affection analysis, high-income analysis, and high-wealth analysis. The primary analysis consists of five models. Model 1 is a constrained linear regression model, regressing the percentage of portfolio assets in taxable accounts on the primary independent variable, bequest expectations, as well as all control variables. Model 1 utilizes a binary variable for bequest expectations, where “1” represents a positive chance of leaving an inheritance and “0” represents no chance of leaving an inheritance. Model 2 includes all variables in Model 1, as well as the two moderator variables, estate planning and self-control, without interaction terms. Model 3 includes all variables in Model 2 as well as interaction terms for the two moderators. Model 4 uses Model 3 as a base, substituting a categorical variable for bequest expectations for the binary variable. Model 5 takes a similar approach to Model 4, substituting log of expected bequest values for the binary bequest expectation variable.

The affection analysis takes the analytical sample and further restricts it to parents with living children. The sample size dropped from 2,526 respondents to 2,297. The analysis consists of two models. Model 6 includes all the variables in Model 5 with the additions of positive affection and negative affection.

The high-income analysis takes the analytical sample and restricts it to respondents with an income at or above the 50th percentile, or \$65,914.86. The sample size dropped from 2,526 respondents to 1,263. Model 7 includes all the variables in Model 5 with the reduced sample size. The high-wealth analysis takes the analytical sample and restricts it to respondents with total portfolio assets at or above the 50th percentile, or \$327,000. The sample size dropped from 2,526 respondents to 1,263. Model 8 includes all the variables in Model 5 with the reduced

sample size. Table 4.4 provides an outline of the various models utilized for the analyses and their differences.

Table 4.4. Model Breakdown for Analyses

		Base Model	Moderator Model (Base Model + Moderators)	Interaction Model (Moderator Model + Interaction Terms)
Bequest Expectations	Binary	Model 1	Model 2	Model 3
	Categorical			Model 4
	Continuous			Model 5
				Model 6*
				Model 7**
				Model 8***

* Affection variables added to model, sample restricted to parents

**Sample restricted to respondents with income in the 50th percentile or higher

***Sample restricted to respondents with total portfolio assets in the 50th percentile or higher

Primary Analysis Results

Results for Model 1 can be found in Table 4.5. Respondents with bequest expectations had, on average, 23.67 percentage points higher assets in their taxable accounts than those without bequest expectations. Female respondents had 2.2 lower percentage points of their portfolio in taxable accounts, on average, than their male peers. Race and ethnicity showed mixed results with Hispanic respondents, on average, having a lower percentage of their portfolio (-6.50%) in taxable assets than their White peers. There was no statistically significant difference for Black and Other respondents when compared to their White peers.

Age squared was positively associated with having a higher percentage of portfolio assets in taxable accounts. This suggests a u-shape in distribution, where the percentage of portfolio assets decrease to a certain age, after which they increase. Planning showed some evidence of a positive relationship with having a higher percentage of portfolio assets in taxable accounts: a change in planning horizon from a year to more than 10 years was associated with a 6.08 increase in percentage points of assets in taxable accounts. A family history of estate planning

was the only bequest-related variable that showed evidence of a relationship to the percentage of a portfolio held in taxable assets. Specifically, having a family history of estate planning was associated with having 11.20 higher percentage points of total portfolio assets in taxable accounts.

Table 4.5. Model 1 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Bequest	23.67***	4.10
Gender (Reference Group: Male)	-2.25**	0.88
Marital Status (Reference Group: Married)		
Partnered	-2.43	4.15
Separated/Divorced	0.10	2.42
Widowed	-0.28	2.41
Single	3.18	4.08
Race & Ethnicity (Reference Group: White)		
Black	-4.61	2.80
Hispanic	-6.50*	3.02
Other	5.84	3.43
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.46	4.19
Some College	-1.77	1.77
College Degree	-0.50	1.90
Graduate/Professional Degree	-0.93	2.21
Life Cycle Hypothesis		
Age	-1.81	0.95
Age ²	0.02**	0.01
Employed	-0.12	1.91
Log (Income)	0.88	0.46
Health: (Reference Group: Excellent)		
Poor	-3.58	4.49
Fair	-4.76	2.90
Good	-3.91	2.31
Very Good	-3.76	2.17
Life Expectancy	0.04	0.12

*p<0.05 **p<.01 ***p<.001

Table 4.5. Model 1 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Planning Horizon (Reference Group: Next Year)		
Next few months	-5.22	3.12
Next few years	3.37	2.26
5 to 10 years	2.87	2.19
More than 10 years	6.08*	2.57
Bequest-Related		
Parent of living children	-4.64	3.03
Inter Vivos Transfer	0.79	1.70
Life Insurance Holder	-2.57	1.55
Long-Term Care Insurance Holder	-0.50	1.93
Received a Windfall	0.00	0.00
Family History of Estate Planning	11.20***	3.49
R ²		0.111
Adjusted R ²		0.100

*p<0.05 **p<.01 ***p<.001

Results for Model 2, which included estate planning and self-control, can be found in Table 4.6. Percentage of assets in taxable accounts was 23.43 percentage points higher for respondents with bequest expectations compared those without bequest expectations While estate planning did not show evidence of a statistical significance relationship, self-control did. Respondents with higher levels of self-control were more likely to have a higher percentage of their portfolio allocated to taxable accounts. Specifically, a one standard deviation increase in self-control was associated with a 0.28 percentage point increase in the percentage of portfolio assets in a taxable account. The results for the control variables were similar to Model 1, with the addition of age as a statistically significant relationship: an increase in age of one year was associated with a 1.95 percentage point decrease in the percentage of assets in their taxable assets accounts.

