
The Emerging Potential of Longitudinal Empirical Research in Estate Planning: Examples from Charitable Bequests

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Traditionally, empirical analysis of estate planning has been limited to data from probate or estate tax records along with occasional one-time surveys of current plans or opinions. Additionally, the internet now allows easy access to online convenience samples of survey-takers. However, each of these sources has problematic features. Estate tax returns include only the wealthiest estates, and individual-level data is confidential. Probate data is time-consuming to access and includes information only for one specific location. Popular internet panels, although potentially useful for experiments, are not nationally representative.

Today, an important additional source of data, The Health and Retirement Study (“HRS”) is available. It provides high-quality, nationally representative, longitudinal information on participants’ estate planning. It not only tracks changes throughout the participants’ lives but also includes details of subsequent post-mortem transfers. Critically, this study, originating in 1992, has now accumulated a sufficient number of deceased participants (over 14,000) to permit sophisticated analyses of post-mortem wealth transfers. This Article reviews the advantages of HRS data for empirical research in estate planning and demonstrates the new types of analyses that are now possible. It does so by comprehensively outlining current knowledge regarding charitable bequests gleaned from both new and previous analyses of this data. By illustrating how much this data can illuminate one particular estate planning decision (charitable bequests), this Article is intended to spur those interested in the empirical analysis of estate planning to make further use of it.

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INTRODUCTION

An important source of data holds the promise of substantially expanding the estate transfer research questions that can be addressed by empirical analysis.¹ The Health and Retirement Study (“HRS”) is a large, nationally representative, longitudinal study including information on both lifetime circumstances and post-mortem transfers.² The HRS itself is not new, having origins beginning in 1992.³ What is new is the accumulation of a sufficient number of deceased study participants to permit sophisticated empirical analysis of their post-mortem transfers, particularly for less common behaviors such as charitable transfers.⁴

This Article reviews key elements of HRS data in the context of estate planning and estate transfers and compares these features with other sources of empirical data.⁵ It then illustrates the types of empirical estate planning and estate transfer research made possible by HRS data through a presentation of previous and new findings on the topic of charitable bequests.⁶

¹ See MARITA A. SERVAIS, OVERVIEW OF HRS PUBLIC DATA FILES FOR CROSS-SECTIONAL AND LONGITUDINAL ANALYSIS 1 (2010), <https://hrs.isr.umich.edu/sites/default/files/biblio/OverviewofHRSPublicData.pdf> [<https://perma.cc/Q9Q2-RG2Z>].

² *Id.*

³ *Id.*

⁴ See Russell N. James III, *The New Statistics of Estate Planning: Lifetime and Post-Mortem Wills, Trusts, and Charitable Planning*, 8 *EST. PLAN. & COMMUNITY PROP. L.J.* 1, 5 (2015) [hereinafter *The New Statistics of Estate Planning*].

⁵ See *infra* Part I.

⁶ See *infra* Parts II-IV. Following the common practice in both I.R.S. and academic publications on this topic, the term “charitable bequest” in this Article references charitable estate transfers generally, rather than only gifts by will of personal property. See, e.g., Martha Britton Eller, *Charitable Bequests: Evidence from Federal Estate Tax Returns*, 21 *STAT. INCOME BULL.* 174 (2001), <https://www.irs.gov/pub/irs-soi/95escbar.pdf> [<https://perma.cc/H2DF-Q8JM>]; Steven A. Hanke et al., *A Two-State Analysis of Estate Taxes and Charitable Bequests from the Most Generous Decedents*, 28 *ADVANCES ACCT.* 38, 39 (2012); David Joulfaian, *Charitable Bequests and Estate Taxes*, 44 *NAT’L TAX J.* 169, 171 (1991); Wojciech Kopczuk, *Bequest and Tax Planning: Evidence from Estate Tax Returns*, 122 *Q.J. ECON.* 1801, 1827 (2007); Kathleen McGarry, *Inter Vivos Transfers and Intended Bequests*, 73 *J. PUB. ECON.* 321, 321 (1999).

I. THE HEALTH AND RETIREMENT STUDY: INTRODUCTION AND
COMPARISONS WITH OTHER ESTATE PLANNING DATA SOURCES

A. *Description of the Health and Retirement Study*

The HRS is a longitudinal study of health and financial circumstances of adults aged fifty and older conducted every two years.⁷ It has included more than 43,000 participants and is “the largest academic behavioral and social science project ever undertaken in the United States.”⁸ The HRS first began in 1992, initially funded by congressional action⁹ in 1990 with subsequent federal grants far exceeding \$100 million,¹⁰ and is now “the most comprehensive population-representative study” of older adults in the nation.¹¹

With regard to lifetime estate planning, the HRS reports the presence of wills and trusts in each survey wave, and their beneficiaries including charity, grandchildren, and children (and if the children receive equal amounts).¹² It also reports life insurance amounts and beneficiaries, as well as details regarding durable powers of attorney for healthcare and living wills.¹³

As a longitudinal study, the HRS tracks participants across their lives.¹⁴ This longitudinal feature makes it possible to identify changes in the participants’ lifetime circumstances (such as changes to their estate plans) and associate those with other changes occurring before, during, or after.¹⁵ Additionally, the HRS collects extensive information on income, wealth, health, cognition, biomarkers, genetics, and

⁷ See Amanda Sonnega et al., *Cohort Profile: The Health and Retirement Study (HRS)*, 43 INT’L J. EPIDEMIOLOGY 576, 576 (2014).

⁸ Gwenith G. Fisher & Lindsay H. Ryan, *Overview of the Health and Retirement Study and Introduction to the Special Issue*, 4 WORK, AGING & RETIREMENT 1, 1 (2018).

⁹ See F. Thomas Juster & Richard Suzman, *An Overview of the Health and Retirement Study*, 30 J. HUM. RESOURCES S7, S19-S20 (1995) (discussing the initial appropriations history).

¹⁰ Mich. Office of Servs. to the Aging, *U-M Receives \$70 Million to Continue Its Study of Aging*, RESOURCES FOR AGING, July 2006, at 1, 3, https://www.michigan.gov/documents/miseniors/ENEWS35-7-2006_175546_7.pdf [https://perma.cc/UH4M-AUSX].

¹¹ Sonnega et al., *supra* note 7, at 577.

¹² See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 2016 FINAL RELEASE CODEBOOK SECTION T: WILLS AND LIFE INSURANCE (2016), at PT001-PT008, http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16t_ri.htm [https://perma.cc/LD8H-7A7E] [hereinafter CODEBOOK SECTION T].

¹³ *Id.* at PT011-PT251.

¹⁴ See Sonnega et al., *supra* note 7, at 584.

¹⁵ See SERVAIS, *supra* note 1, at 28-31.

comprehensive psychological and social measurements.¹⁶ This provides a vast array of potential factors preceding, following, or otherwise associated with estate planning circumstances and changes.

In addition to these nationally representative lifetime measurements, the HRS also identifies the size and ultimate destinations of deceased participants' post-mortem estates, typically through interviews with family members or caretakers.¹⁷ Through additional linkages with the National Death Index, tracking of participant mortality is comprehensive.¹⁸ From 1992 through 2016, over 14,000 study participants have died, thus leading to the creation of a substantial set of information on post-mortem transfers.¹⁹ This steady accumulation of decedents means that the current and future possibilities of sophisticated empirical analysis of estate transfers are much greater than in the past,²⁰ especially for relatively infrequent estate transfer behaviors, such as charitable transfers.²¹

A key goal of the HRS is to represent the *entire* national population above the threshold age.²² Acquiring such a representative sample is a deceptively complicated task. For example, a telephone or internet survey excludes those who do not have a telephone or internet access.²³ A survey in English will exclude those who do not speak English.²⁴ To address such issues, the HRS employs a multi-stage area-probability selection process.²⁵ Representative physical locations from across the nation (including eighty-four metropolitan areas and rural counties) are selected.²⁶ Then, trained interviewers are dispatched to those areas to

¹⁶ See Sonnega et al., *supra* note 7, at 576.

¹⁷ *Id.* at 579.

¹⁸ *Id.*

¹⁹ See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY/AHEAD 1995-2016 EXIT AND POST-EXIT, <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/JK5Y-WFPZ>] [hereinafter 1995-2016 EXIT AND POST-EXIT] (based on author's calculations using data from this source).

²⁰ See, e.g., Kopczuk, *supra* note 6, at 1827 (using earlier HRS decedent data with only 3,612 decedents).

²¹ See Russell N. James III, *The Myth of the Coming Charitable Estate Windfall*, 39 AM. REV. PUB. ADMIN. 661, 668-69 (2009) [hereinafter *The Myth*] (reporting 5.3% of deceased panel members' estates generating a charitable transfer).

²² See Sonnega et al., *supra* note 7, at 576.

²³ See, e.g., Jelke Bethlehem, *Selection Bias in Web Surveys*, 78 INT'L STAT. REV. 161, 161 (2010).

²⁴ See, e.g., Mary B. Ofstedal & David R. Weir, *Recruitment and Retention of Minority Participants in the Health and Retirement Study*, 51 GERONTOLOGIST S8, S13 (2011).

²⁵ Sonnega et al., *supra* note 7, at 577, 584.

²⁶ See Amanda Sonnega & David R. Weir, *The Health and Retirement Study: A Public Data Resource for Research on Aging*, 2 OPEN HEALTH DATA 1, 2 (2014).

personally contact all residences in the selected areas to identify the presence of people in the household above the threshold age.²⁷ All initial and alternating subsequent interviews are conducted face-to-face with well-trained interviewers.²⁸ Interviews are available in both English and Spanish, with 51% of Hispanic participants completing the interviews in Spanish.²⁹

However, even when a study successfully locates the right potential participants, not all will participate, leading to the potential for non-response bias.³⁰ In each wave of the HRS survey — perhaps due to interviewer skill and training,³¹ respondent compensation,³² and the study's purpose, history, and importance — between 80% and 90% of those asked to participate choose to do so.³³ Even so, because some types of people are still more, or less, likely to participate than others, the HRS employs a complex weighting scheme to address this issue of non-response bias.³⁴

Finally, the HRS is intentionally focused on racial and ethnic disparities, and so it oversamples Hispanics and African Americans, allowing researchers to gain greater confidence with regard to the circumstances of these minority groups.³⁵ This does not reduce the national-representativeness of the study when the weighting scheme is applied because the individual weight is designed to reflect the share of the national population represented by each respondent.³⁶

Beyond having the right participants, another important issue relates to the reliability of the data. For example, if respondents on an internet survey are simply clicking through as rapidly as possible to receive a

²⁷ See Sonnega et al., *supra* note 7, at 578.

