NBER WORKING PAPER SERIES

UNEQUAL BEQUESTS

Marco Francesconi
Robert A. Pollak
Domenico Tabasso

Working Paper 21692
http://www.nber.org/papers/w21692

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
October 2015

We are grateful to Sonia Bhalotra, Sergei Severinov, Mark Wilhelm, and seminar participants at the University of Geneva, UCLA, UTCC Bangkok, Washington University School of Law, and several conferences and workshops for comments and suggestions. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

Unequal Bequests
Marco Francesconi, Robert A. Pollak, and Domenico Tabasso
NBER Working Paper No. 21692
October 2015
JEL No. D13,J12,K36

ABSTRACT

Using data from the Health and Retirement Study (HRS), we make two contributions to the literature on end-of-life transfers. First, we show that unequal bequests are much more common than generally recognized, with one-third of parents with wills planning to divide their estates unequally among their children. These plans for unequal division are particularly concentrated in complex families, which are of two types: families with stepchildren and families with genetic children with whom the parent has had no contact, e.g., children from previous marriages. We find that in complex families past and current contact between parents and children reduces or eliminates unequal bequests. Second, although the literature focuses on the bequest intentions of parents who have made wills, we find that many older Americans have not made wills. Although the probability of having a will increases with age, 30 percent of HRS respondents aged 70 and over have no wills. Of HRS respondents who died between 1995 and 2010, 38 percent died without wills. Thus, focusing exclusively on the bequest intentions of parents who have made wills may provide an incomplete and misleading picture of end-of-life transfers.

Marco Francesconi
University of Essex
Colchester CO4 3SQ
United Kingdom
and IZA
mfranc@essex.ac.uk

Domenico Tabasso
University of Geneva
and NCCR LIVES and IZA
domenico.tabasso@unige.ch

Robert A. Pollak
Washington University in St. Louis
Arts and Sciences
and the Olin Business School
Campus Box 1133
1 Brookings Drive
St. Louis, MO 63130-4899
and IZA
and also NBER
pollak@wustl.edu

A Supplementary online material is available at:
https://sites.google.com/site/domtabasso/appendix-material-for- unequal-bequests

1. Introduction

In this paper we shed new light on bequest behavior using a large and nationally representative US sample drawn from the Health and Retirement Study (HRS) over the period 1995–2010. A distinguishing feature of our work is its focus on complex families, in particular on parents with stepchildren and parents with genetic children with whom they have limited or no contact (e.g., children from previous marriages). We complement our analysis of the bequest intentions of parents with wills by examining actual bequests using reports about the disposition of the estates of HRS respondents who died between one HRS wave and the next. We find that unequal bequests (both intended and actual) are much more prevalent than previously documented, with one-third of parents with wills planning to distribute their estates unequally. Unequal intended bequests are most common in complex families, but contact between parents and children reduces or eliminates unequal bequests. Finally, we find that a substantial fraction of older parents report having no wills and a substantial fraction of HRS respondents who died had no wills.

Empirical research has long established that a substantial majority of parents divide, or intend to divide, their estates equally among their children (Menchik 1980; Wilhelm 1996; McGarry 1999; Cox 2003; Light and McGarry 2004; Behrman and Rosenzweig 2004). Despite the fact that earlier economic models predicted unequal bequests (e.g., Becker 1974; Bernheim, Shleifer, and Summers 1985; Cox 1987), more recent studies have developed theories that attempt to rationalize the prevalence of equal bequests, sometimes also attempting to explain why parents treat their children unequally with respect to inter vivos transfers but equally with respect to bequests (e.g., Andreoni 1989; Bernheim and Severinov 2003).

The proportion of American parents aged 50 and over who reported having wills,[1] in which their children were treated unequally more than doubled between 1995 and 2010, rising from 16 percent to almost 35 percent (Figure 1).[2] This upward trend, which holds for both mothers and fathers, is not simply driven by the ageing of the HRS respondents.[3] A similar increase can be observed across several cohorts of Americans born since 1890 (Figure 2). Younger cohorts (i.e., those born in 1960 or after) are substantially more likely to intend unequal bequests, with the sharpest increases occurring among individuals who are no longer married: widows, widowers, and divorced individuals (Figure 3).[4] Bequests,

[1] We focus on the bequest intentions of parents with wills because most of the information on bequest intentions collected by HRS is from parents who report that they have wills. See the data description in subsection 3.B.

[2] Throughout the paper, stepchildren are counted as "children". Moreover, although the legal definition of stepchildren is narrow (i.e., a stepchild is the child of a spouse), we use this term broadly, to include the children of a cohabiting partner as well as the children of a legally married spouse.

[3] Between 1998 and 2010 the average age of the HRS sample increased only by four years. This is due to a number of factors, including attrition, death of older respondents and, since 2004, the introduction of new cohorts of individuals aged 51 to 56.

[4] HRS data do not allow us to distinguish between cohabitors and married individuals.

therefore, bear a strong relationship to demographics: as demographics are changing so are bequests.

Since the middle of the 1990s the fraction of parents reporting unequal bequest intentions has consistently been 30–35 percentage points higher among parents with stepchildren than among those with genetic children only (Figure 4). Comparing parents who have had no contact with at least one of their genetic children with parents who have had at least some contact with all of their genetic children, we find the no-contact parents about 35–45 percentage points less likely to intend equal bequests.[5] The trends in unequal bequest intentions among parents without contact with their children is the same as the trend observed among parents with stepchildren. As the proportion of complex families has risen in the last twenty years, so has the proportion of parents who plan unequal bequests.

When individuals die without a valid will, the intestacy laws of their state provide the default allocation, dividing the decedent's estate between the surviving spouse and the children.[6] After providing an often very substantial share for the surviving spouse, intestacy laws divide the remainder equally among the decedent's genetic and legally adopted children. Unlike surviving spouses, under intestacy laws surviving cohabiting partners inherit nothing. And, unlike genetic and legally adopted children, under intestacy laws stepchildren inherit nothing (Fried 1992; Brashier 2004; Friedman 2009; Reid, de Waal, and Zimmermann 2011).

Since 1998 the average fraction of HRS respondents without a will has been around 42 percent (Figure 5).[7] Among respondents with stepchildren the average fraction without wills is somewhat greater (49 percent), and it is even greater among parents who have no contact with their genetic children (58 percent). Parents aged less than 70 are much less likely to have wills, perhaps because writing a will is not yet salient for them, but a staggering 30 percent of parents aged 70 and over report not having wills. The data also reveal a slight education gradient (not shown): HRS respondents with university degrees or higher qualifications are more likely to have a will as opposed to their less educated counterparts.

Standard economic models ignore complex families. The (usually implicit) assumption is that all children are born to a married couple who remain married to each other. When one spouse dies, the surviving spouse is (usually implicitly) assumed not to remarry.

[5] In 1995 the HRS did not ask the question on parent-child contact, while in 2010 the question was asked only to a small fraction of respondents. For these reasons we do not show those two years in Figure 4.

[6] As Rosenbury (2005) shows, there are important differences in intestacy laws across states, but we focus on features that are common across states.

[7] This figure starts in 1998 because the 1995 HRS wave oversampled older people (with an average age of 78 years), while the 1996 wave oversampled younger individuals, whose average age is 59 years. From 1998 onwards, the study comprised both subsamples, and in that year individuals were on average aged 67.

Little is said about divorce, remarriage or repartnering and even less about multiple partner fertility.[8] By ignoring divorce, repartnering, or remarriage, canonical economic models fail to recognize the increased complexity of the family (Bumpass and Lu 2000; Stevenson and Wolfers 2007; Lundberg and Pollak 2014, 2015).

In addition to presenting a representative picture of contemporary end-of-life transfers, we make two contributions to the literature. First, we show that unequal bequests are much more common than generally recognized. Unequal bequests are concentrated in complex families, that is, families in which parents have stepchildren and families with genetic children with whom the parent has had no contact (e.g., children from previous marriages). Parents with stepchildren are much less likely to include all children in their wills than parents without stepchildren, and parents with stepchildren who have wills are substantially less likely to plan equal bequests. Similarly, parents who have had no contact with one or more of their genetic children are less likely to include all of their children in their wills. When all children are included in the parent's will, we find that parents with no-contact children are less likely to plan equal bequests. The likelihood of unequal bequests, however, is reduced and often entirely eliminated by longer coresidence of stepparents and stepchildren. We interpret this finding as reflecting the accumulation of family-specific capital (e.g., trust and affection) that triggers norms of equal treatment.

Our second contribution to the literature on end-of-life transfers shifts the focus from individuals with wills to those who die intestate (i.e., without wills). We find that many older Americans do not have wills. More specifically, 40 percent of HRS respondents report not having wills and 30 percent of HRS respondents aged 70 and over report not having wills. Of HRS respondents who died, 38 percent died intestate. Hence, the usual focus on bequest intentions provides an incomplete and misleading picture of end-of-life transfers.

The paper is organized as follows. Section 2 reviews previous work on bequests and describes the legal environment in which individuals make end-of-life transfers. The data are described in Section 3, where we also present the statistical methods we use in our analysis. Section 4 presents the benchmark results of our empirical analysis of bequest intentions, while Section 5 shows further empirical results, which include instrumental variables estimates, and the analysis of changes in bequest intentions and of the actual division of estates. Section 6 provides a simple conceptual framework for interpreting end-of-life transfers. Section 7 concludes.

[8] In a traditional nuclear family all the children in the household are joint children, but one or both parents may have children from previous partnerships living elsewhere.

2. Background and Related Literature

Almost all economic models predict unequal bequests.[9] For example, the altruist model assumes that parents equalize marginal utilities across children (Barro 1974; Becker 1974; Becker and Tomes 1979; Tomes 1981). This assumption, together with some strong assumptions about preferences and inter vivos transfers, implies that parents will bequeath more to their less well-off children. Exchange models assume that bequests are made to children in return for their services such as attention and care (Bernheim, Shleifer, and Summers 1985; Cox 1987; Cox and Rank 1992). Because children face different opportunity costs of providing these services, exchange models predict that children will provide different amounts of services and will receive unequal bequests.[10]

Although both the altruist model and exchange models have some empirical support (Tomes 1988, Cox and Rank 1992; Laitner and Ohlsson 2001), most empirical studies challenge both classes of models finding that an overwhelming majority of parents divide their estates equally among their children (Menchik 1980, 1988; Wilhelm 1996; McGarry 1999; Light and McGarry 2004; Behrman and Rosenzweig 2004; Erixson and Ohlsson 2015).[11] Significant effort has then been devoted to rationalizing equal bequests. For instance, Bernheim and Severinov (2003) propose a model of intergenerational transfers based on the assumption that each child's perception of parental affection influences his or her subjective well-being. Children cannot directly observe parental preferences, but parents signal affection through their actions, including bequests. Altruistic parents then must consider the possibility that unequal bequests may lead their children to infer that they are loved either more or less than their siblings. The assumption that the division of inter vivos gifts is not observed by all the children, whereas the division of bequests (or the division implied by bequest intentions) is observed, remains untested. Nor is it clear whether and how parents' stated bequest intentions affect children's actions (e.g., caregiving) regarding the parents. Equal division is also consistent with parents' indifference over how their estates are divided among their children. But indifference is both implausible and theoretically unsatisfying because it is compatible with all possible division patterns.[12]

Evolutionary psychology suggests a suite of hypotheses about end-of-life transfers that

[9] Comprehensive reviews of the extensive economics literature on bequests are given by Behrman (1997), Laitner (1997), Laferrère and Wolff (2006), and McGarry (2008, 2013). For an introduction to the legal literature, see Friedman (2009) and Grossman and Friedman (2011). For a comprehensive treatment of the legal issues, see Dukeminier and Sitkoff (2013).