Table 4.6. Model 2 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Bequest	23.43***	4.08
Estate Planning	2.86	1.74
Self-Control (Standardized)	0.28***	0.07
Gender (Reference Group: Male)	-2.14*	0.88
Marital Status (Reference Group: Married)		
Partnered	-2.93	4.11
Separated/Divorced	0.11	2.43
Widowed	-0.87	2.38
Single	3.64	4.09
Race & Ethnicity (Reference Group: White)		
Black	-4.90	2.79
Hispanic	-6.14*	3.04
Other	5.99	3.47
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.27	4.24
Some College	-1.69	1.76
College Degree	-1.04	1.90
Graduate/Professional Degree	-1.56	2.22
Life Cycle Hypothesis		
Age	-1.95*	0.94
Age ²	0.02**	0.01
Employed	0.52	1.89
Log (Income)	0.82	0.45
Health: (Reference Group: Excellent)		
Poor	-1.30	4.47
Fair	-2.92	2.95
Good	-3.08	2.33
Very Good	-3.56	2.19
Life Expectancy	0.01	0.12

*p<0.05 **p<.01 ***p<.001

Table 4.6. Model 2 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Planning Horizon (Reference Group: Next Year)		
Next few months	-4.73	3.10
Next few years	3.31	2.24
5 to 10 years	2.46	2.17
More than 10 years	5.23*	2.54
Bequest-Related		
Parent of living children	-4.41	3.02
Inter Vivos Transfer	0.56	1.69
Life Insurance Holder	-2.74	1.55
Long-Term Care Insurance Holder	-1.00	1.93
Received a Windfall	0.00	0.00
Family History of Estate Planning	10.91**	3.52
R ²		0.119
Adjusted R ²		0.107

*p<0.05 **p<.01 ***p<.001

Model 3, which included moderating effects for estate planning and self-control, can be found in Table 4.7. Results were similar to Model 2 in terms of the direction of most relationships. The one significant distinction in the models is the impact of adding in the interaction terms. As with the previous model, there was no evidence of a statistically significant relationship between estate planning and the percentage of portfolio assets held in taxable accounts. There was also no evidence of a statistically significant relationship between the interaction term of bequest expectation and estate planning and the ratio of portfolio assets held in taxable account. The same was true for self-control and the interaction term between bequest expectations and self-control: neither showed evidence of a statistically significant relationship to percentage of assets in taxable accounts in Model 3.

Table 4.7. Model 3 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Bequest	22.60***	4.60
Estate Planning	0.27	10.38
Bequest x Estate Planning Interaction	2.62	10.42
Self-Control (Standardized)	0.26	0.23
Bequest x Self-Control Interaction	0.01	0.23
Gender (Reference Group: Male)	-2.15**	0.88
Marital Status (Reference Group: Married)		
Partnered	-2.90	4.11
Separated/Divorced	0.11	2.44
Widowed	-0.87	2.38
Single	3.60	4.12
Race & Ethnicity (Reference Group: White)		
Black	-4.93	2.80
Hispanic	-6.16*	3.04
Other	6.00	3.48
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.22	4.24
Some College	-1.69	1.76
College Degree	-1.04	1.90
Graduate/Professional Degree	-1.57	2.22
Life Cycle Hypothesis		
Age	-1.95*	0.94
Age ²	0.02**	0.01
Employed	0.53	1.89
Log (Income)	0.82	0.45
Health: (Reference Group: Excellent)		
Poor	-1.24	4.48
Fair	-2.95	2.96
Good	-3.08	2.34
Very Good	-3.56	2.19
Life Expectancy	0.01	0.12

*p<0.05 **p<.01 ***p<.001

Table 4.7. Model 3 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Planning Horizon (Reference Group: Next Year)		
Next few months	-4.71	3.10
Next few years	3.32	2.24
5 to 10 years	2.47	2.17
More than 10 years	5.25*	2.54
Bequest-Related		
Parent of living children	-4.41	3.02
Inter Vivos Transfer	0.57	1.70
Life Insurance Holder	-2.74	1.55
Long-Term Care Insurance Holder	-1.00	1.94
Received a Windfall	0.00	0.00
Family History of Estate Planning	10.92**	3.52
R ²		0.119
Adjusted R ²		0.106

*p<0.05 **p<.01 ***p<.001

Model 4 results, which utilized the categorical bequest expectation variable in lieu of the binary variable, can be found in Table 4.8. Results were similar to Model 3 in terms of the direction of most relationships. A change in bequest expectation from category 0 to category 1 was associated with a 22.40 increase in percentage point of portfolio assets held in taxable accounts. As with the previous model, there was no evidence of a statistically significant relationship between estate planning, self-control, or their respective interaction terms with the percentage of portfolio assets held in taxable accounts.

Table 4.8. Model 4 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Bequest Categorical: (Reference Group: Category 0)		
Category 1	22.40**	8.28
Category 2	22.11***	4.53
Category 3	21.04***	4.85
Category 4	28.69***	5.05
Estate Planning	-0.90	9.16
Bequest x Estate Planning Interaction (Reference 0 and 0)		
Bequest Category 1 and Estate Planning 1	18.39	12.90
Bequest Category 2 and Estate Planning 1	2.20	9.30
Bequest Category 3 and Estate Planning 1	5.32	9.45
Bequest Category 4 and Estate Planning 1	1.38	9.59
Self-Control (Standardized)	0.23	0.24
Bequest x Self-Control Interaction (Reference Group: 0)		
Bequest Category 1	0.27	0.40
Bequest Category 2	0.02	0.25
Bequest Category 3	-0.15	0.28
Bequest Category 4	0.12	0.29
Gender (Reference Group: Male)	-2.56**	0.90
Marital Status (Reference Group: Married)		
Partnered	-2.35	4.07
Separated/Divorced	0.43	2.43
Widowed	-0.91	2.38
Single	3.55	4.12
Race & Ethnicity (Reference Group: White)		
Black	-5.09	2.79
Hispanic	-6.19*	3.04
Other	5.45	3.45
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.75	4.22
Some College	-1.74	1.77
College Degree	-1.08	1.90
Graduate/Professional Degree	-1.32	2.22