²⁸ See Ofstedal & Weir, *supra* note 24, at S8-S9, S12.

²⁹ See *id.* at S13; Sonnega et al., *supra* note 7, at 578.

³⁰ See Eleanor Singer, *Introduction: Nonresponse Bias in Household Surveys*, 70 PUB. OPINION Q. 637, 637 (2006).

³¹ See Fisher & Ryan, *supra* note 8, at 2; Ofstedal & Weir, *supra* note 24, at S8-S9.

³² See Ofstedal & Weir, *supra* note 24, at S12-S13 (referencing compensation starting at \$50 for the base survey in 2008 with additional incentives for completing additional survey components).

³³ See Sonnega et al., *supra* note 7, at 579 (presenting a comprehensive description of response rates); see also HEALTH AND RETIREMENT STUDY STAFF, *SAMPLE SIZES AND RESPONSE RATES 3* (2017), https://hrs.isr.umich.edu/sites/default/files/biblio/ResponseRates_2017.pdf [<https://perma.cc/N4U9-L8XW>].

³⁴ See Sonnega et al., *supra* note 7, at 578; see also UNIV. OF MICH., *SAMPLING WEIGHTS: REVISED FOR TRACKER 2.0 AND BEYOND*, https://hrs.isr.umich.edu/sites/default/files/biblio/wgtdoc_0.pdf (last visited Jan. 28, 2020) [<https://perma.cc/N4U9-L8XW>] [hereinafter *SAMPLING WEIGHTS*].

³⁵ See Ofstedal & Weir, *supra* note 24, at S10.

³⁶ See *SAMPLING WEIGHTS*, *supra* note 34.

small payment (or are actually non-human bots³⁷ designed to do the same) then the data obtained is not instructive.³⁸ In the HRS, all initial and alternating subsequent interviews are conducted face-to-face by well-trained interviewers, typically in the respondents' homes.³⁹ Across the years, "interviewers work hard to establish and maintain rapport with respondents," regularly sending notes, holiday cards, and newsletters between surveys.⁴⁰

B. Comparison with Estate Tax Data

Estate tax data provides national statistics on estate transfers.⁴¹ However, it provides this data only for the largest estates, with the 2019 unified credit resulting in an exemption equivalent of \$11.4 million for an individual⁴² and \$22.8 million for a married couple.⁴³ Even in 2017, with estate tax exemption equivalent levels at less than half this amount,⁴⁴ estate tax data provided information for less than one-half of 1% of all decedents.⁴⁵ Unlike estate tax records, the HRS provides nationally representative data from all wealth levels.⁴⁶ Because the HRS

³⁷ See Chris Stokel-Walker, *Bots on Amazon's Mechanical Turk Are Ruining Psychology Studies*, NEW SCIENTIST (Aug. 10, 2018), <https://www.newscientist.com/article/2176436-bots-on-amazons-mechanical-turk-are-ruining-psychology-studies/> [<https://perma.cc/7TPX-FL7F>].

³⁸ See Sean A. Dennis et al., *Online Worker Fraud and Evolving Threats to the Integrity of MTurk Data: A Discussion of Virtual Private Servers and the Limitations of IP-Based Screening Procedures*, BEHAV. RES. ACCT. (forthcoming) (manuscript at 1-2, 23), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3233954 [<https://perma.cc/AA5P-W8PQ>].

³⁹ See Ofstedal & Weir, *supra* note 24, at S8-S9, S12.

⁴⁰ Fisher & Ryan, *supra* note 8, at 3. For more details, see generally HEALTH AND RETIREMENT STUDY, <http://hrsparticipants.isr.umich.edu/> (last visited Jan. 28, 2020) [<https://perma.cc/V2CK-QZAZ>] (providing information on what to expect as a participant in the HRS).

⁴¹ See, e.g., *SOI Tax Stats — Estate Tax Statistics*, INTERNAL REVENUE SERV. (Oct. 16, 2019), <https://www.irs.gov/statistics/soi-tax-stats-estate-tax-statistics> [<https://perma.cc/7J9X-SDFA>].

⁴² Rev. Proc. 2018-57 § 3.41.

⁴³ See 26 C.F.R. § 20.2010-1 (2019).

⁴⁴ See Rev. Proc. 2016-55 § 3.35.

⁴⁵ Compare Kenneth D. Kochanek et al., *Mortality in the United States, 2016*, CTRS. FOR DISEASE CONTROL & PREV. (Dec. 21, 2017), <https://www.cdc.gov/nchs/products/databriefs/db293.htm> [<https://perma.cc/VQ4W-F3HR>] (showing 2,744,248 resident deaths in 2016), with INTERNAL REVENUE SERV., TABLE 1: ESTATE TAX RETURNS FILED IN 2017, at B9 (2018), https://www.irs.gov/pub/default_path_no_value/17es01fy.xls [<https://perma.cc/9J9F-GMA6>] (showing 12,711 estate tax returns filed in 2017).

⁴⁶ See *supra* Part I.A.

tracks the lifetime circumstance of respondents, it can reveal estate planning trends well in advance of their expression in actual post-mortem transfers.⁴⁷ Among decedents, it can also connect a long history of lifetime behaviors with post-mortem transfers.⁴⁸ Finally, HRS data are available to any researcher, not just those with access to confidential federal estate tax returns.⁴⁹

C. Comparison with Probate Data

As a result of the difficulty in collecting data from probate records, such research is typically limited to one or two locations.⁵⁰ In contrast, the HRS is representative of the entire nation over age fifty.⁵¹ Further, the HRS also includes information on non-probate post-mortem transfers.⁵² Previous research has identified that exclusion of non-probate assets, such as life insurance proceeds, results in a substantial understatement of estate wealth in probate records.⁵³ Additionally, the HRS includes a much broader range of information about both living and deceased respondents and also contains information about estate planning documents prior to the final document.⁵⁴

D. Comparison with Online Convenience-Sample Data

A convenience sample (i.e., non-probability based sample) consists of respondents who are easily accessible, rather than respondents who are probabilistically selected from the population of interest.⁵⁵ Examples of such convenience samples include those passing by at a local mall, students from a researcher's university, and survey takers from online panels such as MTurk, Qualtrics, or professional consumer panels.⁵⁶

⁴⁷ See *infra* Part III.

⁴⁸ See *infra* Part IV.

⁴⁹ Hanke et al., *supra* note 6, at 39.

⁵⁰ See, e.g., *id.*; David Horton, *In Partial Defense of Probate: Evidence from Alameda County, California*, 103 GEO. L.J. 605, 605 (2015) (surveying estate administration in one location).

⁵¹ See Sonnega et al., *supra* note 7, at 576.

⁵² See Marco Francesconi et al., *Unequal Bequests* 8 (Nat'l Bureau of Econ. Research, Working Paper No. 21692, 2015), <https://www.nber.org/papers/w21692.pdf> [<https://perma.cc/5PET-RTQN>].

⁵³ See Joulfaian, *supra* note 6, at 171.

⁵⁴ See *infra* Parts II-IV.

⁵⁵ See Jeremy Kees et al., *An Analysis of Data Quality: Professional Panels, Student Subject Pools, and Amazon's Mechanical Turk*, 46 J. ADVERT. 141, 142 (2017).

⁵⁶ See *id.* at 141.

One concern with online samples is that the quality of responses may vary widely. For example, in one study, Qualtrics and Lightspeed panel respondents performed the worst on measure reliability tests compared with other convenience samples.⁵⁷ They were also more likely to fail attention check questions than either MTurk or student respondents.⁵⁸ Additionally, through the use of virtual private servers, a single online respondent — or even a computer “bot” designed to randomly answer multiple choice questions⁵⁹ — may complete multiple surveys in order to receive multiple payments.⁶⁰

Nevertheless, such online panels are often used when participants are randomly assigned to different experimental groups, because comparisons *between* these groups remain relevant even if a limited share of randomly assigned responses are unrelated noise.⁶¹ Such randomized experiments with online panels have been useful in estate planning research such as testing variations in responses to differing estate planning phrases or testing the effects of various preliminary reminders on estate planning intentions.⁶²

⁵⁷ *Id.* at 151 tbl.5.

⁵⁸ *See id.* at 150.

⁵⁹ *See* Stokel-Walker, *supra* note 37.

⁶⁰ *See* Dennis et al., *supra* note 38, at 16-17; *cf.* Gary Langer, *The Importance of Probability-Based Sampling Methods for Drawing Valid Inferences*, in *THE PALGRAVE HANDBOOK OF SURVEY RESEARCH 7-8* (David L. Vannette & Jon A. Krosnick eds., 2018) (noting that “among the 10 largest opt-in survey panels, 10 percent of panelists produced 81 percent of survey responses”).

⁶¹ *See, e.g.*, John A. Bates & Brian A. Lanza, *Conducting Psychology Student Research via the Mechanical Turk Crowdsourcing Service*, 15 *N. AM. J. PSYCHOL.* 385, 385 (2013); Kevin J. Mullinix et al., *The Generalizability of Survey Experiments*, 2 *J. EXPERIMENTAL POL. SCI.* 109, 111 (2015); Gabriele Paolacci et al., *Running Experiments on Amazon Mechanical Turk*, 5 *JUDGMENT & DECISION MAKING* 411, 411 (2010).

⁶² *See, e.g.*, Russell N. James III, *Creating Understanding and Interest in Charitable Financial and Estate Planning: An Experimental Test of Introductory Phrases*, 17 *J. PERS. FIN.* 9, 9 (2018); Russell N. James III, *Describing Complex Charitable Giving Instruments: Experimental Tests of Technical Finance Terms and Tax Benefits*, 28 *NONPROFIT MGMT. & LEADERSHIP* 437, 437 (2018); Russell N. James III, *Phrasing The Charitable Bequest Inquiry*, 27 *VOLUNTAS: INT'L J. VOLUNTARY & NONPROFIT ORG.* 998, 998 (2016); Russell N. James III, *The Family Tribute in Charitable Bequest Giving: An Experimental Test of the Effect of Reminders on Giving Intentions*, 26 *NONPROFIT MGMT. & LEADERSHIP* 73, 73 (2015); Russell N. James III & Claire Routley, *We the Living: The Effects of Living and Deceased Donor Stories on Charitable Bequest Giving Intentions*, 21 *INT'L J. NONPROFIT & VOLUNTARY SECTOR MARKETING* 109, 109 (2016).