[10] Bargaining power and bargaining ability will also play a role in the absence of special assumptions (e.g., that parents can make take-it-or-leave-it offers to their children.)

[11] Wilhelm (1996), which use federal estate tax data, does allow for adopted children but not for stepchildren and assumes that parents have equal (symmetric) concern for all their children. To the best of our knowledge, all bequest models driven by altruism or exchange motives ignore stepchildren.

[12] Pollak (1988) argues that the credibility of the parents' threat to disinherit a child in the strategic bequest model of Bernheim, Shleifer, and Summers (1985) crucially depends on the assumption that parents are indifferent over how their estates are divided among their children.

are still largely untested (Cox 2003, 2007). The underlying premise is that parents behave so as to maximize the probability of survival of their genes and that children with greater wealth are more likely to pass on their genes. One implication is what we call the "genetic-child hypothesis" — that is, parents will make end-of-life transfers to their genetic children rather than to their social children (i.e., genetically unrelated children such as stepchildren who live in the same household).[13] We consider the implications of this hypothesis in two cases: stepchildren and genetic children with whom the decedent has had no contact (e.g., children from a previous marriage who were very young when the parents divorced). The genetic child hypothesis makes clear predictions in both of these cases. Decedents will favor their genetic children.[14]

The only empirical work that attempts to assess the relative importance of the altruism, exchange, and the genetic-child hypotheses is Light and McGarry (2004). Using intended bequest data for a sample of 45- to 80-year-old mothers drawn from the National Longitudinal Surveys of Young Women and Mature Women, they find that the vast majority of mothers (more than 92 percent) intend to leave equal bequests. The mothers who said they intended to leave unequal bequests were asked to explain why. Some responded with explanations that were consistent with altruism, others with exchange and, among mothers with stepchildren, some with explanations consistent with the genetic-child hypothesis. Light and McGarry find that greater within-family variation in children's incomes (a proxy for altruism), poor maternal health (a proxy for exchange), and the presence of stepchildren (a proxy for the genetic-child motive) are associated with higher probabilities of unequal intended bequests. More specifically, for mothers with at least one genetic child and at least one stepchild, they find that the probability of unequal intended bequests increases from 7.9 to 11.3 percent, a 43 percent increase.

Other studies examine the extent to which the division of end-of-life transfers compensates for caregiving. For example, using data from the first wave of the Assets and Health Dynamics among the Oldest Old, Brown (2006) finds that children who are currently caregivers are 32 percentage points more likely than their noncaregiving siblings to be included in their parents' life insurance policies, while expected caregivers are three percentage points more likely to be included in their parents' wills and 15 percentage

[13]Unlike models based on altruism or exchange, which hinge on actions taken individually by parents and children (such as the child's need for support or the frequency of visits to and other contacts with older parents), the genetic-child hypothesis relies on one specific trait – the genetic link between decedents and potential beneficiaries. In this respect, the genetic-child hypothesis is similar to models of intrahousehold allocation that emphasize a single (exogenous) attribute, such as birth order (Behrman and Taubman 1986; Chu 1991) or the child's sex (Behrman, Pollak and Taubman 1986). Although these other single-attribute models may be useful for understanding differential inter vivos transfers or bequests related to birth order or sex, they cannot explain unequal bequests or bequest intentions toward genetic and social children.

[14]Evolutionary reasoning also speaks to the distribution of bequests among genetic children and, when it does, it seldom predicts equal bequests. For example, a childless post-menopausal daughter would not be predicted to receive bequests. These accounts however are outside the scope of our paper.

points more likely to be included in their parents' life-insurance policies.

Unequal transfers from parents to children and from children to parents have also been documented in divorced families. Analyzing the effects of parental marital disruption on late-life inter vivos transfers, Pezzin and Schone (1999) find that parents (especially older men) engage in substantially lower levels of transfers with stepchildren than with their genetic children. Marital disruption is also central in Pezzin, Pollak, and Schone (2008). That study, however, concentrates on "upstream transfers" (i.e., adult children's time and cash transfers to their parents) rather than on "downstream transfers" (i.e., transfers of time and cash from parents to their children). They find unequal flows of services to unpartnered disabled parents in families that experience divorce, with stepchildren providing significantly lower transfers than genetic children. Other than Light and McGarry (2004), however, no previous study has examined bequests to stepchildren.

End-of-life transfers and bequests have also been analyzed by legal scholars and commentators. Unequal division of estates among genetic children typically generates unease among trust and estates lawyers because they view unequal bequests as invitations to litigation (Collins 2000; Blattmachr 2008; American Bar Association 2013). Stepchildren, however, belong to a different category since the law treats stepchildren as unrelated strangers rather than as family members (Schanzenbach and Sitkoff 2009).

Legal scholars also write on intestacy, a subject thus far entirely neglected by economists. Intestacy statutes divide the estates of married decedents with children between the surviving spouse and the decedent's genetic and legally adopted children.[15] If a stepparent dies without a valid will, stepchildren inherit nothing.[16] As a number of scholars have pointed out, stepchildren have never fared well under intestacy statutes (Mahoney 1989; Gary 2000; Noble 2002; Brashier 2004; Cremer 2011). Stepchildren however may inherit from their absent biological parent, and so it is unclear whether they are disadvantaged by intestacy law.[17] This issue cannot be explored with the HRS data and requires additional research.

Some stepparents may intentionally forego writing a will precisely because they know that intestacy laws will mandate an equal division among their genetic and adopted children and give nothing to their stepchildren. On the other hand, parents with genetic children with whom they have had no contact might write wills to avoid giving these children an equal share of their estates. Some parents are no doubt aware of the default

[15]The Uniform Probate Code treats adopted children as if they were genetic children of the decedent (Noble 2002; Cahn 2005).

[16]California provides a narrow exception to this generalization: a stepchild may inherit if it can be shown that the stepparent would have adopted the stepchild but was prevented from doing so by a legal barrier. This exception is available only to a stepchild who satisfies the legal definition of a stepchild (i.e., a child of the decedent's spouse, not of the decedent's cohabiting partner). See Hanson (1995) and Noble (2002) for more details.

[17]At common law, in fact, the relationship of stepparent and stepchild generally confers no rights and imposes no duties (Wypyski 1984).

division imposed by intestacy law while others are not. Unfortunately, HRS provides no information about respondents' knowledge of or beliefs about intestacy law. We can, for the first time, examine whether parents are less likely to write a will if they have stepchildren or if they have genetic children with whom they have had no contact.

3. Data

A. Samples: Core and Exit Files

Our analysis uses data collected between 1995 and 2010 by the Health and Retirement Study (HRS), which contains detailed information about bequest intentions and the actual distribution of estates.[18] The HRS is a longitudinal survey of a nationally representative sample of more than 26,000 Americans over the age of 50 who are interviewed every two years.[19] If a respondent has a spouse or partner, the spouse or partner is invited to become an HRS respondent. In each survey year, the "core files" provide data from standard questionnaires administered to all respondents. The "exit files" provide information about the actual distribution of the estates of HRS respondents who died since the previous wave; this information is collected from a proxy respondent, such as the surviving spouse, an adult child, or another close family member.

From the core files we select respondents with at least one child and with nonmissing information on intended bequests and other basic variables. This leaves us with an unbalanced panel of 23,984 individuals, for a total of 117,189 person-wave observations. When first observed in the study, 11,221 individuals (47 percent of the sample) report having no will, while 12,763 report having a will. As the survey progresses, the percentage of individuals without a will decreases to 42 percent. Of the 21,140 parents in our sample with more than one child, 11,170 (53 percent) report their plans to distribute their estates among their children. More than one fifth of the whole sample (5,082 parents) report having both genetic children and stepchildren.[20] Of these individuals, 2,342 report having a will (about 18 percent of the sample of parents with wills or over 46 percent of the parents with stepchildren).

The HRS also collects information on the frequency of contacts between parents and children. We use this information for the 12,739 individuals who have genetic children only and report the frequency of contacts with their children and their bequest intentions. Almost 14 percent of them (1,764 parents) report having had no contact with at least one of their genetic children for at least one year during the survey period. On average 6.6

[18] As noted in the Introduction, HRS asks respondents about their bequest intentions only if they report having wills or trusts. We do not distinguish between wills and trusts, because trusts are not common in the HRS sample: only 1.1 percent of the respondents report having a trust but not a will and 1.4 percent report having both a will and a trust.

[19] See <http://hrsonline.isr.umich.edu/> for more information about the data.

[20] The HRS does not distinguish between genetic children and adopted children.

percent of parents report having no contact in the previous year with at least one of their children.[21] Among no-contact parents, the proportion without a will exceeds 57 percent. This is substantially greater than that observed among parents who have more frequent contact with all their genetic children (43 percent).

The exit files provide information on the actual disposition of estates and other basic variables for 7,416 individuals (almost 85 percent) of the 8,800 HRS respondents who died over the sample period. There are 2,781 parents (38 percent) who died intestate, a slightly smaller proportion than the 42 percent of HRS respondents in the core files who report having no wills. Of the remaining 4,635 who died with a will, 3,897 had more than one child and 630 (18 percent of the sample of decedents with wills and with more than one child) had both stepchildren and genetic children, representing more than 90 percent of decedents with stepchildren.[22]

B. Outcomes

Table 1 shows the means of our main dependent variables broken down by the presence of stepchildren in both the core and the exit files and by parents' marital status. About 42 percent of the sample in the core files does not have a will (column (a)). The raw difference of 6.9 percentage points between those with stepchildren (column (b)) and those with genetic children only (column (c)) is statistically significant. Almost two-thirds of divorced parents do not have a will. Again, parents with stepchildren are less likely to have a will than parents with genetic children only. The same picture emerges from the exit files, even though the fraction of all parents without a will is almost 38 percent, somewhat less than in the core files. We shall return to this issue in the next section.

Conditional on having a will, about three-quarters of the parents from the core files report they include all children in their wills, while only 59 percent of the estates whose distributions are reported in the exit files were divided in a way that included all children.[23] Intended inclusion of all children is substantially less likely among parents with stepchildren regardless of their marital status, but this does not emerge in the exit files,

[21] Among parents with both stepchildren and genetic children, the proportion of parents with no contact with at least one of their children is higher, around 28%.

[22] The exit files necessarily yield a sample that is smaller than that obtained from the core files. Moreover, at present, the exit files disproportionally represent individuals with lower socioeconomic status and higher mortality risks (Cutler et al. 2011).