*p<0.05 **p<.01 ***p<.001

Table 4.8. Model 4 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Age	-1.90*	0.95
Age ²	0.02**	0.01
Employed	0.96	1.90
Log (Income)	0.71	0.45
Health: (Reference Group: Excellent)		
Poor	-0.45	4.47
Fair	-2.46	2.93
Good	-2.61	2.32
Very Good	-3.15	2.17
Life Expectancy	-0.02	0.12
Planning Horizon (Reference Group: Next Year)		
Next few months	-4.99	3.09
Next few years	2.92	2.24
5 to 10 years	1.91	2.18
More than 10 years	4.33	2.54
Bequest-Related		
Parent of living children	-4.49	3.02
Inter Vivos Transfer	0.03	1.69
Life Insurance Holder	-2.46	1.55
Long-Term Care Insurance Holder	-1.53	1.92
Received a Windfall	0.00	0.00
Family History of Estate Planning	10.37**	3.53
R ²		0.129
Adjusted R ²		0.113

*p<0.05 **p<.01 ***p<.001

Model 5 results utilized the log of expected bequest expectations in place of the categorical and binary bequest expectation variables. Results can be found in Table 4.9. Results were similar to Model 3 in terms of the direction of most relationships. A 10% change in bequest expectations was associated with a 0.18 percentage point increase in the percentage of portfolio assets held in taxable accounts. As with the previous model, there was no evidence of a

statistically significant relationship between estate planning, self-control, or their respective interaction terms with the percentage of portfolio assets held in taxable accounts.

Table 4.9. Model 5 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Log (Expected Bequest)	1.90***	0.43
Estate Planning	0.85	6.19
Bequest x Estate Planning Interaction	0.12	0.61
Self-Control (Standardized)	0.27	0.24
Bequest x Self-Control Interaction	-0.01	0.02
Gender (Reference Group: Male)	-2.89**	0.90
Marital Status (Reference Group: Married)		
Partnered	-2.40	4.04
Separated/Divorced	0.34	2.41
Widowed	-1.02	2.38
Single	3.21	4.14
Race & Ethnicity (Reference Group: White)		
Black	-4.84	2.80
Hispanic	-6.06*	3.02
Other	5.78	3.40
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.89	4.19
Some College	-2.06	1.76
College Degree	-1.59	1.90
Graduate/Professional Degree	-1.77	2.21
Life Cycle Hypothesis		
Age	-1.95*	0.95
Age ²	0.02**	0.01
Employed	1.31	1.90
Log (Income)	0.73	0.45

*p<0.05 **p<.01 ***p<.001

Table 4.9. Model 5 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Health: (Reference Group: Excellent)		
Poor	-1.31	4.47
Fair	-2.40	2.93
Good	-2.44	2.32
Very Good	-3.11	2.16
Life Expectancy	-0.04	0.12
Life Cycle Hypothesis		
Planning Horizon (Reference Group: Next Year)		
Next few months	-5.05	3.08
Next few years	2.62	2.24
5 to 10 years	1.71	2.17
More than 10 years	4.33	2.54
Bequest-Related		
Parent of living children	-4.68	3.04
Inter Vivos Transfer	-0.25	1.69
Life Insurance Holder	-2.62	1.54
Long-Term Care Insurance Holder	-1.34	1.92
Received a Windfall	0.00	0.00
Family History of Estate Planning	9.90**	3.49
R ²		0.126
Adjusted R ²		0.114

*p<0.05 **p<.01 ***p<.001

Affection Analysis Results

Model 6, which included moderating effects for estate planning and self-control, can be found in Table 4.10. Results were similar to Model 5 in terms of the direction of most relationships. A 10% change in bequest expectations was associated with a 0.20 percentage point increase in the percentage of portfolio assets held in taxable accounts. A one standard deviation increase in self-control was associated with a 0.24% increase in the percentage of portfolio assets in a taxable account. Female respondents had 3.52% lower percentage of their portfolio in taxable accounts, on average, than their male peers. With the addition of interactions terms to the

model, there was no statistically significant relationship between self-control and percentage of assets in taxable accounts.

Unlike previous models, there was no statistically significant difference between Hispanics and their White peers in terms of the percentage of taxable assets that made up portfolio assets. The results for interactions terms were similar to prior analysis. There was no evidence of a statistically significant relationship to the ratio of portfolio assets held in taxable account. The same was true for the interaction term between bequest expectations and self-control, which showed no evidence of a statistically significant relationship to percentage of assets in taxable accounts.

Table 4.10. Model 6 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Log (Expected Bequest)	2.03***	0.46
Estate Planning	1.21	6.49
Bequest x Estate Planning Interaction	0.10	0.64
Self-Control (Standardized)	0.24	0.29
Bequest x Estate Planning Interaction	-0.00	0.03
Positive Affection	-0.31	1.09
Negative Affection	-0.73	1.40
Gender (Reference Group: Male)	-3.52**	0.95
Marital Status (Reference Group: Married)		
Partnered	-3.58	4.21
Separated/Divorced	0.85	2.58
Widowed	-1.01	2.46
Single	-2.98	6.55
Race & Ethnicity (Reference Group: White)		
Black	-4.97	2.98
Hispanic	-6.15	3.14
Other	3.67	3.61

*p<0.05 **p<.01 ***p<.001

Table 4.10. Model 6 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Education (Reference Group: HS Diploma/GED)		
Less than HS	0.26	4.40
Some College	-2.63	1.83
College Degree	-2.51	2.00
Graduate/Professional Degree	-3.34	2.34
Life Cycle Hypothesis		
Age	-1.61	1.02
Age ²	0.02**	0.01
Employed	1.07	2.05
Log (Income)	0.64	0.46
Health: (Reference Group: Excellent)		
Poor	-0.27	4.69
Fair	-0.81	3.06
Good	-0.91	2.44
Very Good	-2.17	2.28
Life Expectancy	-0.01	0.13
Planning Horizon (Reference Group: Next Year)		
Next few months	-5.69	3.20
Next few years	1.88	2.31
5 to 10 years	1.33	2.26
More than 10 years	3.78	2.68
Bequest-Related		
Inter Vivos Transfer	0.09	1.70
Life Insurance Holder	-2.46	1.64
Long-Term Care Insurance Holder	-0.59	2.02
Received a Windfall	0.00	0.00
Family History of Estate Planning	9.65**	3.75
R ²		0.131
Adjusted R ²		0.117

*p<0.05 **p<.01 ***p<.001

High-Income Analysis Results

Results for Model 7 can be found in Table 4.11. Bequest expectations were associated with percentage of taxable assets: a 10% change in bequest expectations was associated with a

0.15 percentage point increase in the percentage of portfolio assets held in taxable accounts. The moderators, estate planning and self-control showed no statistically significant relationship with the percentage of portfolio assets held in taxable accounts. In terms of interaction term for bequest expectations and estate planning, there was no evidence of a statistically significant relationship to the ratio of portfolio assets held in taxable account. The same was true for the interaction term between bequest expectations and self-control, which showed no evidence of a statistically significant relationship to percentage of assets in taxable accounts.