However, these online panels cannot be used to represent the national population.⁶³ Consequently, such non-probability samples, including quota sampling⁶⁴ where a convenience sample is selected so as to mimic targeted demographic characteristics of the national population, “generally they do not support formal statistical inference.”⁶⁵ More authoritatively, the first summary conclusion and recommendation of the American Association for Public Opinion Research Task Force on Online Panels is that “[r]esearchers should avoid nonprobability online panels when one of the research objectives is to accurately estimate population values.”⁶⁶ The report from this blue-ribbon panel headed by nineteen survey research experts, states bluntly, “There currently is no generally accepted theoretical basis from which to claim that survey results using samples from nonprobability online panels are projectable to the general population.”⁶⁷

E. Comparison with Mailed Survey Data

As compared with convenience samples, traditional mailed surveys have the advantage that they can be addressed to a probabilistically-selected sample of residences.⁶⁸ However, one challenge with such surveys is that non-response rates may be high and biased.⁶⁹ As an illustration, one study including a question about charitable bequests⁷⁰ was mailed to 20,000 residences but resulted in only 701 usable surveys

⁶³ See Kees et al., *supra* note 55, at 142 (referencing such online panel surveys, the authors explain that “the extent to which a convenience sample actually represents the entire population cannot be known”); Langer, *supra* note 60, at 9-10.

⁶⁴ See, e.g., Yves Tillé & Alina Matei, *Basics of Sampling for Survey Research*, in THE SAGE HANDBOOK OF SURVEY METHODOLOGY 311, 314 (Christof Wolf et al. eds., 2016) (referencing quota sampling, the authors explain, “In this paradigm of representativity, the statistical inference is not valid. The argument of representativity is fallacious”).

⁶⁵ Ronald D. Fricker, Jr., *Sampling Methods for Online Surveys*, in THE SAGE HANDBOOK OF ONLINE RESEARCH METHODS 162, 166 (Nigel Fielding, Raymond M. Lee & Grant Blank eds., 2d ed. 2017).

⁶⁶ Reg Baker et al., *Research Synthesis: AAPOR Report on Online Panels*, 74 PUB. OPINION Q. 711, 714 (2010).

⁶⁷ *Id.* at 758.

⁶⁸ See Colm O’Muircheartaigh, *Address-Based and List-Based Sampling*, in THE PALGRAVE HANDBOOK OF SURVEY RESEARCH, *supra* note 60, at 363, 365-67.

⁶⁹ See Robert M. Groves, *Nonresponse Rates and Nonresponse Bias in Household Surveys*, 70 PUB. OPINION Q. 646, 646-47 (2006).

⁷⁰ BANK OF AM., THE 2012 BANK OF AMERICA STUDY OF HIGH NET WORTH PHILANTHROPY: ISSUES DRIVING CHARITABLE ACTIVITIES AMONG WEALTHY HOUSEHOLDS 72 (2012), https://scholarworks.iupui.edu/bitstream/handle/1805/5708/2012_bank_of_america_study_of_high_net_worth_philanthropy.pdf [<https://perma.cc/R93P-5VKP>].

in the final sample.⁷¹ Although the study found that 95.4% of high-net-worth-household respondents reported making current donations to charity, given that the entire survey was *about* charitable giving,⁷² it seems appropriate to consider the relative likelihood that a non-charitable person would volunteer their time for free to complete such as survey.

II. NATIONAL ESTATE PLANNING STATISTICS WITH CHARITABLE EXAMPLES

A. *Single-Year Nationally Representative Statistics*

The HRS is ideally suited to provide insight into the nation's estate planning among adults over fifty.⁷³ But, how does this age restriction limit the comprehensiveness of the data on the topic of estate transfers and the estate plans that control those transfers? Decedents aged fifty and above represent 97.9% of all decedents filing estate tax returns, control 98.3% of total gross estate dollars, and transfer 99.6% of all estate dollars donated to charity.⁷⁴ Thus, observing the nation's estate planning circumstances for living respondents beginning at age fifty provides a nearly complete picture of plans that will *actually* control estate transfers, particularly for charitable estate transfers.⁷⁵

⁷¹ *Id.* at 5, 76-77.

⁷² *Id.* at 5.

⁷³ See James III, *The New Statistics of Estate Planning*, *supra* note 4, at 3-5.

⁷⁴ See INTERNAL REVENUE SERV., TABLE 8. ESTATE TAX RETURNS FILED FOR FEMALE 2009 DECEDENTS, B10, C10, F10, G10 (2013), <https://www.irs.gov/pub/irs-soi/09es08yd.xls> [<https://perma.cc/FZE6-WRBT>]; INTERNAL REVENUE SERV., TABLE 7. ESTATE TAX RETURNS FILED FOR MALE 2009 DECEDENTS, B10, C10, F10, G10 (2013), <https://www.irs.gov/pub/irs-soi/09es07yd.xls> [<https://perma.cc/N3YN-V9A3>] (cells B10, C10, F10, and G10 in Table 8 were used in conjunction with cells B10, C10, F10, and G10 in Table 7 to determine the percentage of all decedents filing estate tax returns and the control of total gross estate dollars); see also Eller, *supra* note 6, at 182 fig.L (based on author's calculations using data from these sources).

⁷⁵ See Eller, *supra* note 6, at 182 fig.L.

Table 1. National, Testate, and Charitable Testate Estimated Means (Standard Errors) for Adults over Fifty from 2016 Health and Retirement Study⁷⁶

	(1)	(2)	(3)
	All Individuals (National)	Testate Individuals	Charitable Testate Individuals
Will/Trust	0.463 (0.009)	1	1
Charitable Will/Trust	0.052 (0.003)	0.113 (0.005)	1
Age	65.366 (0.202)	69.104 (0.253)***	68.154 (0.367)*
Male	0.466 (0.003)	0.447 (0.005)***	0.456 (0.017)
Married	0.594 (0.006)	0.654 (0.008)***	0.668 (0.018)
Divorced/ Separated	0.183 (0.005)	0.132 (0.006)***	0.112 (0.011)
Widowed	0.132 (0.003)	0.164 (0.005)***	0.112 (0.012)***
Never Married	0.087 (0.003)	0.047 (0.004)***	0.101 (0.015)***
Any Children	0.893 (0.004)	0.912 (0.006)***	0.743 (0.025)***
Hispanic	0.102 (0.010)	0.032 (0.003)***	0.013 (0.003)***
Non- Hispanic White	0.738 (0.010)	0.889 (0.006)***	0.929 (0.010)***

⁷⁶ UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 2016 CORE (FINAL V2.0) (2019), <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/WK3J-HVFP>] [hereinafter 2016 CORE]; UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: CROSS-WAVE TRACKER FILE (EARLY 2016 V3.0) (2019), <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/F7AA-DKN5>] [hereinafter CROSS-WAVE TRACKER FILE] (based on author's calculations using data from these sources applying weights to project to the national population over fifty); see *Task 4b: How to Set Up a T-Test in NHANES Using SAS Survey Procedures*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/nchs/tutorials/dietary/Advanced/EstimatePrevalence/Task4b.htm> (last visited Jan. 23, 2020) [<https://perma.cc/2DNG-5ZYS>]. The means for binary variables reflect proportions of positive responses. P-values are from weighted t-tests. *Id.*

Non-Hispanic Black	0.106 (0.006)	0.044 (0.003)***	0.032 (0.006)*
Non-Hispanic Other	0.054 (0.004)	0.035 (0.004)***	0.025 (0.006)
Assets (\$100,000 units)	6.052 (0.317)	9.883 (0.512)***	20.106 (2.581)***
Income (\$10,000 units)	9.824 (0.434)	12.160 (0.379)***	18.771 (1.749)***
Years of Education	13.326 (0.066)	14.129 (0.052)***	15.165 (0.079)***
Monthly Religious Attendance	2.310 (0.032)	2.482 (0.038)***	3.165 (0.124)***
20-Word Recall Score	10.104 (0.054)	10.433 (0.067)***	11.164 (0.136)***
Excellent Health	0.093 (0.004)	0.116 (0.006)***	0.155 (0.017)*
Very Good Health	0.317 (0.005)	0.371 (0.007)***	0.427 (0.020)**
Good Health	0.330 (0.005)	0.321 (0.007)	0.266 (0.020)**
Fair Health	0.194 (0.005)	0.142 (0.005)***	0.116 (0.013)*
Poor Health	0.066 (0.002)	0.049 (0.003)***	0.036 (0.008)
Cancer Diagnosis	0.140 (0.003)	0.176 (0.005)***	0.188 (0.016)
Stroke Diagnosis	0.065 (0.003)	0.062 (0.003)	0.052 (0.007)
Heart Diagnosis	0.213 (0.005)	0.242 (0.007)***	0.204 (0.013)**
n	19,928	8,248	842

Note: * $p < .05$, ** $p < .01$, *** $p < .001$ for weighted t-tests, column 2 comparing with non-testate individuals, column 3 comparing with testate individuals without a charitable component.

As an example of using the HRS to reveal national estate planning circumstances, Table 1 presents results related to charitable estate planning. Column 1 estimates the national averages for each variable. It

is important to keep in mind that these are not simply the averages for this sample of the nearly 20,000 individuals participating in the 2016 wave of the HRS.⁷⁷ Instead, each of these responses are individually weighted to account for their relative representativeness of the national population, taking into account both non-response and intentional oversampling, so that they estimate the true national circumstances.⁷⁸

Thus, for example, an estimated 46.3% of U.S. residents over fifty would indicate having a will or a trust in response to the question, “Do you currently have a will that is written and witnessed?”⁷⁹ and subsequently 5.2% would answer “Yes” to the question, “Have you made provisions for any charities in your will or trust?”⁸⁰ The relatively small standard errors suggests that these means are estimated with good precision.⁸¹ For example, a 95% confidence interval gives the range of values which, 95% of the time, will include the true underlying population mean.⁸² This 95% confidence interval is simply the estimated mean, plus or minus 1.96 times the standard error.⁸³ Thus, with 95% probability, the actual testate share of the over-fifty population is between 44.5% and 48.1%, and the share with charitable estate provisions is between 4.6% and 5.8%.⁸⁴

The other variables demonstrate just a small portion of the immense range of information available about HRS participants.⁸⁵ Not only are typical demographic and economic variables available, such as age, marital status, race, ethnicity, education, income, and wealth,⁸⁶ but also

⁷⁷ See *supra* Part I.A. and note 74.