[23] As already mentioned, most of the information available in the HRS is on bequest intentions of parents who report that they have a will. The exception is in relation to the probability that respondents bequeath a specific amount of money (expressed in given categories), which is asked to each household independently of whether respondents have a will or not. At the end of subsection 4.B we discuss the results found using that information. We should stress that this information is not about the exact monetary value of resources that parents intend to transfer to their children. Rather, it is about the *probability* that a parent leaves a bequest worth a given amount of money. We therefore cannot determine how much each child will inherit in case his/her parents write a will.

where none of the differences are statistically significant at conventional levels (column (d), panel B).

In the core files, almost one-third of all parents with a will report that they plan to distribute their estate unequally among their children (column (a), panel C). Intended unequal divisions are much more likely among parents with stepchildren (61 percent for all parents and a staggering 75 percent for divorced parents, column (b)) than among parents with genetic children only (27 and 29 percent respectively, column (c)). In the exit files, however, the proportion of estates that are divided unequally is substantially greater (53 percent). The difference between parents with stepchildren and parents with genetic children only is smaller than that observed in the core files, but is always statistically significant. This may reflect a change in parents' behavior between the time they reported their intentions in the core files and the actual distribution of their estates reported in the exit files. It may also be driven by selection (parents in the exit files are older) or reflect the difference in mortality rates by socioeconomic status (parents in the exit files are less educated and less healthy, and these might be the type of parents who are more likely to distribute unequally their end-of-life resources).

Appendix Table A1 mirrors Table 1 focusing on no-contact parents. As in the case of parents with stepchildren, parents who have had no contact with their genetic children in the past year are much more likely not to have a will. About 59 percent of no-contact parents have no will, as opposed to 44 percent of parents who have regular contact with all their genetic children (panel A). Among divorced no-contact parents the proportion of those without a will is 70 percent. Looking only at parents with a will, almost 84 percent of those with regular contacts with all their genetic children report the intention to include all of them in the will. This proportion is 27 percentage points greater than that observed among no-contact parents, and the difference is highly significant (panel B). Finally, parents in regular contact with their children also report they are more likely than no-contact parents to divide their estates equally (77 and 47 percent, respectively). The difference between these two groups of parents is even greater when we consider those who divorced or widowed (panel C). These patterns are consistent with the predictions implied by exchange models.

C. Explanatory Variables and Statistical Methods

Table 2 reports summary statistics for the explanatory variables we use to model the probabilities of reporting having a will and reporting the intention to leave unequal bequests. We show figures for the sample of parents who report having wills (column (b)) and for the broader sample of 23,984 individuals that also includes parents who report not having wills (column (a)). The table also presents summary statistics for the subsample of all parents who have both genetic children and stepchildren (column (c)) and the subsample

of 2,342 parents with stepchildren who report having wills (column (d)).[24]

Our covariates include standard demographic controls for parents' age, sex, race, marital status, and number of marriages. These variables capture basic heterogeneity within and across households. We also include measures of annual family income and total wealth (both expressed in 1995 prices), parents' education and employment status. We use these variables as controls for heterogeneity in parental resources. HRS respondents are also asked whether they gave money to at least one child or to all children equally; inter vivos transfers are known to depend more directly than bequests on children's current incomes and thus tend to be divided less evenly (McGarry 1999).

One of our key explanatory variables is an indicator variable for the presence of at least one genetic child and at least one stepchild. The genetic-child hypothesis predicts that parents will treat genetic children and stepchildren differently in allocating resources. Because parents' ability or willingness to make transfers may depend on the total number of children and stepchildren, we include these characteristics as well.

Another key variable is parents' lack of contact with their genetic children. Parents who report having had no contact with at least one of their genetic children over the previous year are defined to be no-contact parents. In subsection 5.D we will also consider parents with infrequent contact. This latter group comprises parents who report having had at least one contact with their children over the last year, but not at least one contact a month, while parents with frequent contacts are those who have contact at least once a month. Exchange models predict that children with more regular contacts will be more likely to receive bequests if these children are also more likely to provide care and support to their needy older parents (Bernheim, Shleifer, and Summers 1985; Cox 1987).

We use parental health status ("poor or fair" as opposed to "good or excellent") as a proxy for a parent's need for children's services and hence, willingness to pay for them (i.e., the exchange motive). Using the parents' reports of the children's income and wealth would substantially reduce the number of observations, so instead of doing so we predict each child's income using observed characteristics. Following Light and McGarry (2004), we predict incomes using estimated parameters from income models that we fit to the data from the Current Population Survey (CPS) between 1994 and 2006. Our sample consists of all CPS respondents in the same age group as the parents/children in our HRS sample. We estimate separate models for men and women using as regressors a constant, a quartic in age, five dummy variables indicating the highest educational attainment, and indicator variables for race, marital status, number of children, and home ownership. We then use this predicted income variable to construct a measure of income differences, the coefficient of variation (obtained by dividing the standard deviation of estimated income by its mean) among the children of each individual.

[24]For the sake of brevity, summary statistics of the independent variables for the sample of contact/no-contact parents are not reported. They are available on the online appendix.

For each of our covariates, we observe differences between parents with a will, parents with stepchildren, and parents with stepchildren and a will (columns (b)–(d)). Perhaps unsurprisingly, the most striking differences are between parents in the core files (column (a)) and those in the exit files (column (e)). Compared with the parents in the core files, parents in the exit files are less educated and more likely to report being in poor or fair health in the last wave in which they participated. Parents in the exit files are older (and thus more likely to be retired), and more likely to have been widowed (and hence to have lower household income).

Methods — Let Y_{it} denote one of the outcome variables described in subsection 3.B above, i.e., whether individual i does not have a will at time t (=1, 0 otherwise), whether i, conditional on having a will, mentions all children in the will at time t (=1, 0 otherwise), and whether i includes all children equally in the will (=1, 0 otherwise). Let X_{it} be a matrix containing all the explanatory variables described above, and C_{it} an indicator variable that is equal to 1 if individual i lives in a complex family (i.e., stepfamily or no-contact family) at time t, and zero otherwise. In the next section we report and discuss random effects (RE) probit estimates obtained from a specification of the following sort (Arellano 2003; Wooldridge 2010):

$$Y_{it} = \alpha + \beta C_{it} + X'_{it}\gamma + \varepsilon_{it}, \tag{1}$$

where $\varepsilon_{it} = \nu_i + \xi_{it}$ is the residual, in which ν_i is the unobserved individual-specific component and ξ_{it} is an idiosyncratic error term.

Since the RE model assumes that ν_i and C_{it} (as well as ν_i and X_{it}) are uncorrelated, in subsection 5.A we shall present results based on fixed effects (FE) models, which do not impose this no-correlation assumption. In the same subsection, we also deal with the potential endogeneity of family complexity by using an instrumental variables (IV) method based on a new instrument for C_{it}. We defer the description of this approach to that part of the paper.

4. Benchmark Estimates

We present our benchmark estimates, emphasizing the roles of stepparents and parents without contact with at least one of their genetic children. We first describe who has a will and who does not (subsection A). Then we analyze whether parents include all children in the will and, if they do, whether they intend to leave equal bequests to all children (subsection B).[25] We next investigate how health, wealth, and previous inter vivos transfers affect the probability that HRS respondents intend to treat their children unequally (subsection C).

[25]It is worth keeping in mind that stepchildren are counted as children.

A. Who Has a Will and Who Does Not

As we saw in Table 1, the fraction of HRS respondents who have children but do not have wills is substantial: 42 percent of those in the core files report not having a will. A complication with bequest intention data is right censoring: some parents who will eventually write wills have not done so at the time they respond to the survey. Older and less healthy parents, however, might be more likely than other respondents to write wills. So might unpartnered widows or widowers, who are the last ones to have the responsibility of passing on the family estate to future generations. To account for these possibilities, we control for parental age and health status, and estimate separately the response of widows, widowers and divorced parents. To assess the extent of the right censoring problem more directly, we use data from the exit files.[26]

Table 3 presents marginal effects from random effects probit estimates of β in equation (1), that is, the impact of the presence of stepchildren on the probability that parents report *not* having a will. The table, based on data from the core files, shows the results from five specifications. In specification (a) we include our basic set of controls (demographics, education, and employment status) as well as health status indicators. Specification (b) adds measures of money transfers to children, while specification (c) drops these measures of money transfers but includes controls for parents' expected income and wealth. Specification (d) includes all previous measures, while specification (e) also includes as an additional regressor the coefficient of variation between children's income. Besides the results for all parents, the table also shows results separately for fathers and for mothers, and reports the pooled and separate effects for the subsamples of widowed and divorced parents.

Although the descriptive statistics show that individuals with both genetic children and stepchildren are less likely to report having wills than those with genetic children only, the estimates in Table 3 imply that our basic control variables largely account for this difference (column (a)), except for widows and for divorced fathers. Widows are indeed 7 percentage points more likely to have a will. This is confirmed when we control for inter vivos transfers and parental income and wealth (columns (b)–(d)), but the relationship becomes weaker and loses statistical significance when we further control for the coefficient of variation between children's predicted income (column (e)).

For divorced fathers with stepchildren we find that the probability of not having a will is nearly 8 percentage points greater than the corresponding probability for divorced fathers with genetic children only (column (a)). Controlling for inter vivos transfers and parental income and wealth leads to even greater estimates, ranging from 8 to 12 percent-

[26] As mentioned in Section 3, 38 percent of parents in the exit files died intestate. This slightly lower proportion than that recorded in the core files may reflect an actual change in parents' behavior or selection driven by differential attrition based on age, health, and socioeconomic status. We leave this interesting issue for future research.

age points (columns (b) to (d)). When we control for within-family income differences, the probability of not having a will goes up to almost 20 percentage points. In the next subsection we examine whether the differential propensities to have a will reflect parental preferences to favor own genetic children or preferences to equalize the distribution of estates across all children, including stepchildren.

Table 4 broadly confirms the results found for stepparents in the case of no-contact parents. There are however two differences. One is among fathers who are 10–12 percentage points more likely not to have a will if they have no contact with their genetic children, although this relationship disappears when we control for expected wealth and within-family income differences. The other difference is among widowers who, regardless of the specification, are between 14 and 20 percentage points more likely to have no will if they have no contact with their genetic children. Lack of contact therefore may induce fathers in general, and widowers in particular, to eschew the allocations implied by intestacy statutes.

We do not know, however, why so many individuals do not write wills. Legal scholars suggest that procrastination is one of the most plausible explanations for intestacy (Weisbord 2012). But procrastination does not manifest an intent to die intestate. Likewise, the high rate of intestacy is not the result of agreement with, or reliance on, the default rules of heirship. Although agreement with the default rules could reduce the need for a will (Hirsch 2004), there is some (dated) anecdotal evidence that suggests that individuals lacking a will do not intentionally rely on the default rules (Fellows, Simon, and Rau 1978; Contemporary Studies Project 1978). Economists have also been moving away from the notion that individuals who do not "opt out" could be assumed to prefer the default (Thaler and Sunstein 2008). For example, in the context of retirement savings, Beshears et al. (2009) provide strong empirical evidence that defaults do matter. In the context of intestacy, we have no empirical research to draw on. Nonetheless, the earlier evidence used by legal experts and the empirical evidence found in other contexts argue against assuming that individuals without wills prefer, and would have chosen, the distribution mandated by intestacy law.