Gender showed evidence of a relationship to taxable assets, with female respondents having 3.26 lower percentage point of their portfolio in taxable accounts, on average, than their male peers. In this model, race and ethnicity showed no statistically significant relationship with percentage of portfolio assets in taxable accounts. Education showed evidence of a negative relationship with taxable assets: respondents with a college degree had, on average, 6.21% lower percentage points of their portfolio's assets in taxable accounts than their peers with high school diplomas or GEDs.

Age squared was positively associated with having a higher percentage of portfolio assets in taxable accounts. Income was also positively associated with percentage of taxable assets: a 10% change in income was associated with a 6.10 percentage point increase in the percentage of portfolio assets held in taxable accounts. Family history of estate planning again showed evidence of a positive relationship to the percentage of a portfolio held in taxable assets, with respondents with a family history of estate planning having, on average, 12.11 higher percentage point of their portfolio in taxable assets than their peers who did not have a family history of estate planning.

Table 4.11. Model 7 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Log (Expected Bequest)	1.60*	0.75
Estate Planning	-2.57	10.66
Bequest x Estate Planning Interaction	0.39	1.03
Self-Control (Standardized)	0.04	0.54
Bequest x Self-Control Interaction	0.01	0.05
Gender (Reference Group: Male)	-3.26**	1.19
Marital Status (Reference Group: Married)		
Partnered	-6.28	5.63
Separated/Divorced	1.48	3.76
Widowed	-0.65	4.70
Single	0.77	8.76
Race & Ethnicity (Reference Group: White)		
Black	0.35	4.07
Hispanic	-5.20	4.19
Other	8.01	4.70
Education (Reference Group: HS Diploma/GED)		
Less than HS	-8.30	7.81
Some College	-4.95	2.92
College Degree	-6.21*	2.97
Graduate/Professional Degree	-8.12*	3.19
Life Cycle Hypothesis		
Age	-2.56	1.44
Age ²	0.03*	0.01
Employed	0.91	2.45
Log (Income)	6.40***	1.95
Health: (Reference Group: Excellent)		
Poor	4.07	6.35
Fair	-1.17	4.24
Good	-0.72	3.02
Very Good	-1.00	2.74
Life Expectancy	-0.21	0.16

*p<0.05 **p<.01 ***p<.001

Table 4.11. Model 7 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Life Cycle Hypothesis		
Planning Horizon (Reference Group: Next Year)		
Next few months	-2.63	4.89
Next few years	3.66	3.18
5 to 10 years	3.58	3.08
More than 10 years	3.67	3.48
Bequest-Related		
Parent	-6.73	4.14
Inter Vivos Transfer	0.82	2.38
Life Insurance Holder	-2.88	2.36
Long-Term Care Insurance Holder	-2.32	2.58
Received a Windfall	0.00	0.00
Family History of Estate Planning	12.08**	4.28
R ²		0.154
Adjusted R ²		0.139

*p<0.05 **p<.01 ***p<.001

High-Wealth Analysis Results

Results for Model 8 can be found in Table 4.12. For the first time, bequest expectations were not associated with percentage of taxable assets. The moderators, estate planning and self-control showed no statistically significant relationship with the percentage of portfolio assets held in taxable accounts. In terms of interaction term for bequest expectations and estate planning, there was no evidence of a statistically significant relationship to the ratio of portfolio assets held in taxable account. The same was true for the interaction term between bequest expectations and self-control, which showed no evidence of a statistically significant relationship to percentage of assets in taxable accounts.

Gender showed evidence of a relationship to taxable assets, with female respondents having 5.20 lower percentage point of their portfolio in taxable accounts, on average, than their male peers. Education showed evidence of a negative relationship with taxable assets: respondents with a college degree had, on average, 6.65% lower percentage points of their

portfolio's assets in taxable accounts than their peers with high school diplomas or GEDs.

Respondents with a graduate or professional degrees had, on average, 7.00% lower percentage points of their portfolio's assets in taxable accounts than their peers with high school diplomas or GEDs

Age was negatively associated with having a higher percentage of portfolio assets in taxable accounts, while age squared was positively associated. For this first time, employment showed evidence of a relationship; employed respondents, on average, 5.93% higher percentage points of portfolio assets held in taxable accounts. Additionally, windfall showed evidence of a positive relationship with percentage of assets held in taxable accounts for the first time as well. Family history of estate planning again showed evidence of a positive relationship to the percentage of a portfolio held in taxable assets, with respondents with a family history of estate planning having, on average, 9.41 higher percentage points of their portfolio in taxable assets than their peers who did not have a family history of estate planning.