⁷⁸ See *supra* Part I.A.

⁷⁹ UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12, at PT001.

⁸⁰ *Id.* at PT008. Those who refused to answer or didn't know the answer are here treated as if they answered “No.”

⁸¹ See BARBARA ILLOWSKY ET AL., INTRODUCTORY STATISTICS 425 (2018), https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/IntroductoryStatistics-OP_LXn0jei.pdf [<https://perma.cc/HGL4-FKLU>].

⁸² See *id.* at 444.

⁸³ See *id.* at 447.

⁸⁴ See *supra* Table 1 (based on author's calculations using data from this table).

⁸⁵ See UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12 (showing the broad range of information gathered from HRS participants).

⁸⁶ The income (H13ITOT) and wealth (H13ATOTB) variables result not only from an extensive set of questions regarding each possible income source and asset category, but also from a comprehensive set of validated imputation techniques to accurately estimate income and wealth for those who choose not to report their income or assets in some categories. See DELIA BUGLIARI ET AL., RAND HRS DETAILED IMPUTATIONS FILE 2016 (V1) DOCUMENTATION 2, 16-26, 323, 491 (2019), https://www.rand.org/content/dam/rand/www/external/labor/aging/dataproducts/randhrsimp1992_2016v1.pdf [<https://perma.cc/WD3W-J3LM>].

a range of other factors such as scores on cognitive tests,⁸⁷ social interactions including attendance at religious services,⁸⁸ self-rated health,⁸⁹ and health-related diagnoses.⁹⁰

Having a charitable provision in a will or trust may be thought of as a two-step process because a person must first have a will or trust document before he or she can express a charitable intent in that document.⁹¹ Even if a person *would* include a charitable component in their planning documents *if* they had such documents, we cannot observe this intent in the absence of estate planning documents. Thus, column 2 reflects the subset of the population that has the possibility of reporting a charitable estate planning component, i.e., testate individuals.⁹² Finally, column 3 shows the subset of the population that currently reports having a charitable component in their will or trust documents.⁹³

A simple comparison of these columns shows significant differences among these three groups.⁹⁴ For example, as compared with the national population, testate individuals are older, have more income, assets, and years of formal education, are more likely to be married or

⁸⁷ See MARY BETH OFSTEDAL ET AL., DOCUMENTATION OF COGNITIVE FUNCTIONING MEASURES IN THE HEALTH AND RETIREMENT STUDY 7-11 (2005), <http://hrsonline.isr.umich.edu/sitedocs/userg/dr-006.pdf> [<https://perma.cc/3ZN3-FR2S>].

⁸⁸ See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 2016 FINAL RELEASE CODEBOOK SECTION B: DEMOGRAPHICS, at PB082, http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16b_ri.htm [<https://perma.cc/YE6T-6R5Z>]. Here “more than once a week” is coded as eight times per month, “two or three times a month” is coded as 2.5 times per month, and “one or more times a year” is coded as once per month.

⁸⁹ See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 2016 FINAL RELEASE CODEBOOK SECTION C: PHYSICAL HEALTH, at PC001, http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16c_ri.htm [<https://perma.cc/UNJ4-PPXP>] (“Would you say your health is excellent, very good, good, fair, or poor?”).

⁹⁰ See *id.* at PC018, PC036, PC053 (measuring positive answers to the questions, “Has a doctor ever told you that you have cancer or a malignant tumor, excluding minor skin cancer?”, “Has a doctor ever told you that you have had a heart attack, coronary heart disease, angina, congestive heart failure, or other heart problems?”, and “Has a doctor ever told you that you have had a stroke?”, respectively).

⁹¹ See James III, *The New Statistics of Estate Planning*, *supra* note 4, at 30 (reporting offsetting trends in the propensity to have will or trust documents and the propensity to include charity among those with such documents).

⁹² Those who responded “No” (without indicating having a trust) or did not respond to the question, “Do you currently have a will that is written and witnessed?” were not asked, “Have you made provisions for any charities in your will or trust?” See UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12, at PT001, PT008.

⁹³ See *id.* at PT008.

⁹⁴ See *supra* Table 1.

to have been previously diagnosed with cancer, and are less likely to be a racial or ethnic minority.⁹⁵ Those with a charitable estate component, as compared with other testate individuals, report better health, attend religious services more frequently, have higher cognitive scores, more income, assets, and years of formal education, and are less likely to have children or be a racial or ethnic minority.⁹⁶

B. Multiple Regression Analysis

While these simple comparisons are interesting, they do not tell the whole story because these variables are potentially interrelated. For example, if a minority group has substantially less wealth than others, it would not be appropriate to describe the group as less charitably inclined simply because they are less likely to have a charitable component in an estate plan. Instead, what is more helpful is some form of multiple regression allowing a comparison that controls for differences in other factors.⁹⁷

⁹⁵ See *supra* Table 1.

⁹⁶ See *supra* Table 1.

⁹⁷ See, e.g., STATA, PROBIT — PROBIT REGRESSION 4, <https://www.stata.com/manuals13/rprobit.pdf> [<https://perma.cc/4PA2-MCBB>].

Table 2. Marginal Effects from Probit Regression Models with 2016 Health and Retirement Study⁹⁸

	(1)	(2)	(3)	(4)
	Probability of Will/Trust	Charitable Probability among Those with Will/Trust	Overall Probability of Charitable Will/Trust	Underlying Charitable Probability If All Had Documents
Age	0.0176***	0.0004	0.0009***	-0.0018
Male	-0.0253**	-0.0014	-0.0019	0.0018
Married	omitted reference category			
Divorced/ Separated	-0.0838***	0.0052	-0.0033	0.0230
Widowed	-0.0307**	-0.0096	-0.0044	-0.0072
Never Married	-0.1236***	-0.0045	-0.0071*	0.0167
Any Children	0.0046	-0.2156***	-0.0564***	-0.2570***
Non- Hispanic White	omitted reference category			
Hispanic	-0.2657***	-0.0256	-0.0183***	0.0114
Non- Hispanic Black	-0.2372***	-0.0189	-0.0159***	0.0158
Non- Hispanic Other	-0.1346***	-0.0147	-0.0095**	0.0003
Assets (\$100,000 units)	0.0089***	0.0014***	0.0005***	0.0016***
Years of Education	0.0328***	0.0117***	0.0047***	0.0116***

⁹⁸ 2016 CORE, *supra* note 76; UNIV. OF MICH., CROSS-WAVE TRACKER FILE, *supra* note 76. Table 2 is based on author's calculations using data from these sources. See *supra* Table 2. The first three columns report marginal effects for probit regressions and the fourth for the second stage of a two-stage Heckman probit regression including income in the first stage only. See STATA, HECKPROBIT — PROBIT MODEL WITH SAMPLE SELECTION 1-7, <https://www.stata.com/manuals13/rheckprobit.pdf> [<https://perma.cc/3XT7-GSRX>] [hereinafter HECKPROBIT].

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Monthly Religious Attendance	0.0089***	0.0105***	0.0029***	0.0137***
20-Word Recall Score	0.0061***	0.0022*	0.0010***	0.0021
Excellent Health	0.1320***	0.0173	0.0110	0.0046
Very Good Health	0.0965***	0.0003	0.0046	-0.0140
Good Health	0.0525**	-0.0151	-0.0016	-0.0290
Fair Health	0.0048	0.0009	-0.0003	0.0007
Poor Health		omitted reference category		
Cancer Diagnosis	0.0528***	0.0078	0.0044	0.0046
Stroke Diagnosis	-0.0218	0.0184	0.0031	0.0299
Heart Diagnosis	0.0336**	-0.0109	-0.0019	-0.0187

Note: * p<.05, ** p<.01, *** p<.001

Table 2 reports the marginal effects (the estimated instantaneous effect that a change in a particular explanatory variable has on the predicted probability of the measured outcome when the other variables are set to their sample means) for four such regressions.⁹⁹ The starred results are statistically significant, meaning that they would be unlikely to arise if there were no underlying differences in the population.¹⁰⁰ The first two columns show the charitable estate planning decision broken into two steps.¹⁰¹ The first step, column 1, reflects the probability of having will or trust documents and the second step, column 2, reflects the probability of including charity among those who have such

⁹⁹ See *Computing Marginal Effects for Discrete Dependent Variable Models*, SAS, <https://support.sas.com/rnd/app/ets/examples/margeff/index.html> (last visited Jan. 24, 2020) [<https://perma.cc/DAA5-AXPA>]; STATA, HECKPROBIT POSTESTIMATION — POSTESTIMATION TOOLS FOR HECKPROBIT 1-6, <https://www.stata.com/manuals/rheckprobitpostestimation.pdf> [<https://perma.cc/3SAC-DMFN>]; STATA, MARGINS — MARGINAL MEANS, PREDICTIVE MARGINS, AND MARGINAL EFFECTS 1, <https://www.stata.com/manuals13/rmargins.pdf> [<https://perma.cc/Y5FG-5T7B>].

¹⁰⁰ See ILLOWSKY ET AL., *supra* note 81, at 513.

¹⁰¹ See *supra* Table 2.

documents.¹⁰² These two steps are combined in column 3 reflecting the probability, among the entire population, of having a charitable will or trust document.¹⁰³

Breaking these two steps apart is critical to understanding the underlying relationships. For example, column 3 shows that having children is associated with a significant decrease in the probability of having a charitable estate plan.¹⁰⁴ The results in columns 1 and 2 show that this is not driven by a decreased propensity to have estate planning documents (column 1), but by a decreased propensity to include charity in those documents (column 2).¹⁰⁵ Conversely, the negative association between minority racial or ethnic status and the probability of having a charitable estate plan (column 3) is driven by a decreased propensity to have documents (column 1), rather than by any significant difference in the propensity to include charity among those who have documents (column 2).¹⁰⁶ Other factors, such as wealth, education, frequency of religious attendance, and cognitive scores increase both the probability of having estate planning documents (column 1) and the probability of including charity among those who have such documents (column 2).¹⁰⁷

Finally, the fourth column attempts to estimate the association between each variable and the underlying interest in including charity in an estate plan, controlling for the non-random nature of obtaining estate planning documents.¹⁰⁸ The problem here is that we can't observe the charitable estate planning preferences of those who don't have estate planning documents. Because the likelihood of completing estate planning documents is not random, the analysis (reported in column 2) estimating associations for this (testate) group's charitable estate preferences may not reflect the associations found in the general population.¹⁰⁹ The results in column 4 attempt to control for this issue by estimating associations with the willingness to include charity in a hypothetical world in which everyone had estate planning documents.¹¹⁰

¹⁰² See *supra* Table 2.