B. Unequal Intended Bequests

Conditional on parents having a will and having more than one child, we now investigate two questions: whether parents *include* all children in their wills and whether they treat all children *equally* in their wills.

Table 5 presents random effects probit estimates of the stepchild variable on the probability that individuals include all children in their wills. The five specifications in columns (a)–(e) and the rest of the organization of the table are the same as in Table 3. Table 5 reveals that for parents with stepchildren the likelihood of including all children in the

will is 28–39 percentage points lower than for parents without stepchildren. This impact is stronger in absolute value for mothers than for fathers, although controlling for income dispersion between siblings reverses this result (column (e)). In specification (d), mothers with stepchildren are almost 38 percentage points less likely to report including all children in their wills while fathers with stepchildren are about 27 percentage points less likely to do so. These negative effects are strongest for divorced parents with stepchildren, with estimated impacts ranging between 59 and 63 percentage points lower than for divorced parents without stepchildren. We also find strong negative effects among widows and widowers. This might happen because widows and widowers write new wills after the death of the spouse. We shall return to this possibility in subsection 5.B, where we analyze changes in bequest intentions.

We repeated the same analysis focusing on the behavior of parents who have only genetic children but who have no contact with at least one of them. The results are presented in Appendix Table A2. These are qualitatively very similar to those reported in Table 5. Parents who have no contact with at least one of their genetic children are 20–24 percentage points less likely to include all children in the will. In this case, it is fathers (and not mothers) who generally have a higher propensity not to mention all children in their wills. Divorced parents (especially divorced fathers) show an even greater likelihood of not including all of their children in the will, although this likelihood is the same as that found for all parents once we control for within-family differences (column (e)). No-contact parents therefore have a substantially greater propensity to treat their genetic children unequally.

Conditional on having a will, we repeated the same analysis for the likelihood of having a will in which all children are treated equally. Table 6 reports the RE probit estimates for parents with stepchildren, while Appendix Table A3 reports the estimates for no-contact parents. Table 6 indicates that the presence of stepchildren is always associated with a considerably lower probability of equal intended bequests and these differences are always statistically significant at the 1 percent level. For example, having both genetic children and stepchildren as opposed to having genetic children only reduces the probability of a will in which all children are treated equally by 31 percentage points (first row, column (d)). This negative effect is greater for mothers than for fathers (36 versus 25 percentage points, respectively), and the difference is statistically significant at conventional levels. But, as in Table 5, this gender difference is not robust to the inclusion of the coefficient of variation of children's predicted income (column (e)).

Unpartnered parents (either divorced or widowed) are generally less likely to plan equal bequests if they have genetic children and stepchildren. For example, divorced fathers are 52 percentage points less likely to treat all children equally than divorced fathers with genetic children only (column (d)). Similar responses are found for divorced mothers as well as for widows and widowers, and the gender differences are never statistically

significant.

Without exceptions, the estimates in Appendix Table A3 reveal that parents who have no contact with their genetic children are also less likely to plan an equal division of their estates. Parental absence is on average associated with a reduction in the probability of equal bequest intentions of 28–32 percentage points. Slightly larger reductions are observed among all fathers and among those who are divorced or widowed.[27]

In sum, the estimates in Tables 5 and 6 and those in Appendix Tables A2 and A3 tell a consistent story. Parents in complex families are less likely to mention all their children in the will. Among such parents, those who do mention all children are more likely to plan an unequal division of end-of-life transfers. This evidence suggests that stepchildren and genetic children with no contact with their parents appear to face similar chances of inheriting from their stepparents and parents. This result sits at odds with the genetic-child hypothesis, according to which parents favor their own genetic offspring over stepchildren, and seems instead to be driven mainly by other motives. In the next subsection we explore this possibility further.[28]

C. Health, Wealth, and Inter Vivos Transfers

In our analysis we included variables that are meant to proxy altruism and exchange as bequest motives. We also controlled for gifts to children, since parents might adjust their bequest intentions if they made substantial inter vivos transfers. The adjustment could go in either direction. Parents might give less to children who already received inter vivos transfers to equalize lifetime transfers, or they might give more because previous transfers indicate greater need or closer ties. We now briefly discuss these results that can be found in the online appendix.

In families with stepparents and in families with no-contact parents, wealth and income

[27]The results in Tables 6 and A3 were found for parents with two or more children *and* a will. An alternative sample selection is to include only parents with two or more children and a will that mentions *all* of the children. This selection clearly leads to smaller samples. But even when this more restrictive definition is used, we find effect estimates that are in line with (albeit of smaller magnitude than) those shown in Tables 6 and A3. They are reported in Appendix Table A4.

[28]It should be emphasized that we performed several robustness checks. The estimates from these exercises by and large confirm the picture of bequest intentions that has emerged so far. In one of the exercises, we disaggregated the overall effect of the stepchild indicator variable by the number of genetic children and stepchildren and distinguished among parents with one child in each category, those with two genetic children and one stepchild, those with one genetic child and two stepchildren, and those with two or more children in each category. Virtually all our earlier results are robust to this change. In another check, we took advantage of the fact that, regardless of whether individuals have a will, the HRS asks one respondent per household to report the probability of leaving a bequest worth at least $10,000, $100,000, and $500,000, excluding any inheritance to be left to the surviving partner if he/she is still alive. We banded all answers into six groups, i.e., we distinguished individuals who report a zero probability from those with a positive probability, and these in turn were banded into five quintiles. Using random-effects ordered probit regressions, we then re-analyzed the models of having a will, inclusion of all children in the will, and equal intended bequests. Again, the results from this analysis are qualitatively very similar to those discussed above. These and the previous estimates are reported in the online appendix.

have opposite effects on the probability of having a will. Wealthier parents are less likely to report not having a will. But higher income parents are more likely to do so, perhaps because such parents are likely to be younger and still in the labor force. In both types of families, having made inter vivos transfers is associated with a 5–9 percentage point reduction in the probability of not having a will. Being in fair or poor health is associated with a 5–10 percentage point increase for stepparents, while the estimated increase is 9–13 percentage points for no-contact parents. Less healthy parents, who might be more in need of care from their children, may have an incentive to have a will. Finally, larger differences in children's incomes are associated with a higher probability of not having a will, although this relationship is never statistically significant.

Wealthier stepparents and wealthier no-contact parents are more likely to report including all children in their wills as well as dividing their estates equally. Moreover, for parents with stepchildren, greater parental income, which might be more common among younger (still working) parents, is associated with a reduction in both probabilities. For such parents, we also estimate that parents who have already made inter vivos transfers have a 7 percentage point higher probability of including all children in their wills and 11 percentage point higher probability of intending equal bequests. For no-contact parents, the relationship with income is weaker and the effect of inter vivos transfers is smaller. For instance, having already made inter vivos transfers increases the probability of including all children in the will by 4–5 percentage points and the probability of equal bequest intentions by 5–7 percentage points.

For both types of families, greater income dispersion between siblings is associated with a lower probability that wills include all children and a greater probability that parents intend to divide their estates unequally. Although these correlations are not statistically significant, if we assume that parents intend to give more to low-income children, then they are consistent with altruistic behavior.

Parents in poor health are 2 to 4 percentage points less likely to include all children in the will and, conditional on mentioning all children, around 4 percentage points less likely to include all of them equally. If poor health reflects parents' long-term need for child assistance, these results suggest that parents may use their intended future transfers, which they could make known to their children, to elicit a long-term flow of services. This is consistent with the exchange motive documented by Light and McGarry (2004).

5. Further Empirical Results

In this section we discuss further results in four subsections. Specifically, in subsection A we compare our benchmark RE estimates with the estimates found with FE models and those found with an instrumental variables approach. In subsection B we exploit the longitudinal aspect of the HRS examining changes in bequest intentions, while in

subsection C we turn from bequest intentions to the actual division of estates using the exit files. Finally, in subsection D we examine how contacts and interactions between parents and children in complex families are related to end-of-life transfers.

A. Evidence from Fixed Effects and Instrumental Variables Models

FE Estimates — As mentioned in Section 3, the RE estimates presented so far rely on the assumption that the unobserved individual-specific component of the error term and our measure of family complexity (i.e., ν_i and C_{it}, respectively, in equation (1)) are uncorrelated. A concern with the RE estimates is that the effect of family complexity on bequest behavior might be spurious. But this may be due precisely to the mutual association that family complexity and bequest behavior share with some unmeasured causal factor. For instance, the association between having stepchildren (or having no contact with genetic children) and not mentioning all children equally in the will may not be driven by family complexity per se. Rather, it may reflect some hard-to-measure characteristics of the complex families in which older individuals live, such as the personality of their new partners or frail health.

Although the primary goal of this paper is not to provide estimates that have a causal interpretation, we also performed our analysis estimating equation (1) with FE linear probability models. Indeed we do not see these estimates as offering a casual effect of family complexity, but rather as providing us with a robustness check of the estimates we reported earlier. The FE estimates are shown in panel A of Table 7 where, for ease of comparison, we also report the RE estimates from our basic specification discussed above.[29]

Consider first the estimates for stepparents. In the cases of inclusion of all children in the will and of equal division (columns (b) and (c) respectively), the FE estimates are just slightly smaller (in absolute value) than the corresponding benchmark RE estimates, but they have the same sign and the same level of statistical significance. The economic interpretation of them is therefore the same as that of our previous RE estimates.

If instead we look at the probability of having no will (column (a)), the FE estimates reveal that stepparents are 2 percentage points less likely to have no will than their counterparts without stepchildren, while the RE estimates revealed no difference between the two groups of parents. Albeit quantitatively small, this difference reveals that stepparents may be less willing to rely on the default rules of heirship, than what we would have inferred from the RE results.

Turning to no-contact families, the FE estimates show no significant relationship between this type of families and their likelihood of having no will (column (d)). The difference between the FE results and the RE estimates disappears, however, when we

[29]The FE estimates from the other specifications are available in the online appendix.

move to richer specifications: indeed Table 4 (specifications (c)–(e)) reveals no correlation among all groups of no-contact families, except for widowers.

Finally, in the cases of inclusion of all children and of equal division, the FE estimates confirm the negative link found with the RE models, but the FE estimates are about 70 to 76 percent lower in absolute value. This may suggest that the strength of the association between lack of contact and bequest behavior is lower than that suggested by the RE estimates. But it may also reveal the presence of substantial measurement errors in the C_{it} variable which would bias our estimates toward zero. Because of this possibility, we now turn to the instrumental variables approach.

IV Estimates — To account for the potential endogeneity of family complexity in (1) and limit the possible problem of measurement error in C_{it}, which could be exacerbated by the FE model, we resort to an instrumental variables approach. The variable we use to instrument for family complexity is a novel measure of optimism, which we construct using individual expectations information contained in the HRS questionnaires. In particular, we use a measure that combines the individuals' responses to two questions, one on inflation expectations over the next 10 years and the other on the expectation of a major depression over the next 10 years. We use optimism as a predictor of life choices which, in turn, are linked to family complexity. A complete description of this variable and its subcomponents is available in the online appendix, where we also discuss its relationship with individuals' demographic and socioeconomic characteristics.