Table 4.12. Model 8 – Percent of Portfolio Assets in Taxable Account Results

Variable	β	S.E.
Log (Expected Bequest)	1.51	0.99
Estate Planning	-1.67	12.14
Bequest x Estate Planning Interaction	0.50	1.15
Self-Control (Standardized)	-0.37	0.50
Bequest x Self-Control Interaction	0.03	0.05
Gender (Reference Group: Male)	-5.20***	1.29
Marital Status (Reference Group: Married)		
Partnered	0.60	6.34
Separated/Divorced	7.83	4.49
Widowed	-0.28	3.35
Single	5.70	6.70

*p<0.05 **p<.01 ***p<.001

Table 4.12. Model 8 – Percent of Portfolio Assets in Taxable Account Results (Continued)

Variable	β	S.E.
Race & Ethnicity (Reference Group: White)		
Black	2.48	5.82
Hispanic	7.84	5.98
Other	9.19	4.91
Education (Reference Group: HS Diploma/GED)		
Less than HS	4.79	7.27
Some College	-4.18	2.92
College Degree	-6.65*	2.94
Graduate/Professional Degree	-7.00*	3.11
Life Cycle Hypothesis		
Age	-3.04*	1.51
Age ²	0.03**	0.01
Employed	5.93*	2.82
Log (Income)	0.19	0.66
Health: (Reference Group: Excellent)		
Poor	8.07	6.38
Fair	2.52	4.14
Good	-1.14	3.11
Very Good	-3.20	2.83
Life Expectancy	-0.20	0.22
Planning Horizon (Reference Group: Next Year)		
Next few months	-6.90	5.57
Next few years	4.46	3.48
5 to 10 years	1.69	3.40
More than 10 years	3.08	3.77
Bequest-Related		
Parent	-3.67	4.59
Inter Vivos Transfer	-3.23	2.45
Life Insurance Holder	-3.31	2.19
Long-Term Care Insurance Holder	-2.90	2.52
Received a Windfall	3.19e-07***	5.46e-08
Family History of Estate Planning	9.41**	4.57
R2		0.160
Adjusted R2		0.133

*p<0.05 **p<.01 ***p<.001

Summary of Results

A summary of results for the relationships of interest in all models can be found in Table 4.12. In Models 1 through 7, bequest expectations had a statistically significant and positive relationship with the percentage of assets held in taxable accounts; in Model 8, the high-wealth analysis, this relationship became statistically insignificant. In each model where it was presented (Models 2-7), estate planning did not have a statistically significant relationship with taxable assets. Self-control had a positive relationship in Models 2, which did not include the two interaction terms. Self-control did not have a statistically significant result with percentage of assets in taxable assets in the models that included the interaction terms. For the interaction terms, there were no statistically significant relationships in any of the models they were included (Models 3 through 5). In the additional of parental respondents (Model 6) there was no evidence that positive and negative affection had a relationship with taxable assets. Finally, in the high-income analysis, race and ethnicity had no statistically significant relationship. In addition, education showed evidence of a negative relationship to the percentage of portfolio assets in taxable accounts while income showed income of a positive relationship.

Table 4.13. Summary of Model Results

Model	Bequest Expectations (BE)	Estate Planning (EP)	Self-Control (SC)	BE x EP Interaction	BE x SC Interaction	Positive Affection	Negative Affection
Model 1	Pos. (+)						
Model 2	Pos. (+)	NS	Pos. (+)				
Model 3	Pos. (+)	NS	NS	NS	NS		
Model 4	Pos. (+)	NS	NS	NS	NS		
Model 5	Pos. (+)	NS	NS	NS	NS		
Model 6	Pos. (+)	NS	NS	NS	NS	NS	NS
Model 7	Pos. (+)	NS	NS	NS	NS		
Model 8	NS	NS	NS	NS	NS		

* Pos. (+) = Positive Relationship. Neg. (-) = Negative Relationship.

NS = Not Statistically Significant

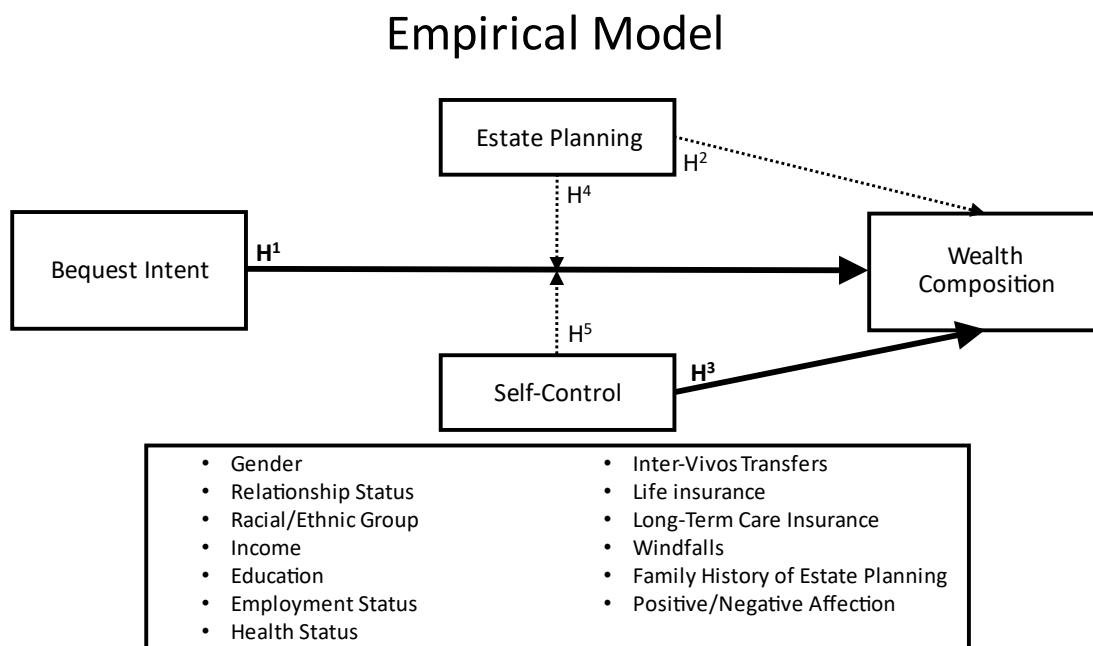
Chapter 5 - Research Findings, Practical Implications, Limitations, and Conclusion

The previous chapter laid out the results of this study but requires additional, relevant context. This section will provide additional perspective to the study results. A brief summary of the hypothesis testing will be presented, followed by a discussion of how the results compare to previous research on bequest expectations, estate planning, and the behavioral life cycle hypothesis.

Summary of Hypotheses Testing

Based on the results of a constrained regression analysis, utilizing StataSE 18.0, there was some support for two of the study's five hypotheses. Please see Figure 5.1 for a visual representation of the relationships.