¹⁰³ See *supra* Table 2.

¹⁰⁴ See *supra* Table 2.

¹⁰⁵ See *supra* Table 2.

¹⁰⁶ See *supra* Table 2.

¹⁰⁷ See *supra* Table 2.

¹⁰⁸ See Christopher Winship & Robert D. Mare, *Models for Sample Selection Bias*, 18 ANN. REV. SOC. 327, 340-41 (1992); STATA, HECKPROBIT, *supra* note 98, at 7.

¹⁰⁹ See Winship & Mare, *supra* note 108; STATA, HECKPROBIT, *supra* note 98, at 7.

¹¹⁰ See Winship & Mare, *supra* note 108; STATA, HECKPROBIT, *supra* note 98, at 7.

Several practical realities emerge from these analyses. The substantial and significant negative association between minority racial or ethnic status and charitable planning in column 1 (including all respondents) disappears in column 2 (including only those who have documents) and column 4 (including all respondents but controlling for the probability of having documents).¹¹¹ This indicates that the initial difference is driven entirely by an estate planning documentation barrier.¹¹² The documentation barrier among minorities shown in column 1 matches previous research finding lower access to formal legal services among minorities reflected by, for example, decreased likelihood of having personal network ties to lawyers,¹¹³ decreased likelihood of using legal representation (such as in employment discrimination cases),¹¹⁴ and decreased likelihood even of being able to get a response when requesting representation from a lawyer.¹¹⁵ Once this documentation barrier is controlled for in column 4, all three minority categories have insignificant but positive associations with including charity.¹¹⁶ This matches results from a different nationally representative study, showing relatively higher self-reported interest in charitable estate planning among Hispanics, African Americans, and “other race” minorities.¹¹⁷

Although many factors are significant predictors of who obtains estate planning documents (column 1), once a person is actually in the law office to complete such documents (columns 2 or 4), the interest in charity is predicted to some extent by greater wealth, education, and religious attendance, but is overwhelmingly predicted by childlessness.¹¹⁸

¹¹¹ See *supra* Table 2.

¹¹² See *supra* Table 2.

¹¹³ See Erin York Cornwell et al., *Networking in the Shadow of the Law: Informal Access to Legal Expertise Through Personal Network Ties*, 51 *LAW & SOC'Y REV.* 635, 660 (2017).

¹¹⁴ See Amy Myrick et al., *Race and Representation: Racial Disparities in Legal Representation for Employment Civil Rights Plaintiffs*, 15 *N.Y.U. J. LEGIS. & PUB. POL'Y* 705, 707 (2012).

¹¹⁵ See Brian Libgober, *Getting a Lawyer While Black: A Field Experiment*, 24 *LEWIS & CLARK L. REV.* 53, 53 (2019).

¹¹⁶ See *supra* Table 2.

¹¹⁷ See Jennifer Lehman & Russell N. James III, *The Charitable Bequest Gap Among African-Americans: Exploring Charitable, Religious, and Family Estate Planning Attitudes*, 17 *J. PERS. FIN.* 43, 50 (2018).

¹¹⁸ See *supra* Table 2.

Over the last twenty-five years, much previous research has applied multiple regression analysis to the national HRS data¹¹⁹ to investigate covariates of the lifetime use of wills and trusts,¹²⁰ advance directives (durable powers of attorney and living wills, either separately or combined),¹²¹ and taxable lifetime transfers to heirs.¹²² For example, a 1996 study using 1993 data for adults aged seventy and older reported

¹¹⁹ Including data from an HRS auxiliary study designated as *The Asset and Health Dynamics Among the Oldest Old* (AHEAD). See UNIV. OF MICH., AHEAD 1993-1995 CORE, <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/JK5Y-WFPZ>]; Beth J. Soldo et al., *Asset and Health Dynamics Among the Oldest Old: An Overview of the AHEAD Study*, 52B J. GERONTOLOGY: SERIES B (SPECIAL ISSUE) 1 (1997).

¹²⁰ See, e.g., Shinae Choi et al., *Do Older Adults with Alzheimer's Disease Engage in Estate Planning and Advance Care Planning Preparation?*, 23 AGING & MENTAL HEALTH 872, 876 (2019); Marsha A. Goetting & Peter Martin, *Characteristics of Older Adults with Written Wills*, 22 J. FAM. & ECON. ISSUES 243, 253-55 (2001); Russell N. James III, *Health, Wealth, and Charitable Estate Planning: A Longitudinal Examination of Testamentary Charitable Giving Plans*, 38 NONPROFIT & VOLUNTARY SECTOR Q. 1026, 1033 (2009) [hereinafter *Health, Wealth, and Charitable Estate Planning*]; Russell N. James III et al., *The Growth of Charitable Estate Planning Among Americans Nearing Retirement*, 18 FIN. SERVICES REV. 141, 151-52 (2009) [hereinafter *The Growth of Charitable Estate Planning*]; Catheryn S. Koss & Tamara A. Baker, *Where There's a Will: The Link Between Estate Planning and Disparities in Advance Care Planning by White and Black Older Adults*, 40 RES. ON AGING 281, 291 (2018); Jieun Lee, *Estate Planning Among the U.S. Elderly: Focusing on Wills*, 43 J. KOREAN HOME ECON. ASS'N 113, 125 (2005) [hereinafter *Estate Planning*]; Lance Palmer et al., *Will Adoption and Life Events Among Older Adults*, 15 FIN. SERVICES REV. 281, 291 (2006); Marsha Anderson Goetting, *Older Adults, Bequests, and Wills* 79 (1996) (unpublished Ph.D. dissertation, Iowa State University) (on file with Iowa State University Digital Repository), <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=12148&context=rtd> [<https://perma.cc/F7HH-H9TP>]; Jieun Lee, *Planned Bequests: Decision to Have a Will and Distributive Preferences Among the Very Old*, at ix, 110 (Aug. 2000) (unpublished Ph.D. dissertation, Purdue University) (on file with Purdue University), <https://docs.lib.purdue.edu/dissertations/AAI3018236/> [<https://perma.cc/58KM-AH8E>] [hereinafter *Planned Bequests*]; Victoria Levin, *Ignoring Certain Certainties: Denial of Death and Will-Holding*, in CHOICES AND CONSEQUENCES: DECISIONS ON HEALTH, WEALTH, AND EMPLOYMENT 76, 124-27 (Aug. 3, 2010) (unpublished Ph.D. dissertation, Harvard University) (on file with author) <https://search.proquest.com/docview/815847946> [<https://perma.cc/T7KY-RTEU>].

¹²¹ See, e.g., Choi et al., *supra* note 120, at 876; Faith P. Hopp, *Preferences for Surrogate Decision Makers, Informal Communication, and Advance Directives Among Community-Dwelling Elders: Results from a National Study*, 40 GERONTOLOGIST 449, 455 (2000); Koss & Baker, *supra* note 120, at 293; Catheryn S. Koss, *Beyond the Individual: The Interdependence of Advance Directive Completion by Older Married Adults*, 65 J. AM. GERIATRICS SOC'Y 1615, 1618 (2017); Catheryn S. Koss, *Does Religiosity Account for Lower Rates of Advance Care Planning by Older African Americans?*, 73 JOURNALS GERONTOLOGY: SOC. SCI. 687, 692 (2018).

¹²² See, e.g., David Joulfaian & Kathleen McGarry, *Estate and Gift Tax Incentives and Inter Vivos Giving*, 57 NAT'L TAXJ. 429, 436, 441 (2004); McGarry, *supra* note 6, at 338.

nationally representative descriptive, bivariate, and multiple logistic regression analyses for the use of will documents.¹²³ These early multiple logistic regression results showed that having a signed and witnessed will document was negatively associated with minority racial status and positively associated with wealth and education.¹²⁴ Similarly, another study analyzing this 1993 data (finding 66% of adults aged seventy and over having wills)¹²⁵ presented a multiple logistic regression model, finding that having a will document was positively associated with assets (particularly housing),¹²⁶ income, age, education, having a financial advisor, volunteering, making charitable donations, and was negatively associated with being Hispanic, Black, or other minority race, or living in a community property state.¹²⁷ Another multiple regression on will holding using HRS data from 1993-2006 found that having estate planning documents was negatively associated with being Hispanic or non-Hispanic Black, but positively associated with greater self-reported health, wealth, and previous diagnosis with cancer, heart disease, and arthritis.¹²⁸ Another study using nationally representative data from the 2006 HRS found that 56.1% of adults above the age of fifty reported having will or trust documents, and that those without documents were significantly more likely to be Hispanic or non-Hispanic Black, less educated, less wealthy, younger, unmarried, and with lower self-reported health.¹²⁹ More recently, another study reporting nationally representative descriptive and multiple logistic regression results for the likelihood of having will documents, durable powers of attorney, and living wills for those aged sixty-five and above using 2012 HRS data, found that the likelihood of having will documents was negatively associated with being Hispanic or non-Hispanic Black or being in the West census region, but was positively associated with income, wealth, homeownership, education, and

¹²³ See Goetting, *supra* note 120, at 31-34, 56-58, 70, 79.

¹²⁴ See *id.* at 70, 79; see also Goetting & Martin, *supra* note 120, at 255.

¹²⁵ Lee, *Planned Bequests*, *supra* note 120, at 91.

¹²⁶ *But cf.* Russell N. James III & Christopher Baker, *Targeting Wealthy Donors: The Dichotomous Relationship of Housing Wealth with Current and Bequest Giving*, 17 INT'L J. NONPROFIT & VOLUNTARY SECTOR MARKETING 25, 29 (2012) (showing in multiple regression analyses with both HRS data and Australian probate data that although net worth and homeownership were positively associated with charitable estate planning, having a greater share of net worth held as housing was negatively associated with charitable estate planning).

¹²⁷ Lee, *Estate Planning*, *supra* note 120, at 125; Lee, *Planned Bequests*, *supra* note 120, at 110.

¹²⁸ Levin, *supra* note 120, at 124-27.