The only other economic study that correlates optimism to life choices (and remarriage, among others) is Puri and Robinson (2007). Their measure of optimism, however, is based on individuals' life expectancy miscalibration (that is, the gap between individuals' self-reported life expectancy and that implied by actuarial tables), while ours does not refer to events that are affected by respondents' life decisions. This difference is important because life expectancy and life expectancy miscalibration are likely to be endogenous to family structure and other life decisions, e.g., health choices, which in turn might be associated with individual bequest behavior.

Social and medical scientists have provided a wealth of evidence indicating that dispositional optimism — whereby one has a positive general outlook about future events and life in general — does matter for physical and psychological well-being (Scheier, Carver, and Bridges 1994; Solberg Nes and Segerstrom 2006). For example, there is a large body of evidence that documents that optimistic cancer patients face lower mortality risk and experience faster recovery after surgery than pessimists (e.g., Schulz et al. 1996; Scheier et al. 1989; Rasmussen, Scheier, and Greenhouse 2009). Puri and Robinson (2007) find that more optimistic people work harder, expect to retire later, invest more in individual stocks, and save more. They also find that optimists who report they have been divorced before are more likely to remarry.

Our IV results are reported in panel B of Table 7. These are obtained from bivariate probit regressions in which the first and second stages are estimated jointly. The first stage predicts family complexity, C_{it}, using the residuals of our measure of optimism from a regression of optimism on age and sex. To account for the fact that we include a predicted variable, the bivariate probit standard errors are estimated using a bootstrap method that, due to the panel nature of the data, also allows for within-individual correlation.

Irrespective of the type of complex family (whether stepfamily or no-contact family) and across all three bequest outcomes, the χ^2 tests and corresponding p-values in the first stage suggest that our instrument is always statistically relevant. We find that, on average, an increase in optimism of 1 percent leads to a reduction in the likelihood that the HRS respondents live in a complex family of 0.1–0.2 percentage points.[30]

The second stage estimates indicate that stepparents are 26 percentage points less likely to include all children in their wills and 31 percentage points less likely to intend equal division of their estate than parents with only genetic children (columns (b) and (c), respectively). These are very close to the benchmark RE estimates we found in Section 4. The corresponding IV estimates for the sample of parents without contact with at least one of their genetic children are instead significantly larger in absolute value than those obtained from the RE models (columns (e) and (f)). This last result suggests the possible presence of unobserved common factors shared by the processes that generate bequest intentions and the likelihood of living in a complex family.

Finally, the IV estimates in columns (a) and (d) show that parents in complex families are, respectively, 21 and 6 percentage points more likely to have no will than their simple family counterparts. The latter estimate is statistically insignificant and is indistinguishable from the corresponding RE estimate shown in Table 4. The significant and positive sign of the former coefficient, instead, may indicate that parents in stepfamilies are substantially more reluctant to make wills than implied by the RE models in Table 3. Family complexity may encourage this procrastination.

In sum, the results presented in Section 4 provide us with a useful benchmark, with the RE estimates being almost always between the FE estimates and the IV estimates. Although the FE model does not impose a zero-correlation assumption between the unobserved individual component of the residuals and C_{it}, its estimates might exacerbate the problems due to measurement error in the family complexity variables. The gaps between

[30]This result is not in line with the finding by Puri and Robinson (2007) that more optimistic people are more likely to remarry. A number of reasons may explain this difference. For example, we employ a different measure of optimism. Moreover, the individuals in their sample are almost twenty years younger than the HRS respondents in our study. Finally, we consider the whole population while they focus on individuals who have been divorced. For comparison, we also repeated our analysis on the subsample of divorced individuals. We found results similar to those shown in Table 7. These estimates are available in the online appendix. More generally, our findings are consistent with the evidence from the psychological literature that documents that optimists are a positive resource for close relationships (Srivastava et al. 2006; Carver et al. 2010).

the IV and the RE estimates shown in Table 7 might instead reflect the downward bias in the RE estimates attributable to measurement errors, with only a small bias in the RE estimates induced by omitted variables.[31] They might also reflect unobserved differences between the characteristics of the treatment and comparison groups (optimists versus pessimists in our case) implicit in the IV approach. Our results therefore suggest that the RE estimates are likely to be not far off the mark. For this reason the results we report in the following subsections rely on RE specifications.

B. Transitions in Bequest Intentions

Exploiting the longitudinal aspect of the HRS, we analyze *changes* in bequest intentions. For each of our three bequest outcomes, these can be readily estimated using equation (1) conditional on $Y_{i,t-1} = 0$ or $Y_{i,t-1} = 1$. Individuals have a high degree of persistence in their intentions. Of those who do not have a will in one wave 88 percent remain without a will in the subsequent wave, and 86 percent (or 79 percent) of those intending to bequeath to all children (or to all children equally) at one point in time continue to do so the subsequent time they are interviewed.

We focus on the transitions from not having a will to having a will, from having a will that does not include all children to having a will that includes all children, and from unequal intended bequests to equal intended bequests.[32] In our analysis we explicitly consider the interaction of the presence of stepchildren or parental absence with changes in parents' marital status (e.g., divorce and death of a spouse). Several other changes might interact with bequest plans and the joint presence of genetic children and stepchildren or the lack of contact with genetic children, such as changes in parental health and changes in children's economic situations. These however are not modeled, due to the small size of our samples.

Table 8 shows the results from a specification that includes changes in our basic set of controls, health status, money transfers to children, and parental income and wealth (comparable to specification (d) in Tables 3–6). The estimates of interest are robust to their exclusion. In panel A we look at stepparents, while in panel B we focus on no-contact parents. For each transition, we report two sets of coefficients. In the first column, we present the impact of having stepchildren or genetic children with whom the parent has no contact on the transition under study. In the second we also show the interaction terms of the stepparent or no-contact parent variable with two changes in parental marital status:

[31] This is confirmed by positive regression coefficients found when we regress each measure of family complexity, C_{it}, on the random effects ν_i for each bequest outcome, Y_{it}. See Card (2001) for a similar interpretation in the context of the estimation of the return to schooling.

[32] The picture emerging from the three transitions in the opposite directions is consistent with that obtained from the three transitions just mentioned. They are therefore not presented, but are available in the web appendix. In the same appendix, for completeness, we also report the estimates obtained from all other transitions, such as from not having a will to having a will that includes all children equally, or from having a will that includes all children to not having a will.

from marriage to divorce and from marriage to widowhood. This is important because, following divorce or the death of a spouse, an individual might write a new will.

In panels C and D we analyze this possibility more directly by considering only the subsample of widows and widowers. In this case, we first analyze whether parents write a new will or change an old will after the death of their partner (first column). In the second column we present the estimates of how the presence of stepchildren or no-contact children changes bequest intentions further.[33]

Panel A of Table 8 reveals that the transition from not having a will to having a will is not affected by the joint presence of stepchildren and genetic children. This is also the case when the presence of stepchildren is interacted with the two changes in marital status. The joint presence of genetic children and stepchildren, instead, significantly reduces the probability of a transition to a will in which all children are included as well as the transition from unequal to equal bequests. Having stepchildren reduces the former transition by almost 9 percentage points (column (c)) and the latter by around 8 percentage points (column (e)). Controlling for changes in parents' marital status does not significantly alter these results (see columns (d) and (f)).

The presence of stepchildren therefore is negatively correlated not only with the probability of equal intended bequests but also with the probability of changing the will from unequal to equal treatment of children. Having lost a partner through divorce or death generally makes this transition even less likely.

Panel B confirms virtually all the previous results for the case of parents with no-contact children. Generally the estimated effects are larger in absolute value among these parents than among stepparents. The only exceptions are in columns (d) and (f) where the reductions in the probability that no-contact children are included in the will and are mentioned equally are not statistically significant if the no-contact parent's partner dies. This could be driven by the low statistical power of our small samples. We assess this issue more directly in the next two panels in which we focus on the subsample of widows and widowers.

For this subsample we draw attention to four interesting results. First, the estimates for widowed stepparents are qualitatively similar to those for no-contact parents. Second, widowhood in all complex families increases the likelihood of changing bequest intentions: it increases the transition to writing a will, having a will in which all children are mentioned, and having a will in which all children are equally included (columns (a), (c), and (e)). Third, stepchildren or no-contact children neither increase nor decrease parents' greater propensity of writing a will (column (b)), but offset their parents' greater propensities of including all children in the wills and including them all equally (columns (d) and (f)). Fourth, the presence of stepchildren combined with the loss of a spouse

[33]Other interesting changes in marital status (e.g., remarriage and repartnering) cannot be analyzed separately due to sample size limitations.

further reduces the likelihood of moving to a will with full inclusion by 13 percentage points and the likelihood of moving to a will with equal division by 9 percentage points (panel C). Such further reductions are not observed among no-contact parents (panel D). This evidence is consistent with what we found in the top two panels.

C. Actual End-of-Life Transfers: Evidence from the Exit Files

The HRS exit files provide direct information about end-of-life transfers. The exit files contain reports by the surviving spouse or partner or by other close family members of the deceased HRS respondent and they allow us to analyze the actual division of estates rather than bequest intentions. Unlike the core files, the exit files do not suffer from right censoring but they are much smaller than the core files and the HRS respondents who die early are not a random subsample of HRS respondents.

Table 9 gives a summary of our results. For each outcome we show probit estimates from two specifications. The first includes controls for standard demographics (column (a)), while the second further controls for year-of-death fixed effects, an indicator for whether the death was expected, earlier transfers to children, and parental wealth (column (b)).[34]

When looking at the probability of intestate succession (in the first two columns of Table 9), the estimated coefficient of the stepchild variable is always statistically indistinguishable from 0. This result, which holds true across all family types and for both fathers and mothers, confirms the general findings reported in Table 3. From the exit files, however, we detect neither the negative effect for widows nor the positive effect for divorced fathers which were found using the core files. This might reflect an actual change in parents' behavior with respect to their bequest intentions. That is, it is possible that widows and divorced fathers with stepchildren are not more (nor less) likely to rely on intestacy law than their counterparts without stepchildren. But it could also be due to the low statistical power implied by the small sample size of the exit files.

In the next two columns, we consider the probability of including all children in the will. This is estimated on the subsample of HRS respondents who wrote a will, while those who died intestate are not included. We generally find that having stepchildren does not affect the likelihood that all children are included (column (a)). This result emerges for the full sample as well as for all the subsamples of mothers and fathers by marital status. It contradicts what we found in Table 5 using the core files. Indeed, in two out of the nine cases under specification (b), we even find a *positive* and significant effect of the stepparent indicator. This result might indicate a strategy according to which stepparents end up including all their children (including stepchildren) in their final will.

[34]The table reports the estimates on the stepchild indicator found among families with stepparents. The exit files do not allow us to perform the same analysis on parents who did not have contacts with their genetic children.