Figure 5.1. Hypothesis Testing Results Within Empirical Model



Hypothesis one was partially supported, with bequest expectations showing evidence of a positive relationship with the percentage of assets in a taxable account in Models 1 through 7, but showing no evidence of a statistically significant relationship in Model 8, the high-wealth analysis. Hypothesis three was partially supported. In Model 2, which excluded interaction terms, self-control showed evidence of a positive relationship with percentage of portfolio assets held in taxable accounts. In the models that included interaction terms for self-control and estate planning, the relationship between self-control and wealth composition was not statistically significant. The analysis showed no support for hypotheses two, four, and five. No model in the analysis provided evidence of a statistically significant relationship between estate planning or the interaction terms for bequest expectations and estate planning or self-control and wealth composition. A summary of the hypothesis testing can be found in Table 5.1.

Table 5.1. Summary of Hypothesis Testing

Hypothesis	Relationship	Result
H ¹	Bequest intent will have a positive relationship with the percentage of wealth held in taxable assets.	Partially Supported
H ²	Estate planning will have a positive relationship with the percentage of wealth held in taxable assets.	Not supported
H ³	Self-control will have a positive relationship with the percentage of wealth held in taxable assets.	Partially Supported
H ⁴	Estate planning will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.	Not supported
H ⁵	Self-control will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.	Not supported

Bequest Expectations

The hypothesis related to bequest expectations was:

H¹: Bequest intent will have a positive relationship with the percentage of wealth held in taxable assets.

Bequest intent, operationalized as bequest expectations, had a positive relationship with the percentage of portfolio assets held in taxable accounts in all but one model. This finding aligned with expectations based on previous research, which provided evidence of a positive relationship between bequest intent and liquid assets, financial assets, and overall net worth (Lee, 2000; Perelman & Pestieau, 1992). It also aligns with findings in the studies of the life cycle patterns of the elderly in Japan (Niimi & Horioka, 2019), Italy (Ventura & Horioka, 2020), and Europe (Horioka & Ventura, 2022), which found bequest motive to have positive relationship with greater saving (less dissaving) among individuals with bequest motives. Based on the mostly positive relationship, bequest expectations showed evidence of a significant influence on

the percentage of portfolios individuals hold in taxable accounts with respect to the full analytical sample.

Estate Planning

The two hypotheses related to estate planning were:

H²: Estate planning will have a positive relationship with the percentage of wealth held in taxable assets.

H⁴: Estate planning will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

These hypotheses were not supported. Estate planning, measured by executing a will and/or revocable trust, had no significant relationship with the percentage of portfolio assets held in taxable accounts. This was not in line with expectations. Previous research by Lee (2000), which showed evidence of a positive relationship between estate planning and many of the taxable asset categories, including real estate, business, stocks/stock mutual funds, bonds/bond funds, short-term bonds, and money market funds. Other studies found a positive relationship between having a will and non-housing wealth (Choi, McDonough, et al., 2019) as well as overall net worth (Goetting & Martin, 2001). The consistent lack of support suggests that estate planning does not have a direct impact on how individuals accumulate and decumulate assets in taxable accounts, nor does it moderate the relationship between this action and bequest intentions.

Self-Control

The two hypotheses related to estate planning were:

H³: Self-control will have a positive relationship with the percentage of wealth held in taxable assets.

H⁵: Self-control will moderate the relationship between bequest intent and wealth composition, increasing the percentage of wealth held in taxable assets.

The results for these two hypotheses were mixed. Results from the model featuring self-control, without an interaction term, substantiated a statistically significant relationship with the percentage of assets held in taxable account. This was within expectations, as Griesdorn and Durband (2016) found that among young baby boomers, self-control was positively associated with net worth. Moreover, it aligns with the rationale suggested by the BLCH. Tax-deferred accounts, like IRAs, tend to be easier to contribute to due to their tax benefits and more illiquid based on the penalties and tax associated with withdrawals (Shefrin & Thaler, 2004). This would suggest growing taxable accounts would require additional self-control.

Results for the models that included an interaction term of self-control offered no supporting evidence that there was a statistically significant relationship between self-control and the percentage of portfolio assets held in taxable accounts. In addition, the analysis of the interaction term between self-control and bequest expectations did not indicate a relationship with percentage of taxable assets. The results suggest that while self-control might have a direct relationship with respondent's decisions on saving and decumulating assets in taxable assets, it does not moderate the relationship between the decision and bequest intentions.

Additional Analysis

There were three additional analyses run on the data. This first analysis was the impact of positive and negative affect of children for a subsample that included only parents. For all analyses where parental status was included, parental status had no statistical relationship to percentage of assets held in taxable accounts. This is not surprising as results on parental status impact on bequest intent, asset ownership, and net worth have been mixed. Fan and Chatterjee

(2019) found evidence of a negative relationship between bequest expectations and number of children. Perelman and Pestieau (1992) only identified a positive relationship between having children and having other real estate property; there was not statistically significant relationship between being a parent and owning liquid assets, other financial assets, or primary housing. In a study of young baby boomers, Griesdorn and Durband (2016) found evidence of a negative relationship between parental status and net worth.

The results for the analysis of affection presented no evidence of a relationship between affection and the percentage of taxable assets that comprise total portfolio assets. Studies on inheritance have found the type and depth of relationships between parents and their children impact the distribution of inheritances and bequests (Erixson & Ohlsson, 2019; Light & McGarry, 2004). Sommers and Lim (2022c) proffered that affection is primarily a one-way street, with positive affection increasing bequest intentions but negative affection having limited impact, as parents rarely disinherit children. The findings of this study imply that while decisions on how assets are split at end of life are affected by the quality of familial relationships, the accumulation and structuring of assets appear to be driven by other factors.

The second analysis was a restricted sample of respondents in the 50th percentile or higher income. While the results were similar to the findings in the primary analysis, there were a few relationships that were distinct and deserve additional attention. Education demonstrated evidence of a negative relationship with percentage of assets in taxable accounts, specifically when comparing respondents with a bachelors, graduate, or professional degree to respondents with a high school diploma or GED equivalent. In addition to education, income was the other variable that showed a statistically significant relationship in the higher income analysis. In contrast to education, income showed evidence of a positive relationship.