¹²⁹ See James III, *Health, Wealth, and Charitable Estate Planning*, *supra* note 120, at 1031.

working full-time.¹³⁰ Another study reporting nationally representative descriptive and multiple regression results for non-Hispanic Blacks and non-Hispanic whites age sixty-five and older, found an interrelated documentation barrier for Black respondents in both will documents and advance directives.¹³¹

C. Multi-Year Nationally Representative Statistics

Because the HRS produces nationally representative data every two years, it is possible to observe national trends across time. For example, among adults aged fifty-five and over with will or trust documents, the share including charity was 8.3%, 9.6%, 9.6%, 9.4%, 10.1%, 10.2%, 10.5%, 10.4%, 11.0%, and 11.4% in the even years from 1998-2016 (i.e., years when the HRS survey was conducted), respectively.¹³² This upward trend is explained by rising levels of childlessness and education.¹³³ This explanation is important because future levels of childlessness and education will continue to climb for many years to come in this age group.¹³⁴

However, a potentially offsetting trend is the reduction in the use of will documents. In these same years the share of living adults aged fifty-five and over who reported having a will document but did not report having a funded trust was 53.9%, 52.4%, 51.9%, 48.1%, 47.6%, 45.8%, 43.9%, 42.1%, 40.7%, and 39.2%, in the even years from 1998 to 2016, respectively.¹³⁵ A previous analysis showed a consistent decrease in the share of adults aged fifty-five and over using will documents (without funded trusts) from 1998 to 2012 across all age groups,¹³⁶ wealth

¹³⁰ Choi et al., *supra* note 120, at 875-76.

¹³¹ See Koss & Baker, *supra* note 120, at 281, 286.

¹³² See UNIV. OF MICH., CROSS-WAVE TRACKER FILE, *supra* note 76; UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 1998-2016 CORE, <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/QZ7L-FW9B>] [hereinafter 1998-2016 CORE]. The percentages are based on the author's calculations using data from these sources applying sample weights. Age is restricted to fifty-five and over because the HRS is designed to represent the over fifty population every sixth year (e.g., 1998, 2004, 2010, 2016) when new respondent cohorts are added, but represents the over-fifty-two and over-fifty-four population in the two intervening waves, respectively.

¹³³ James III et al., *The Growth of Charitable Estate Planning*, *supra* note 120, at 151.

¹³⁴ See James III, *The New Statistics of Estate Planning*, *supra* note 4, at 12.

¹³⁵ See UNIV. OF MICH., 1998-2016 CORE, *supra* note 132; UNIV. OF MICH., CROSS-WAVE TRACKER FILE, *supra* note 76.

¹³⁶ See James III, *The New Statistics of Estate Planning*, *supra* note 4, at 15-16.

levels,¹³⁷ gender and marital status groups,¹³⁸ education levels,¹³⁹ and race or ethnicity groups.¹⁴⁰ In the meantime there has been some growth in the use of funded trusts, but not enough to offset the decline in the use of will documents. In the even years from 1998 to 2016, the share of adults aged fifty-five and over who reported having a funded trust was 7.8%, 9.3%, 9.3%, 10.7%, 10.9%, 10.9%, 10.9%, 11.0%, 11.2%, and 11.8%, respectively.¹⁴¹

III. LIFETIME (WITHIN-PERSON) ESTATE PLANNING CHANGES WITH CHARITABLE EXAMPLES

The previous results showing multiple regression analyses and single-year nationally representative statistics treat the HRS data as cross-sectional data.¹⁴² The multi-year nationally representative statistics treat the HRS data as repeated cross-sectional data.¹⁴³ However, because HRS data are longitudinal, they can also track within-person changes across time¹⁴⁴ — such as changes in estate planning — because respondents repeatedly participate across their lifetimes.¹⁴⁵ Thus, for example, one study used regression analysis to track predictors of the addition of will or trust documents between the 1996 and 2000 survey waves among those who did not initially have such documents.¹⁴⁶ Another used all waves from 1995 to 2006, finding that the addition of a charitable estate planning component was associated with an increase in wealth or self-reported health, while deleting the charitable component was associated with the birth of the first grandchild or ceasing current charitable donations.¹⁴⁷

In addition to exploring factors that predict estate planning changes, the HRS data can also be used to identify factors that change *following* estate planning. For example, one study, comparing people of similar

¹³⁷ See *id.* at 25.

¹³⁸ See *id.* at 23.

¹³⁹ See *id.* at 21.

¹⁴⁰ See *id.* at 18.

¹⁴¹ UNIV. OF MICH., 1998-2016 CORE, *supra* note 132; UNIV. OF MICH., CROSS-WAVE TRACKER FILE, *supra* note 76.

¹⁴² See generally *What Are Longitudinal Data?*, BUREAU LAB. STAT., <https://www.nlsinfo.org/content/getting-started/what-are-longitudinal-data> (last visited Jan. 25, 2020) [<https://perma.cc/49UE-47NK>].

¹⁴³ See generally *id.*

¹⁴⁴ See *id.*

¹⁴⁵ See Sonnega et al., *supra* note 7, at 579.

¹⁴⁶ See Palmer et al., *supra* note 120, at 282.

¹⁴⁷ James III, *Health, Wealth, and Charitable Estate Planning*, *supra* note 120, at 1035-37.

initial wealth, found that those with a charitable component in their estate plan grew their subsequent net worth at a rate 50-100% faster than those without such a charitable plan, leading to speculation that “a charitable estate plan could encourage wealth accumulation by adding a pro-social or moral dimension to wealth holding.”¹⁴⁸

As an illustration of the usefulness of longitudinal data, consider this pragmatic question for nonprofit fundraisers: might encouraging charitable estate planning cannibalize, or otherwise reduce, donors’ *current* charitable giving? This is a real issue of concern, as Professors Adrian Sargeant and Jen Shang note in their popular fundraising textbook, “professional fundraisers ‘hesitate to seek legacy income’ because they fear it will cannibalize their annual fund and capital appeals”¹⁴⁹

Single-year data show that those who have a charitable component in their estate plan make more current donations than those without such an estate plan.¹⁵⁰ But that doesn’t address this question because the people with a charitable estate plan are different from (and presumably more charitable than) the people without a charitable estate plan. The real question is not about how *different* people behave (observable in single-year data), it is about how a person’s behavior *changes* after adding a charitable component (observable only with longitudinal data).

The HRS data allow for such a “before and after” comparison. Among those who added charity to their estate plan,¹⁵¹ their annual charitable giving (in inflation-adjusted dollars) during the surveys given eight, six, four, and two years before the survey in which they reported the estate planning addition averaged \$5,032, \$3,528, \$4,073, and \$4,786, respectively.¹⁵² Their annual charitable giving during the surveys given

¹⁴⁸ Russell N. James III, *Charitable Estate Planning and Subsequent Wealth Accumulation: Why Percentage Gifts May Be Worth More Than We Thought*, 10 INT’L J. EDUC. ADVANCEMENT 24, 25 (2010).

¹⁴⁹ ADRIAN SARGEANT ET AL., FUNDRAISING PRINCIPLES AND PRACTICE 381 (2010) (quoting K. H. Caldwell, *Stalking the Silent Bequest: Three Myths About Bequest Donors*, 29 FUND RAISING MGMT. 24, 25 (1998)).

¹⁵⁰ See James III, *Health, Wealth, and Charitable Estate Planning*, *supra* note 120, at 1031.

¹⁵¹ This excludes those who always — or never — reported having a charitable estate plan, as it is not possible to observe both the “before” and “after” for these respondents. *See id.*

¹⁵² See UNIV. OF MICH., 1998-2016 CORE, *supra* note 132. “Before” occurs in a year when a respondent answered “No” to the question, “Have you made provisions for any charities in your will or trust?”, or indicated they had no will or trust documents, but then in a later year answered “Yes” to this question. *See* UNIV. OF MICH., CROSS-WAVE TRACKER FILE, *supra* note 76. The number of waves before the change is defined by the first subsequent wave in which a person answered “Yes” to the charitable estate

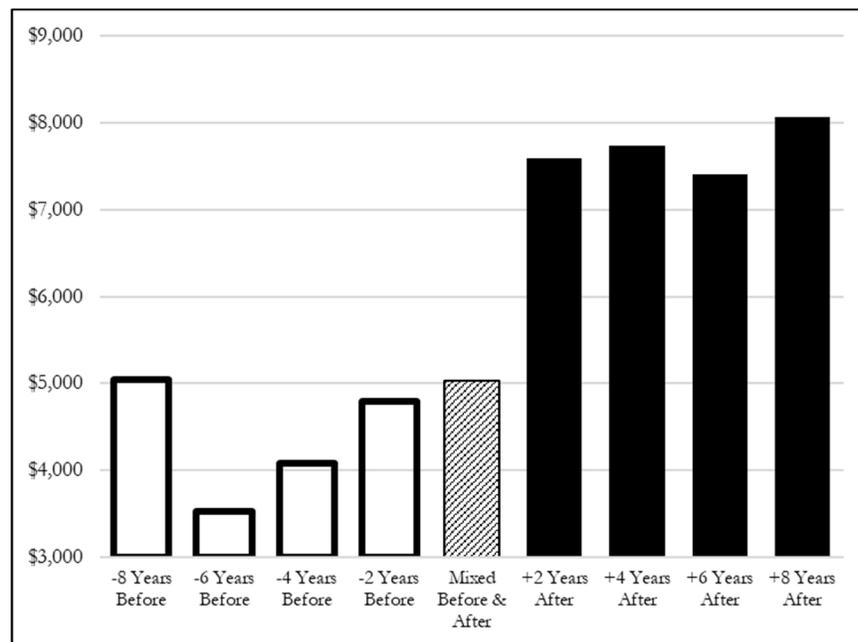
two, four, six, and eight years after they reported the estate planning addition averaged \$7,594, \$7,738, \$7,405, and \$8,060, respectively.¹⁵³ Thus, using these 8,891 “before and after” observations from 1993-2016, inflation-adjusted giving was, on average, about 77% greater after the charitable estate planning component was added than it was before (\$7,699 versus \$4,355).¹⁵⁴

question. See UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12, at PT001, PT008. “After” occurs when a person answers “Yes” to the charitable estate question, but in a previous year had answered “No”, or indicated that they had no will or trust documents. *Id.* The number of waves after the change is defined by the most recent wave prior to the “Yes” response in which a “No” response, or an indication that no will or trust documents existed, was given. *Id.*

¹⁵³ See UNIV. OF MICH., 1998-2016 CORE, *supra* note 132. The figures are based on the author’s calculations using data from this source. The average giving in the survey when the estate addition was first reported was \$5,025. However, it is impossible to tell how much of this giving occurred before or after the charitable estate planning component was added. Current donations are reported for the calendar year *prior to* the date of the survey and the estate plan components are for the *current* plan at the time of the survey.