Would all children be included *equally*? The last two columns, where we present the estimates for the probability of equal bequests, suggest that they are not.[35] In fact, in line with the bequest intention estimates of Table 6, the results in Table 9 indicate that the presence of stepchildren reduces the probability that actual bequests are equal by 9 percentage points (first line, specification (a)). This impact is roughly a fourth of the magnitude of the corresponding impact on intended bequests. As in the case of the core files, the estimated effect of stepchildren on equal actual bequests is greater for fathers than for mothers, although the relatively large standard errors make this differential response by gender statistically indistinguishable from 0. We also cannot detect differential impacts for the subpopulations of parents who experienced divorce or the death of a spouse or partner. But the probability of equal bequests is particularly low for divorced mothers and widowers, with estimated effects similar to those we found for the intended bequests. Some of these effects lose their statistical significance when we estimate specification (b), but by and large the main pattern of results is confirmed.

In sum, the presence of stepchildren does not affect the probability of writing a will. Stepparents might explicitly decide to rely on intestacy statutes which would leave nothing to stepchildren. For parents who die with a will, the actual bequests observed in the exit files are largely consistent with the bequest intentions reported in the core files. Unequal bequests are a distinguishing feature of stepparents whose genetic children are favored over stepchildren in the actual division of estates.

D. Interactions between Parents and Children

We now focus on how interactions between parents and children are related to the probability that the children are mentioned in the will. We first look at the stepparent–stepchild interaction and investigate whether stepchildren are less likely to be included in the will of a stepparent when the stepparent also has genetic children.

Table 10 presents random effects probit estimates of the probability that a stepchild is mentioned in the stepparent's will for the whole sample of stepchildren. The table shows the results from five specifications. In specification (a) we include a basic set of controls (i.e., parent and child's age and gender), the age at which the child became a stepchild, and the number of years spent with the stepparent. Specification (b) also controls for whether the stepparent reported providing care for the stepchild's child(ren), while specification (c) includes an indicator of whether the stepchild was the main recipient of inter vivos transfers from the stepparent. Specification (d) adds a measure of the stepchild's predicted income, which was constructed using the procedure described in Section 3, and controls for the within-family difference between the stepchild's predicted income and the genetic child's income (or the income mean when there are two or more genetic children). We

[35] As before, this analysis is based only on the subsample of parents who died with a will.

distinguish three subgroups, one in which the stepchild's income is equal or greater than the genetic child's, another in which it is 1–49 percent lower, and the last one in which it is 50+ percent lower.[36] Finally, specification (e) includes an indicator of whether the stepparent expects to receive help from his/her stepchild in the future.

Table 10 reveals that for a child whose stepparent also has a genetic child the probability of being included in the will is 3–4 percentage points lower, an average impact of about 15 percent (columns (a)–(e)). This is consistent with the genetic-child hypothesis according to which parents tend to favor children who share their genes. This negative relationship is entirely eliminated, however, if the stepchild's predicted income is lower than the genetic child's (specification (d)). Nearly two-fifths of stepchildren in the sample have relatively lower incomes. This finding is consistent with altruism if parents not only are more likely to mention low-income stepchildren in their wills (as we find here), but also give them more. We cannot test this last point because, as mentioned in Section 3.B, the HRS does not contain any information about the monetary amount that the respondents intend to bequeath to each child.

Across all specifications, the older the stepparent the higher the likelihood that the stepchild is included in the will: the stepchild penalty is offset if the stepparent is 10 years older than the average stepparent. This may indicate a greater need for the stepchild's assistance. These findings mirror the relationship between parents and their genetic children. In particular, they suggest that stepparents may use bequests to elicit a long-term flow of reciprocal services rather than episodic short-term care. It is possible, in fact, that episodic short-term care could be "paid for" by inter vivos transfers. This behavior is consistent with the strategic use of bequests postulated by Bernheim, Shleifer and Summers (1985). Children whose stepparents are in poor/fair health (another possible indicator of need) have however a 5–6 percentage point *decrease* in the probability of being included in the will.

Table 10 also shows that, regardless of the age at which a child acquired the stepparent, the more years he/she spent with the stepparent the higher the likelihood of being included in the will: 7–10 years of stepchildhood completely eliminate the stepchild penalty. Moreover, a stepchild's probability of inclusion in the will goes up by about 6–8 percentage points if the stepparent reports having provided care for the stepchild's child(ren) (specifications (b)–(e)) and by another 13–14 percentage points if the stepchild is also the main recipient of inter vivos transfers (specifications (c)–(e)). This may reflect trust and bonding, which are strengthened by repeated interactions over longer time periods. Finally, if stepparents expect help from their stepchildren in the future, the likelihood the stepchild is mentioned in the will goes up by 14 percentage points (a 54 percent increase

[36] We checked the sensitivity of this cutoff using different partitions (e.g., at one-third and two-thirds of the genetic child's income), and found results that are essentially identical to those shown in Table 10. These alternative estimates are thus not reported.

over the baseline probability). This result suggests again the presence of exchange motives with parents using bequests strategically toward stepchildren.

Stratifying the sample by gender (see Appendix Tables A5 and A6), we find that the negative association between the probability of being mentioned in the will and the presence of a step-sibling (i.e., the variable 'stepparent has own genetic children') is concentrated among male stepchildren, who experience a reduction in this probability of about 5–9 percentage points. Female stepchildren experience a reduction of at most 3 percentage points but this reduction is never statistically significant. For female stepchildren the probability of being mentioned in the will is also unaffected by differences in children's predicted incomes. The relationship between stepparental expectation about future help and inclusion in the will is stronger for female stepchildren (17 percentage points for female as opposed to 11 percentage points for male stepchildren). The same pattern of results, with the same gender differences, persists when we focus on the subsamples of stepchildren of divorced and widowed parents. These results are reported in the online appendix.

We now turn our attention to no-contact parent–genetic child interactions and investigate how contacts in complex families affect bequest intentions. In Table 11 we report how the probability that a genetic child is mentioned in his/her parent's will varies with the frequency of contact and with the fact that the parent's spouse is not genetically related to the child.[37] The first two columns of the table show that parents who have no contact with their genetic children are 21–24 percentage points less likely to mention them in their wills. The lack of parent–child contact therefore more than halves the child's odds of inclusion in the parent's will. Having infrequent rather than frequent contacts also reduces the likelihood of inclusion by 14–15 percentage points, but, as indicated by the p-values at the bottom of the table, the difference between having infrequent contacts and having no contact is always statistically significant. These results do not change when we add controls for child's income and other parent-child interaction terms (e.g., grandchild's care and inter vivos transfers).

We find that the "no-contact genetic child penalty" is fully offset if the child is the main recipient of inter vivos transfers. This might reflect earlier (more frequent) interactions. Similarly, if the no-contact child is a female, her penalty is reduced by 60–90 percent, perhaps reflecting the flow of other services expected by the parent but not observed in the HRS.

In columns (c) and (d) we explore how the child's odds of being mentioned in the will change not only when the child has infrequent or no contact with the parent but also if he/she is not the genetic child of the parent's partner and if the parent expects

[37]Due to small sample size we could not estimate a specification which included the within-family coefficient of variation in children's income. We thus cannot use the estimates in Table 11 to assess the role played by altruism.

to receive help from him/her in the future. We find that, if the no-contact child is also genetically unrelated to the parent's partner, his/her probability of being included in the will is further reduced by 8 percentage points (column (c)). This means that for no-contact stepchildren the odds of inclusion are essentially reduced to zero. As before, being the main recipient of inter vivos transfers and being a female will reduce the penalty substantially but will not eliminate it entirely. Expecting help from the absent child in the future does not significantly affect the likelihood of mentioning him/her in the will (column (d)). This suggests that parents do not anticipate receiving any help from genetic children with whom they have no regular contact.

Finally, we explore how the lack of contact interacts with the absence of a relationship with the parent's partner as well as with the parent's expectation of receiving help in the future (column (e)). If parents expect to receive help from their absent genetic children in the future, the probability that such children are included in the will increases by 39 percentage points. This more than offsets the penalty of having no contact. However, if the parent formed a new family and the absent child is not related to the parent's new partner/spouse, the chances that the absent child is mentioned in the will are reduced by 28 percentage points, leading to an absent-child penalty of about 17 points, almost 40 percent of the baseline probability.

We also conducted this analysis separately for male and female children, the results of which are shown in web appendix. These estimates broadly confirm the results in Table 11, with effects that are generally similar for sons and daughters. However, women (but not men) who are not the genetic children of the parent's partner face an additional penalty only if they have no contacts with their parents.

In sum, parents are more likely to transfer resources to children who share their genes than to stepchildren who are genetically unrelated to them. But a simple evolutionary story, such as the genetic-child hypothesis, does not explain what we observe in the data as, for example, in the case of no-contact parents. Furthermore, bequests to stepchildren are affected by altruistic and exchange motives. Parents are likely to leave bequests to their low-income stepchildren suggesting altruistic motives. And stepchildren are more likely to be mentioned in their stepparents' wills if the stepparents are older suggesting exchange motives. Trust and bonding seem to be highly relevant within all complex families: there is no stepchild penalty if stepparents help with child care or have already made other transfers. Similar patterns occur between parents and their no-contact genetic children. The relationship between stepchildren and parents in complex families requires deeper, more subtle explanations than those provided by the genetic-child hypothesis.

6. Theory

Here we provide a simple framework to interpret the results of the previous two sections. We borrow our key insights from the work by Behrman, Pollak and Taubman (1982, 1986, 1995).

Consider a family comprised of one older parent (e.g., the surviving spouse) and two children, child g who is her genetic child and child s who is her stepchild.[38] Suppose the parent has a separable welfare function defined over expected bequests for each child, $W(B_g, B_s)$. The parent maximizes W subject to three constraints. The first constraint is the budget constraint that applies to resources devoted to bequests. Such resources are denoted by R, while investments are denoted by H. Assume the parent faces a fixed price for investments and the price is identical for both children. Normalizing the investment price to 1, we can write the constraint as $H_g + H_s \leq R$.

The other two constrains are the bequest production functions, one for each child. One of the arguments of these functions is bequest-related investments, H, which include the full history of each child's health and human capital investments as well as material help and money transfers that the parents have made over their children's lives and that, in turn, might depend on child attributes, such as age and sex. Child-specific income and family circumstances are also determinants of such investments. Another argument, labeled P, comprises bequest-relevant parental characteristics, such as age, sex, marital status, health, income, and wealth. A final category, labeled T, includes variables that determine the trust relationship between each child and the parent. This takes account of physical proximity, contact, and bonding between parent and child, and is signaled by and shaped by repeated interactions and relative bargaining powers. Putting together these arguments leads us to a child-specific bequest production function of the form $B_k = B(H_k, P_k, T_k)$, $k = g, s$.

Provided the constrained maximization faced by the parent has an interior solution, the first-order condition for parental bequest related investment for child k is

$$\frac{\partial W}{\partial B_k}\frac{\partial B_k}{\partial H_k} - \lambda = 0,$$

where λ is the Lagrange multiplier for the budget constraint that applies to resources devoted to bequest-related investments for the two children. Expressing the first-order conditions in ratio form yields

$$\frac{\partial W/\partial B_s}{\partial W/\partial B_g} = \frac{\partial B_g/\partial H_g}{\partial B_s/\partial H_s}.$$

This expression, which does not include the unobservable λ, corresponds to the standard

[38] Alternatively, child s could be seen as the genetic child with whom the older parent has no contact.

tangency condition for a constrained maximum, i.e., the slope of the parental welfare function equals the slope of the bequest possibility frontier for child s versus child g. This is illustrated by point A in Figure 6. In this figure, we assume equal concern for both children, so the indifference curves are symmetrical around the 45 degree line from the origin. If we also assume a symmetric bequest possibility frontier, these assumptions imply equal bequests in equilibrium, $B_g^* = B_s^*$.