The third analysis was a restricted sample of respondents in the 50th percentile or higher of total portfolio assets. While the results were similar to the findings in the high-income analysis, three relationships were divergent. For the first time, bequest intent did not have a statistically significant relationship with the percentage of portfolio assets held in taxable accounts. This suggests that part of what might be captured is a wealth effect. For example, individuals who inherit large sums of money do not get decision rights on the account types that they inherit. Their percentage of assets in taxable versus tax-deferred accounts would be largely a default position, not based on life-cycling planning. Employment was also found to have a positive relationship with the percentage of assets in taxable accounts. As this restricted sample had a higher median (\$96,090) and mean (\$141,870) income than the analytical sample, these respondents could be exceeding the contribution limits for retirement plans, defaulting them to save more money to taxable accounts. Finally, windfalls showed evidence of a positive relationship with the percentage of portfolio assets held in taxable accounts. This is intuitive as many of the windfall categories (insurance settlements, lawsuits, gifts, etc.) would be received as taxable assets, not in tax-deferred accounts.

Practical Implications

One of the great benefits of studies in personal financial planning is their ability to provide practical implications that impact individuals and families as well as their advisors. The findings from this study suggest individuals with bequest intent hold a larger percentage of their portfolio assets in taxable accounts than those without bequest intent. This means that they might already be taking steps to optimize the potential after-tax wealth they transfer to their beneficiaries, impacting future generations. There are additional ways financial planners, financial counselors, and attorneys can assist clients in structuring portfolio assets to help better

match their inheritance desires with their saving, spending, and investing behaviors. This includes better understanding of bequest intentions, managing and increasing self-control, and building a family legacy of estate planning.

Understanding Bequest Intentions

Bequest intention is one potential motivation for how, why, and where individuals and families accumulate assets (Modigliani & Brumberg, 1954). In order for it to be properly considered, this intention must be identified and then prioritized amongst other goals. If it is a primary goal or objective, financial decisions should be made with this in mind. This might require different tools or strategies than if bequest intent has a lower priority. For example, typical retirement withdrawal strategies focus on reducing income taxes for an individual or couple during their lifetime (Geisler & Hulse, 2018; Reichenstein & Meyer, 2022). By understanding bequest intention and its importance, strategies can be developed that prioritize the reducing income taxes on inherited assets.

As the identifying, selecting and prioritizing goals are part of the second step of the CFP Board's financial planning process (2019), financial planners are uniquely positioned to assist individuals and families with understanding and prioritizing their financial goals. For individuals and families who have the intention to leave a bequest, working with a financial planner can help them better refine these goals and determine the appropriate strategies to leave the most wealth to beneficiaries, consider estate and income taxes. In the same vein, financial planners should have bequest intent on their radar as a goal to revisit in terms of priority amongst other goals like retirement or education funding to identify clients and prospects who prioritize bequest intent. For high net worth families and high income earners especially, a conversation on the expanded

estate tax exemption and income tax planning with respect to inherited assets can be a real value-add.

Managing and Increasing Self-Control

Another factor that demonstrated some efficacy in the ability of individuals to translate bequest expectations into a higher percentage of assets in taxable accounts was self-control. This is consistent with the BLCH, which posits that differences in the attributes of accounts can impact the willingness of individuals save to and spend from those accounts via the process of mental accounting (Shefrin & Thaler, 1988). Retirement accounts can provide tax deferrals and employee matching on contributions (Geisler & Stern, 2014) and are assessed ordinary income taxes and potentially penalties upon withdrawals (Kaplan, 2020), making it easier to contribute and less attractive to make distributions from when compared to taxable accounts.

In order to assist clients with changing their behaviors to align better with their estate planning goals, advisors must help them better engage their self-control. Rha et al. (2006) proffered that developing savings goals and rules can increase the likelihood of saving. One example of this would be pre-commitment of future dollars to savings. Studies focused on pre-commitment of tax refunds have shown the ability to increase savings via pre-commitment (Beverly et al., 2006; Roll et al., 2020). Financial planners and advisors can take similar approaches, getting clients' commitment to save annual bonuses or raises into taxable assets. This would help clients get more assets into portfolios that will get preferred income tax treatment at death.

In terms of spending, there are strategies that can help to avoid and manage tempting situations. These strategies include choosing more favorable circumstances, increasing focus on goals, picturing the regret related with spending decisions, or even suppression of the impulses

(Peetz & Davydenko, 2022). In a previous study, Peetz and Davydenko (2021), found evidence that client selected strategies were implemented more effectively. Financial planners and counselors can assist clients by identifying the strategies they are already utilizing and helping match them to the appropriate situations. Financial planners and counselors can leverage existing inventories (Klontz et al., 2011, 2012) and interventions (Nelson et al., 2015) from the burgeoning field of financial therapy to help clients better understand their stories and relationship with money and spending specifically. This work can be critical in helping clients to create healthy and sustainable change in spending decisions.

Building a family legacy of estate planning

Results of this study suggest that estate planning had no material impact on how bequest intent is translated into portfolio assets from a taxation perspective. Palmer et. al (2006) found that the following life events were associated with drafting a will: cancer diagnosis, widowhood, retirement, and an increase in assets. The list of life events suggest that estate planning is reactive, an attempt to get affairs in order. If it is indeed a response, the impact on subsequent behavior might be minimal.

One estate planning related variable that did show evidence of a positive relationship was a family legacy of estate planning. Previous research suggests that a family's experience with estate planning can be passed on as a tradition (Cox & Stark, 2005; Woosley et al., 2017). In a study conducted by the Artemise Strategy group on behalf of Ameriprise Financial (2022), 67% of respondents noted generational wealth building was important, with the top four steps focusing on accumulating assets through saving, investing, and entrepreneurship. What was notably absent were any steps to ensure that assets transfer effectively to the next generation. By helping clients take the proper steps to implement an estate plan, financial advisors and attorneys

can help to begin or maintain a family legacy of estate planning. can have two potentially potent impacts. First, it can help clients to bring to light the current tax liabilities within their estate plan and adjust their future savings and spending. Second, it can help begin or maintain a family legacy of estate planning, which can impact the accumulation and transfer of inheritance for future generations, passing on a generational wealth mindset. This could be especially impactful for higher wealth families, which should have a higher likelihood of leaving significant assets to beneficiaries.