¹⁵⁴ See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY/AHEAD: 1993-2016 CORE, <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/QZ7L-FW9B>] [hereinafter 1993-2016 CORE]. The figures are based on the author’s calculations using data from this source. Other comparisons generated similar results. For example, the 77% increase treated the overall average for each wave as a separate observation (per-wave average growth across persons). Treating each person as a separate observation across all waves (per-person average growth across waves) resulted in a 74% average increase when comparing the four “after” years with the four “before” years within each person. Comparing all before and after waves, rather than just the four waves before and after the charitable estate planning addition resulted in an 82% (per-wave) or 79% (per-person) increase and included 10,739 observations. Including only the two waves before and the two waves after the charitable estate planning addition resulted in a 73% (per-wave) or 70% (per-person) increase.

Figure 1. Average Annual Charitable Donations Before and After Adding Charity to an Estate Plan



Additionally, among those who added charity to their estate plan, the share giving at least \$1,000 per year (inflation-adjusted)¹⁵⁵ in the years eight, six, four, and two years prior to the charitable plan was 52.0%, 51.3%, 51.3%, and 51.5%, respectively.¹⁵⁶ The share making such gifts in the years two, four, six, and eight years after the charitable estate plan was 57.1%, 60.5%, 63.2%, and 66.4%, respectively.¹⁵⁷ Thus, on average, the propensity to make annual inflation-adjusted gifts of \$1,000 or more rose from 51.5% in the years before the charitable component was added to the estate plan to 61.8% in the years after the charitable

¹⁵⁵ Measured in January 2012 dollars based on data from the Consumer Price Index inflation calculator. See CPI INFLATION CALCULATOR, <https://cpiinflationcalculator.com/> (last visited Jan. 30, 2020) [<https://perma.cc/PE4E-GU5V>]. Because the HRS asks only about giving above \$500 annually, and the inflation-adjusted value of \$500 is different in each wave, it is necessary to pick a threshold amount above this level. See UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: 2016 FINAL RELEASE CODEBOOK SECTION Q: ASSETS AND INCOME, PQ453, http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16q_hi.htm [<https://perma.cc/9C3Q-W227>].

¹⁵⁶ See UNIV. OF MICH., 1993-2016 CORE, *supra* note 154 (based on author's calculations using data from this source).

¹⁵⁷ *Id.*

component was added to the estate plan.¹⁵⁸ This increase in the propensity to donate is particularly notable as several studies have found that the overall propensity to donate typically begins to decline at around age sixty-five to seventy-five,¹⁵⁹ but the median age for those measured in the two, four, six, and eight years following the addition of a charitable component was seventy-three, seventy-five, seventy-five, and seventy-four, respectively.¹⁶⁰

There are, of course, plausible causation arguments, e.g., once a person treats a charity “like a family member” by placing the charity in their estate plan, this increased connection is subsequently expressed in current giving, or once the ultimate destination of the money is determined, a donor might more easily decide to give earlier in order to personally witness the impact of the gift. However, outside of conducting experimental research we cannot say with certainty that the estate planning addition *causes* the increase in charitable giving, only that it *precedes* it.¹⁶¹ Nevertheless, we can say that these results do not support a cannibalization argument. Additionally, we can eliminate some alternative causal pathways to the extent they are measured in the HRS data.¹⁶² But beyond these measured pathways, we are left with both an objective outcome — giving increases dramatically following the estate planning change — and many potential subjective explanations as to why this happens.

IV. LINKING LIFETIME AND POST-MORTEM ESTATE PLANNING DATA WITH CHARITABLE EXAMPLES

Beyond the previously discussed analyses of single-year, multi-year, and longitudinal *lifetime* data, an additional — and largely unused — potential of the HRS lies in its gradual accumulation of *post-mortem*

¹⁵⁸ *Id.*

¹⁵⁹ See Pamala Wiepking & Russell N. James III, *Why Are the Oldest Old Less Generous? Explanations for the Unexpected Age-Related Drop in Charitable Giving*, 33 *AGEING & SOC'Y* 486, 487 (2013) (reviewing results from ten previous studies).

¹⁶⁰ UNIV. OF MICH., 1993-2016 CORE, *supra* note 154 (based on author's calculations using data from this source).

¹⁶¹ See Michael Rutter, *Beyond Longitudinal Data: Causes, Consequences, Changes, and Continuity*, 62 *J. CONSULTING & CLINICAL PSYCHOL.* 928, 937 (1994).

¹⁶² For example, the relationship remains even when controlling for changes in wealth. A fixed effects regression on intra-person changes using all years of data (1993-2016) reporting coefficients with standard errors in parentheses generates: \$Donated = 1294.42 (25.45) + 1282.56 (165.34) EstatePlanCharityDummy + 4.32 (0.27) AssetsIn\$10,000units. UNIV. OF MICH., 1993-2016 CORE, *supra* note 154 (based on author's calculations using data from this source).

data.¹⁶³ It is not only that the HRS has now accumulated a sufficient number of decedents (over 14,000)¹⁶⁴ to permit sophisticated statistical analysis, it is also that, unlike post-mortem data from probate and estate tax files, the HRS post-mortem data connects with a potentially long history of lifetime behaviors and circumstances¹⁶⁵ including estate planning.¹⁶⁶ Additionally, unlike the lifetime reports of estate planning from the HRS, the HRS decedent data includes the specific dollar amounts transferred to different recipients.¹⁶⁷ Thus, for example, one analysis found that childless decedents left larger dollar amounts to charity, both absolutely and as a multiple of their lifetime annual giving.¹⁶⁸

Of course, probate and estate tax data also reveal the distributions of the final estate plan, but unlike HRS data they do not include any estate plans prior to the final plan.¹⁶⁹ Observing these previous plans may be important for a variety of estate planning research questions. For example, in a charitable context, nonprofit organizations may be particularly interested in the timing of when such charitable estate decisions are actually made.¹⁷⁰ Estate tax data reveal that decedents over age eighty-five control the majority of charitable estate dollars transferred.¹⁷¹ However, this may not reflect the age of decision-making because decedent documents could have been completed many years prior to death. Probate data adds the signing date of the final will. Although no U.S. probate studies report age at will signing among charitable decedents, a nationally representative sample of probate

¹⁶³ See Fisher & Ryan, *supra* note 8, at 3.

¹⁶⁴ See UNIV. OF MICH., 1995-2016 EXIT AND POST-EXIT, *supra* note 19 (based on author's calculations using data from these sources).

¹⁶⁵ See Sonnega et al., *supra* note 7, at 580.

¹⁶⁶ See, e.g., Russell N. James III, *Wills, Trusts, and Charitable Estate Planning: An Analysis of Document Effectiveness Using Panel Data*, 20 J. FIN. COUNSELING & PLAN. 3, 8 (2009) [hereinafter *Wills, Trusts, and Charitable Estate Planning*] (comparing amount in estate funds based on length of existence).

¹⁶⁷ See, e.g., UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12.

¹⁶⁸ See James III, *The Myth*, *supra* note 21, at 671. Additionally, in this 1995-2006 data only 9.75% of decedents (581 of 5,957) were childless, but these childless decedents accounted for 51.86% of all charitable dollars transferred (\$26,057,269 of \$50,244,418). See *id.* at 664 (based on author's calculations using data from this source).

¹⁶⁹ Excepting rare cases, such as where revoking the final will document revived the previous will. See UNIF. PROB. CODE § 2-509 (amended 2010), 8 U.L.A. 226 (2013).

¹⁷⁰ Russell N. James III & Christopher Baker, *The Timing of Final Charitable Bequest Decisions*, 20 INT'L J. NONPROFIT & VOLUNTARY SECTOR MARKETING 277, 277-78 (2015).

¹⁷¹ See DAVID JOULFAIAN, BASIC FACTS ON CHARITABLE GIVING 27 (2005), <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-95.pdf> [<https://perma.cc/B5UM-NQ7X>].

records from Australia found that over 75% of all charitable dollars were transferred by wills *signed* at aged eighty or older.¹⁷² Additionally, the majority of charitable dollars were controlled by wills signed within five years of death.¹⁷³

One might argue that the execution of this final will represents the timing of decision-making. However, a potential counter-argument is that the final will document may have simply duplicated long-held charitable provisions in prior wills. Thus, the real date of charitable decision-making could have been decades earlier, with the signing date of the final document representing only the last recorded continuation of that prior decision.

Addressing this possibility requires observing estate plans prior to the final plan, which the HRS data permits.¹⁷⁴ This data reflect a high degree of older-age and end-of-life fluidity in charitable estate planning.¹⁷⁵ For example, among decedents who transferred dollars to charity at death, 61% personally reported at some point within the last five years of life that they *had no charitable component* in their estate plan at that time.¹⁷⁶ Thus, *adding* a charitable component near the end of life is common. Conversely, among those aged seventy and over who indicated that they had a charitable component in their estate plans, only 55% of those who answered the same question ten years later still reported having any charitable component in their estate plans.¹⁷⁷ Thus, *dropping* a charitable component near the end of life is also common. The actual charitable estate planning fluidity is likely even greater than this 55% retention level suggests, because the HRS asks only if the respondent has “made provisions for any charities in your will or trust?”¹⁷⁸ and thus does not capture the additional fluidity from changing charitable amounts or charitable beneficiaries. Given this high end-of-life fluidity in charitable estate planning, the surrounding end-of-life circumstances may be particularly important. Table 3 demonstrates how the HRS can

¹⁷² James III & Baker, *supra* note 170, at 279.

¹⁷³ *Id.*

¹⁷⁴ *See id.* at 280.

¹⁷⁵ *See id.* at 281.

¹⁷⁶ *Id.* at 280.

¹⁷⁷ The retention rates among those aged seventy and over initially indicating a charitable estate component and also answering the same question ten years later for 1993/4-2004, 1995/6-2006, 1998-2008, 2000-2010, 2002-2012, 2004-2014, and 2006-2016 were 51%, 56%, 61%, 53%, 55%, 54%, 55%, respectively. UNIV. OF MICH., 1993-2016 CORE, *supra* note 154 (based on author’s calculations using data from this source).

¹⁷⁸ UNIV. OF MICH., CODEBOOK SECTION T, *supra* note 12, at PT008.

provide information about other circumstances arising in these last years of life.