Because in the previous two sections we found strong evidence of unequal bequest intentions that favor genetic children over stepchildren, we consider changes in the assumptions underlying Figure 6. A straightforward change is to allow for unequal concern. For instance, stepparents may expect stepchildren to care less efficiently for them, or may anticipate that stepchildren can also rely on their nonresidental biological parents for help and support. This case is illustrated in Figure 7, with parental preferences favoring the child genetically linked to the parent, that is child g. If the production possibility frontier remains symmetric, a parent with unequal concern favoring the genetic child will divide the estates unequally, in such a way that $B_g^* > B_s^*$.

Another departure from the benchmark of Figure 6 is through a change in the production possibility frontier, while keeping the assumption of equal concern. Parents might have skewed bequest related investments in favor of their genetic children, or genetic children might have greater bargaining power (emotional capital) toward their parents than stepchildren do. Point E^* in Figure 8 illustrates this case. Clearly, if parents also have unequal concern favoring their genetic children, then the bequest division between the stepchild and the genetic child could be even more unequal, as illustrated by point E' in the figure.

The results in subsection 5.D suggest that the situation is less unfavorable to stepchildren if there is greater bonding and trust between them and their stepparents and if stepparents have greater access to the stepchildren's family-specific capital. This bonding and trust is signaled and fostered by the stepparent providing care for the stepchild's children or making direct transfers to the stepchild. When this happens, the bequest possibility frontier can shift and the household will reach the new equilibrium E'' in Figure 8 (under the assumption of equal concern).

7. Conclusion

In the last thirty years, American families have experienced massive changes: a retreat from marriage, increased divorce and remarriage, and growth in cohabitation and nonmarital childbearing. Stepparents and no-contact parents in complex families may be less motivated than parents in traditional families to provide resources to children with whom they do not share their genes or have not shared their homes. And children in complex families may be less willing than children in traditional families to assist disabled older

parents, especially those with whom they have no genetic connection or only briefly shared a home.

For younger cohorts, nonmarital fertility of cohabiting couples who break up and repartner will substantially increase the prevalence of complex families. Those in the HRS cohort are older, and their complex families are generally a by-product of divorce and remarriage. The implications for intergenerational transfers of these changes in family structure are difficult to predict because complex families created by cohabitation and nonmarital fertility in younger cohorts may behave differently from those created by divorce and remarriage in older cohorts.

We have shown that bequests are much more unequal now than in the recent past and much more unequal than generally recognized. In simple families (i.e., families with neither stepchildren nor no-contact children), equal bequests are the dominant pattern. In complex families, however, we find substantial inequality in both bequest intentions and actual bequests. We cannot assess the relative importance of genetic ties and contact by studying simple families because in such families all of the children have the same genetic ties with their parents. But the bequest patterns we find in complex families imply that contact trumps genetic ties.

The economics literature on end-of-life transfers assumes that individuals, or at least older individuals, make wills. We find instead that parents often fail to write wills and, either by design or default, rely on intestacy law to determine the distribution of their estates. For parents with stepchildren, the effect of relying on intestacy law is to leave everything to genetic and legally-adopted children and nothing to stepchildren. For no-contact parents, the effect of relying on intestacy law is to treat contact and no-contact genetic children equally. If parents understand the most basic provisions of intestacy law, this finding is puzzling. It implies that parents who have had no contact with some of their genetic children are more likely to treat all of their genetic children equally than are parents who have maintained contact with all of their genetic children. We suspect that the absence of wills reflects the disutility of making wills (and contemplating death) rather than preferences for the distribution mandated by intestacy law. Unfortunately, HRS provides no evidence that speaks to this issue. Regardless of parents' motivations for not making wills, we have shown that focusing exclusively on bequest intentions (i.e., on parents who make wills) provides an incomplete and misleading picture of end-of-life transfers.