Limitations & Future Research

Limitations

As explanatory research, there are some significant limitations to this study. These limitations should be considered when interpreting the results. Moreover, these limitations can provide insights into opportunities for additional research.

This study utilized a cross-sectional approach, measuring data at a point in time. As this was an explanatory study, there is an “inherent problem,” a mismatch between a snapshot view of data being used to analyze “a causal process that occur[s] over time” (Babbie, 2016, p. 106). While this approach was utilized for efficiency, a longitudinal approach might prove more convincing and add additional insight.

The power of the analysis for this study is low, with the various models explaining 10 to 14 percent of the variance. A potential cause of the lower power is that the study assumes bequest intention as the primary motivator for asset accumulation/decumulation decisions. In a study of savings motives based on Maslow’s hierarchy, Lee and Hanna (2015) found that retirement/security and self-actualization had the strongest relationships with savings behavior of all motives; this included family/love, of which gifting to children was a component. It is

possible that the addition of variables that confirm prioritization of bequest intent or an alternate theoretical basis could provide greater explanatory power.

One drawback with the data source used was the lack of information available on retirement accounts, including IRAs and employer-sponsored retirement accounts. Specifically, data was not available to distinguish Traditional from Roth accounts. Traditional accounts are funded with pre-tax dollars, with distributions of contributions and earnings subject to ordinary income taxes; Roth accounts are funded with after-tax dollars with contributions never taxed and earnings not taxed if they are qualified withdrawals (Geisler & Stern, 2014). With these distinctions, Roth accounts are most appropriately grouped separately or with taxable accounts, as their taxation also holds a preferred status when compared to Traditional IRAs. The inability to distinguish between these two account types in the data should be considered when assessing the results of this study.

Future Research

This study offers several potential pathways for additional research that can help improve the understanding of how individuals and families translate bequest intentions into savings and investing. First, asset accumulation and decumulation are actions that occur over time. As this analysis is based on point in time data, a natural evolution would be to utilize a method that incorporates change over time. Utilizing a longitudinal approach would allow for the examination of changes over time, providing a better match between the behaviors and the analysis.

Second, this study assumed bequest intention as a primary factor in life cycle decisions. In practice, there are often competing financial goals like securing and maintaining retirement, expanding lifestyle through additional spending, and gifting during lifetime. Future research

studies might rank order the financial goals of individuals. This would allow for restricting analysis to respondents for whom leaving an inheritance is a high priority, providing better understanding of the relationship between bequest intent and life cycle decisions.

Third, better data is needed on the types of retirement accounts individuals hold. More specifically, it is important to separate traditional and Roth accounts in future analysis, as this study assumed conservatively that all retirement accounts were traditional. Roth accounts are funded with after-tax dollars and qualified withdrawals, as well as withdrawals of contributions, are not taxable (Geisler & Stern, 2014). In addition to saving to Roth accounts, clients might pursue strategies like Roth conversions, transferring assets from traditional accounts to Roth accounts and paying any-related income taxes, to change their mix of traditional and Roth accounts during and after their working years (Welch Jr., 2016). For this reason, Roth accounts represent a “golden egg” for many clients and a unique opportunity to grow assets in an effectively income tax-free manner. Capturing the percentage and growth of Roth versus traditional accounts over time can provide additional insights into income and inheritance planning.

Fourth, one factor that consistently showed evidence of a positive relationship with percentage of assets in taxable accounts in this study was a family history of estate planning. This aligns with expectations bas previous research on family traditions of estate planning (Cox & Stark, 2005). There are two explanations that have been offered for this impact. One suggestion is that parent’s modeling of behavior might have a relationship to their children’s future behavior, as proffered by Family Financial Socialization theory (Gudmunson & Danes, 2011). Woosley et. al (2017) found support for this idea in their study of adult children, which

found that parents' end-of-life actions, specifically drafting a living will, helped predict their children's end-of-life planning behaviors, including the drafting of a will or revocable trust.

The second explanation is resource-based. In a study using data from the Survey of Consumer Finances, DeBoer and Hoang (2017) identified a positive relationship between receipt of inheritance and bequest expectations; those respondents who expected to receive an inheritance in the future were more likely to have larger bequest expectations. This aligns with findings from an earlier study of 19th century inheritance data from France, which found that individuals who received larger inheritances also tended to leave much larger bequests to their progeny. Whether based on attitude, capacity, or some combination of the two, family traditions of estate planning do appear to have an impact on the process of transitioning assets through bequests and deserves greater attention in how it impacts portfolio composition.

Conclusion

With expansion of lifetime exemption from \$600,000 to \$12,920,000, estate tax has become less of concern for inheritance for all but the most affluent individuals and families in the United States (Internal Revenue Service, 2022; Soled, 2020). More than ever, the associated income tax of inheritance has become critical to passing on the most after-tax wealth to heirs. This study utilized a cross-sectional analysis, with a theoretical model based on BLCH, to assess if bequest intentions translated into portfolios, specifically the mix of taxable and tax-deferred accounts. The study found support of a direct relationship between bequest intentions and the percentage of taxable assets that make up portfolio assets. While estate planning had no direct or indirect impact, self-control was found to have a direct impact on percentage of assets in taxable accounts in most instances. In addition to the main variables of interest, a family history of estate planning was found to have a consistent and positive relationship with the percentage of assets

held in taxable accounts, consistent with previous literature. As a result of this study, three practical implications were identified that could have a positive impact on how financial planners, financial counselors, and attorneys can better support their clients: better understanding of bequest intentions, helping manage and increase self-control, and highlighting the importance of building a family legacy of estate planning.

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