Table 3. End-of-Life Behaviors Among Charitable and Non-charitable Decedents¹⁷⁹

	Years prior to death								
	0-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18
<u>Charitable Bequest Decedents</u>									
Donate									
\$1,000+/ Year	39.3%	39.7%	43.6%	49.1%	52.7%	53.4%	53.3%	53.9%	56.9%
Volunteer									
2+ Hours/ Week	10.6%	15.4%	16.1%	21.0%	26.4%	26.1%	26.4%	31.7%	37.0%
20-Word Recall Score	7.26	7.98	8.52	8.85	9.05	9.71	10.17	10.61	10.49
<u>Non-Charitable Bequest Decedents</u>									
Donate									
\$1,000+/ Year	16.5%	19.1%	20.5%	22.5%	23.4%	24.8%	25.2%	27.0%	27.8%
Volunteer									
2+ Hours/ Week	5.0%	7.0%	9.3%	10.5%	12.7%	13.4%	14.3%	15.5%	15.9%
20-Word Recall Score	7.13	7.38	7.84	8.25	8.71	9.02	9.40	9.68	10.04

Table 3 reveals that decedents leaving charitable bequests were more likely than non-charitable decedents to be volunteering and making

¹⁷⁹ See UNIV. OF MICH., 1995-2016 EXIT AND POST-EXIT, *supra* note 19; UNIV. OF MICH., HEALTH AND RETIREMENT STUDY/AHEAD: 1992-2016 CORE, <http://hrsonline.isr.umich.edu/index.php?p=avail> [<https://perma.cc/QZ7L-FW9B>]; UNIV. OF MICH., HEALTH AND RETIREMENT STUDY: CODEBOOK SECTION G: FUNCTIONAL LIMITATIONS AND HELPERS, at PG086, http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16g_ri.htm [<https://perma.cc/7ZYC-SS7T>]. “Years prior to death” is an approximation reflecting the survey wave in which the information was collected. “Donate (\$1,000+/year)” indicates if the decedent reported making total contributions to religious or charitable organizations in the previous calendar year in excess of \$1,000 in January 2019 inflation-adjusted dollars based on data from the Consumer Price Index inflation calculator. See CPI INFLATION CALCULATOR, *supra* note 155. “Volunteering (2+ hrs/week)” indicates that the respondent reported “doing volunteer work for religious, educational, health-related or other charitable organizations” totaling at least 100 hours in the previous twelve months. See OFSTEDAL ET AL., *supra* note 87, at 8-9 (using a “word recall score” that combines immediate and delayed word recall score and ranges from zero to twenty).

substantial gifts to charity during life.¹⁸⁰ However, the propensity to do either fell steadily in the years leading up to death for both groups.¹⁸¹ Thus, when charitable decedents reached the final five years of life, most were no longer volunteering or making these donations.¹⁸² Combined with the previous information about the fluidity of charitable estate decisions in the final years of life, this suggests an important ramification. Charities that stop communicating with older donors when they cease donating or volunteering are likely to stop communicating just at the point when the final charitable estate decisions are being made. Conversely, the steady decline in cognitive scores as decedents approach the end of life suggests that legal protections of testators are particularly appropriate.¹⁸³

Not only can the HRS reveal information about estate planning documents prior to the final estate document used to transfer wealth, it can also reveal information about final documents that were *not* used to transfer post-mortem wealth.¹⁸⁴ For example, among 6,833 fully distributed estates where the decedent reported having a signed and witnessed will document in their most recent survey prior to death, a will document was actually probated in only 38% of those cases.¹⁸⁵ In 45% of these cases where no will was probated, the heirs indicated that the decedent did leave a will document, but that it was not used.¹⁸⁶ This points to the importance of non-probate transfers and may help explain (along with the likely reporting of contingent charitable components and end-of-life changes) why nearly 60% of decedents reporting a charitable estate component in the final survey prior to death actually generated no post-mortem transfers to charity.¹⁸⁷ Accordingly, among those reporting a charitable estate component in the last survey prior to death, the probability of actually transferring dollars to charity was higher for those using a funded trust rather than a will document.¹⁸⁸

¹⁸⁰ See *supra* Table 3.

¹⁸¹ See *supra* data accompanying Table 3.

¹⁸² See *supra* data accompanying Table 3.

¹⁸³ The twenty-word test of immediate and delayed word recall reported here is a commonly used test of cognition and memory and can be used to predict both dementia and cognitive impairment without dementia. See Eileen M. Crimmins et al., *Assessment of Cognition Using Surveys and Neuropsychological Assessment: The Health and Retirement Study and the Aging, Demographics, and Memory Study*, 66 J. GERONTOLOGY, SERIES B: PSYCHOL. SCI. & SOC. SCI. 162, 167-70 (2011).

¹⁸⁴ See James III, *The New Statistics of Estate Planning*, *supra* note 4, at 27.

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ See James III, *Wills, Trusts, and Charitable Estate Planning*, *supra* note 166, at 8.

¹⁸⁸ See *id.* at 8.

This was true even when comparing those of similar wealth, age, gender, marital status, and number of offspring.¹⁸⁹

A related concern for the usage of charitable wills is the potentially increased risk that heirs whose inheritance is thereby reduced might destroy the will documents.¹⁹⁰ However, HRS data indicate that among decedents reporting a will document in their most recent survey prior to death, the heirs reported finding no estate planning documents in 14.7% of estates where decedents had reported *no* charitable component but in only 9.2% of estates where decedents *had* reported a charitable component.¹⁹¹

Other research using the HRS has also identified the value of seeing the lifetime history of decedents, rather than just the circumstances at death.¹⁹² A statistical analysis of the top ten lifetime characteristics most important in predicting who would make post-mortem charitable transfers using HRS data found those to be, in order of importance, (1) consistency in donating, i.e., the share of all survey years in which the respondent indicated donating at least \$500 to charity, (2) having no offspring, (3) the highest amount ever donated in any one year during life, (4) consistency in reporting having a funded trust, (5) being female, (6) wealth in the final survey, (7) not being married, (8) donation amount in the year of the final survey, (9) having a growing trajectory of wealth leading up to death, and (10) consistency in volunteering.¹⁹³

Several of these most important predictive factors reflect behavior across many years. For example, wealth *trajectory* approaching death, not just ending wealth, was critical, along with consistency across *all* survey years in giving, donating, and reporting having a funded trust. Similarly, the highest amount of donations ever reported in any one year was an important predictor, more so than the amount of donations reported in the final survey year prior to death. By disclosing more of the lifetime history of decedent behaviors, the HRS reveals the importance of such comprehensive information in predicting post-mortem charitable estate transfers.

¹⁸⁹ See *id.* at 9.

¹⁹⁰ See, e.g., DAVID REZAC ET AL., ESTATE PLANNING: WILLS 5 (2004), http://openprairie.sdstate.edu/cgi/viewcontent.cgi?article=1117&context=extension_fact [<https://perma.cc/7JAQ-Y9YQ>] (noting that heirs who receive more under intestate succession than under the will have an incentive to destroy the will).

¹⁹¹ James III, *Wills, Trusts, and Charitable Estate Planning*, *supra* note 166, at 8.

¹⁹² See, e.g., RUSSELL N. JAMES III, AMERICAN CHARITABLE BEQUEST DEMOGRAPHICS (1992-2012), at 60-64 (2013), <http://www.encouragegenerosity.com/ACBD.pdf> [<https://perma.cc/6NJ8-NE3V>].

¹⁹³ *Id.* at 61-62.

CONCLUSION

This Article demonstrates the wide range of empirical analyses of estate planning and estate transfer behaviors possible with HRS data using illustrative examples from charitable bequests. Although some previous work has been completed, much remains to be explored using the expansive variety of data available in the HRS. In particular, the decedent data is an underutilized component¹⁹⁴ of the HRS, despite some initial investigations exploring post-mortem results for advance directives¹⁹⁵ and wills and trusts.¹⁹⁶ This untapped potential is particularly important given that dramatically increased exemption amounts¹⁹⁷ will soon be reducing the amount of information available from estate tax returns. For the specific issue of charitable estate transfers, an additional source of information could arise if the IRS chose to add estate transfers as a separately reported source of contributions on Form 990.¹⁹⁸ But, in the absence of such new sources of data, new findings in the empirical analysis of wealth transfers may

¹⁹⁴ See generally Fisher & Ryan, *supra* note 8, at 3.

¹⁹⁵ See, e.g., Kerstin Gerst & Jeffrey A. Burr, *Planning for End-of-Life Care: Black-White Differences in the Completion of Advance Directives*, 30 RES. ON AGING 428, 428 (2008) (using 1998 and 2000 HRS data to examine advance directives); Faith P. Hopp & Sonia A. Duffy, *Racial Variations in End-of-Life Care*, 48 J. AM. GERIATRICS SOC'Y 658, 658 (2000) (using HRS data from decedents between 1993 and 1995); Nidhi Khosla et al., *Trends in Engagement in Advance Care Planning Behaviors and the Role of Socioeconomic Status*, 33 AM. J. HOSPICE & PALLIATIVE MED. 651, 652 (2016) (using HRS data to investigate trends in advanced care planning); Catheryn S. Koss & Tamara A. Baker, *Race Differences in Advance Directive Completion: The Narrowing Gap Between White and African American Older Adults*, 29 J. AGING & HEALTH 324, 327 (2017) (using the HRS to examine how overall increases in advance direct completion have affected racial disparities in older adults).

¹⁹⁶ See, e.g., James III, *Wills, Trusts, and Charitable Estate Planning*, *supra* note 166, at 3 (using HRS data to compare pre-death charitable testamentary expectations with post-death distributions for deceased panel members); James III, *The New Statistics of Estate Planning*, *supra* note 4, at 3 (using HRS data to examine both lifetime and post-mortem wills, trusts, and charitable planning); James III & Baker, *supra* note 170, at 277, 281 (using HRS data to determine the timing of final charitable bequest decisions).

¹⁹⁷ See, e.g., 26 C.F.R. § 20.2010-2 (2019) (describing the portability provisions applicable to the estate of a decedent survived by a spouse).

¹⁹⁸ See INTERNAL REVENUE SERV., FORM 990: RETURN OF ORGANIZATION EXEMPT FROM INCOME TAX (2019), <https://www.irs.gov/pub/irs-pdf/f990.pdf> [<https://perma.cc/YS4C-7XWX>] (showing that unlike cash gifts, twenty-four individual types of non-cash gifts, gifts from fundraising events, federated campaigns, and related organizations, charitable bequests are not reported separately). Altering this would be an enormous boon to empirical analysis of charitable bequest transfers as it would provide organizational-level reporting of such gifts.

more likely come from the extensive and growing set of information available in the HRS.