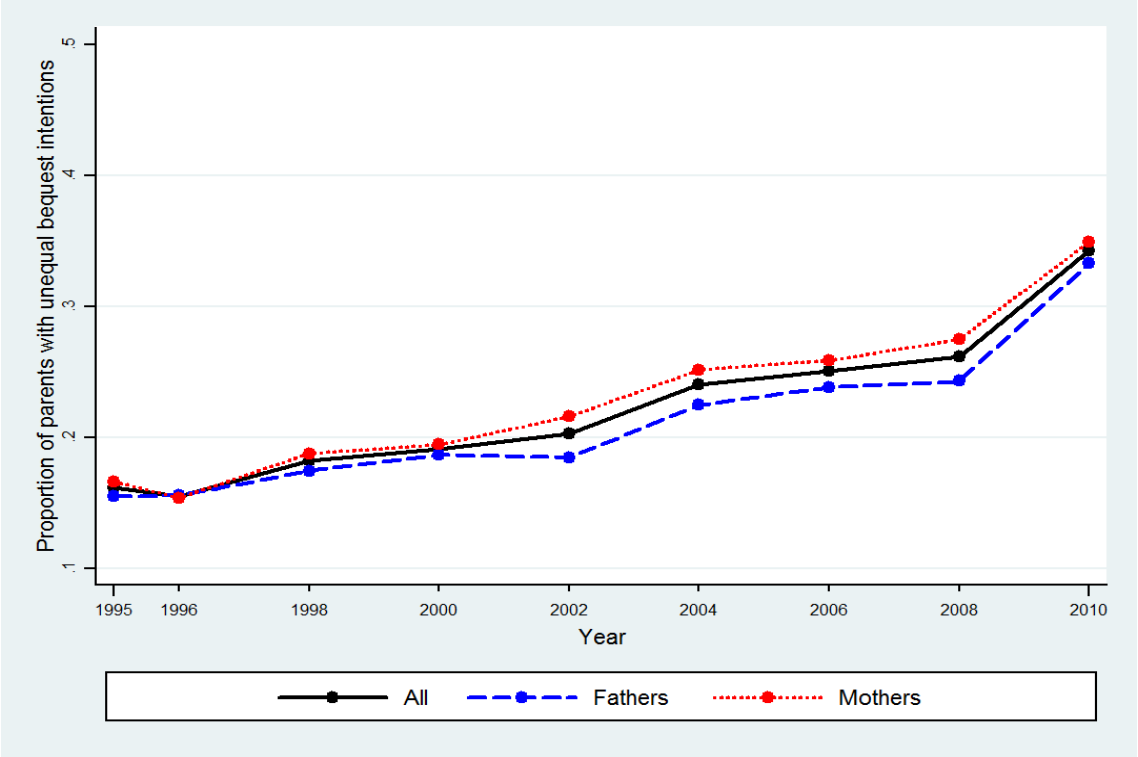

Figure 1: Unequal Bequest Intentions, by Parent's Gender

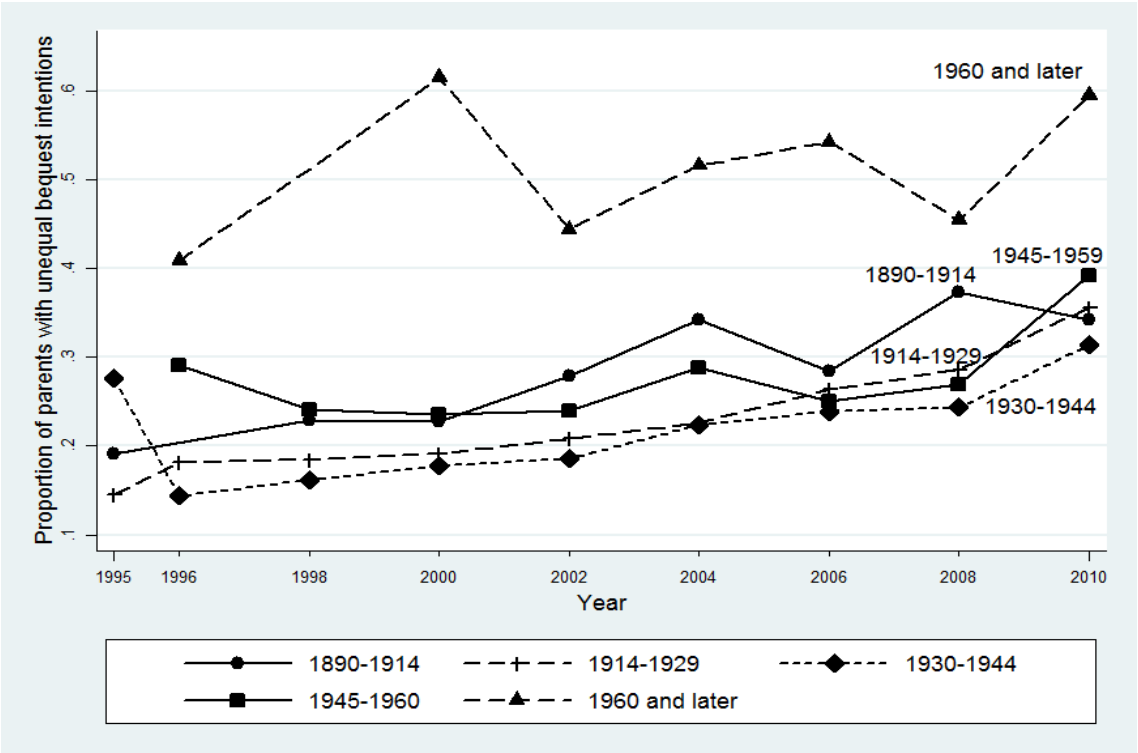

Figure 2: Unequal Bequest Intentions, by Parent's Birth Cohort

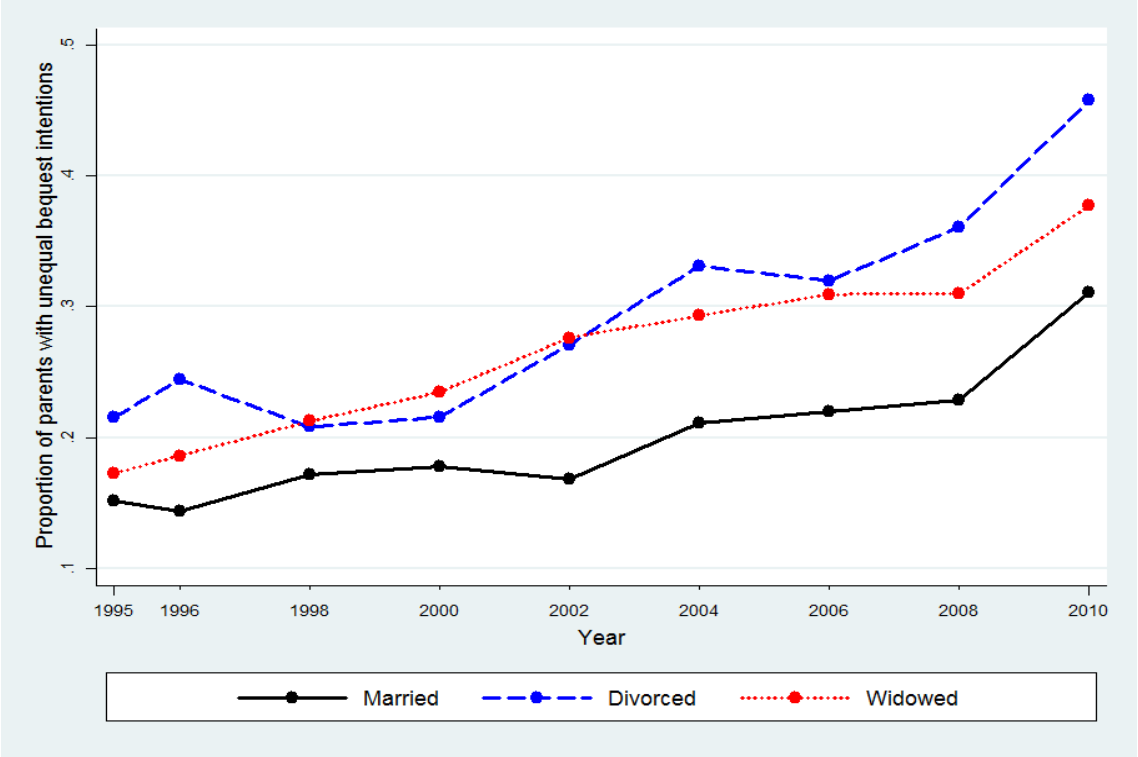

Figure 3: Unequal Bequest Intentions, by Parent's Marital Status

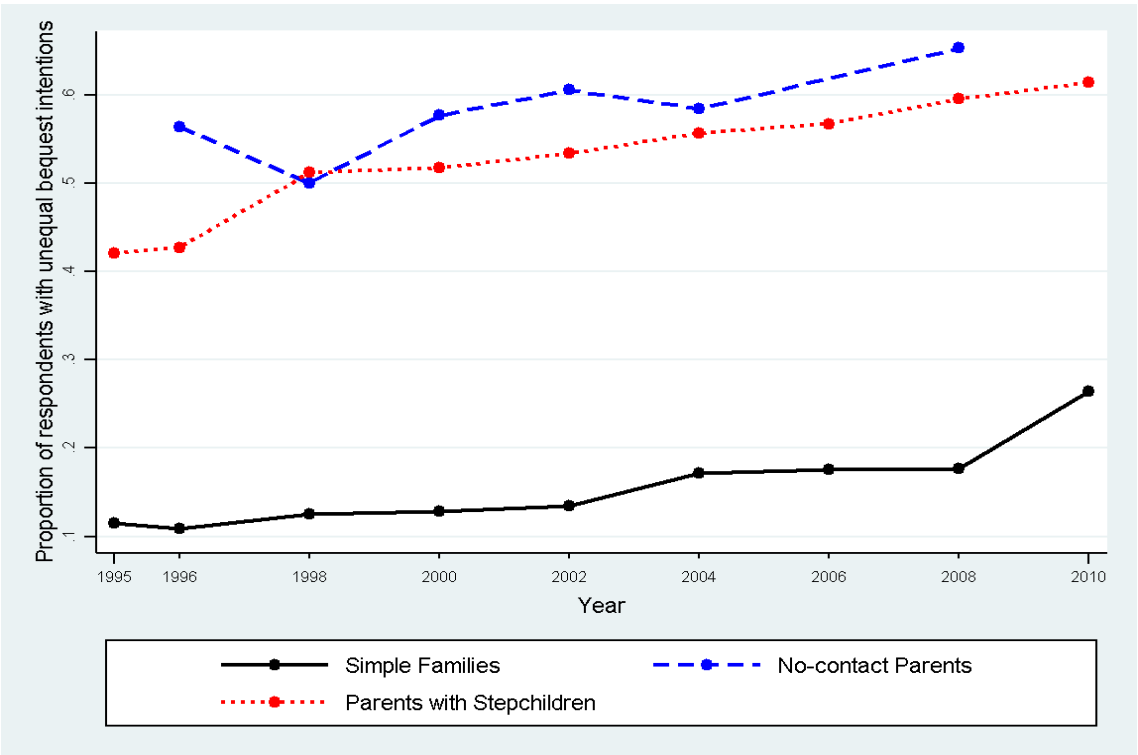

Figure 4: Unequal Bequest Intentions, by the Family Type

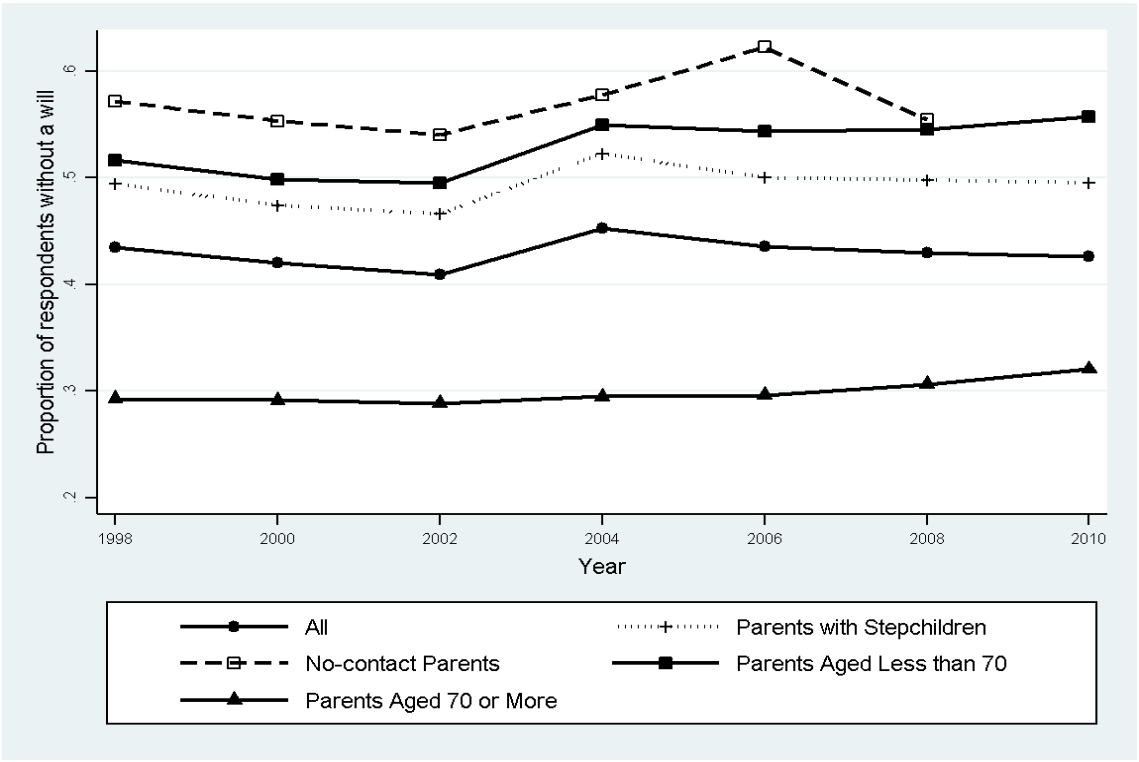

Figure 5: Trends in Intestacy Rates, by Parent's Age and Family Type

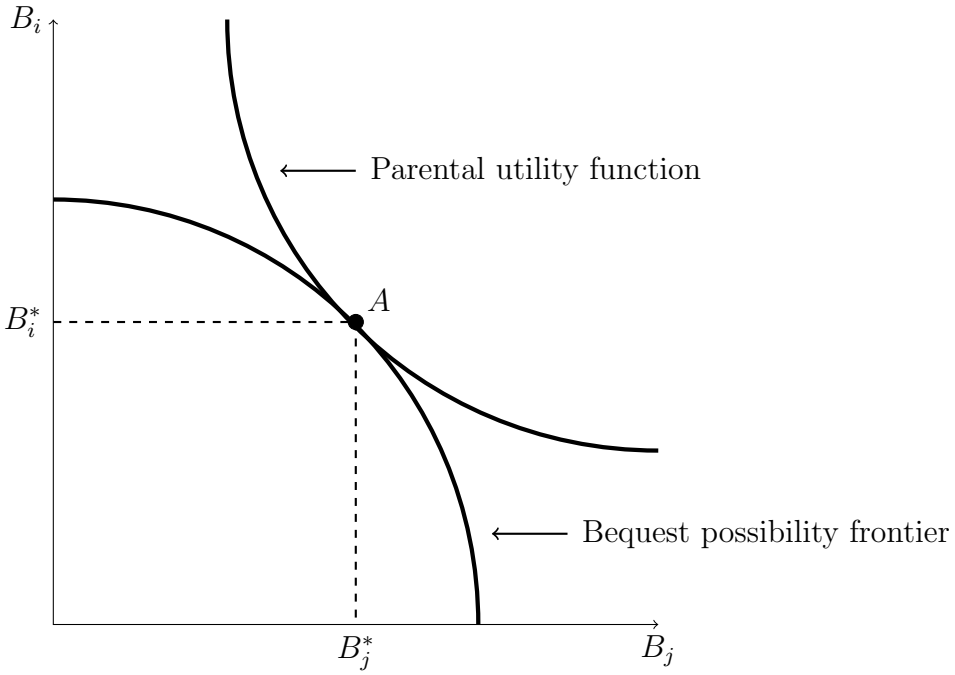

Figure 6: Equal Concern and Symmetric Bequest Possibility Frontier

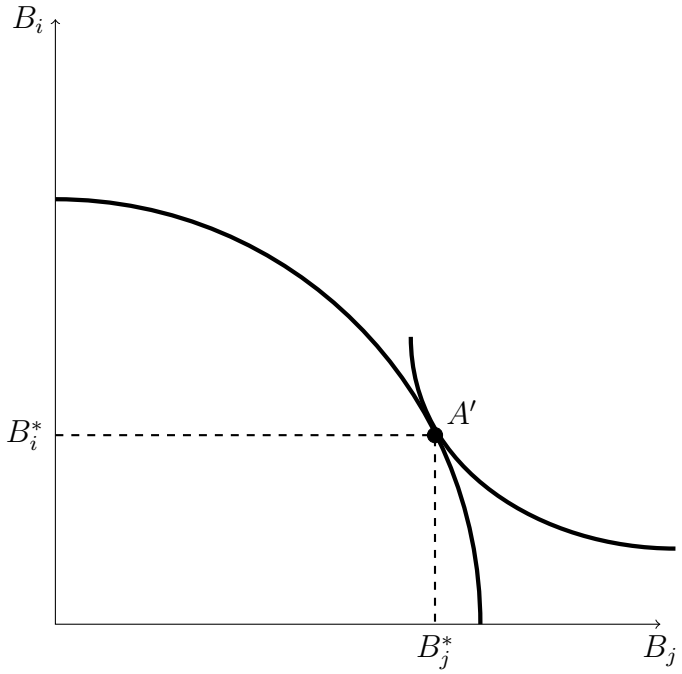

Figure 7: Unequal Concern Favoring Child j and Symmetric Bequest Possibility Frontier

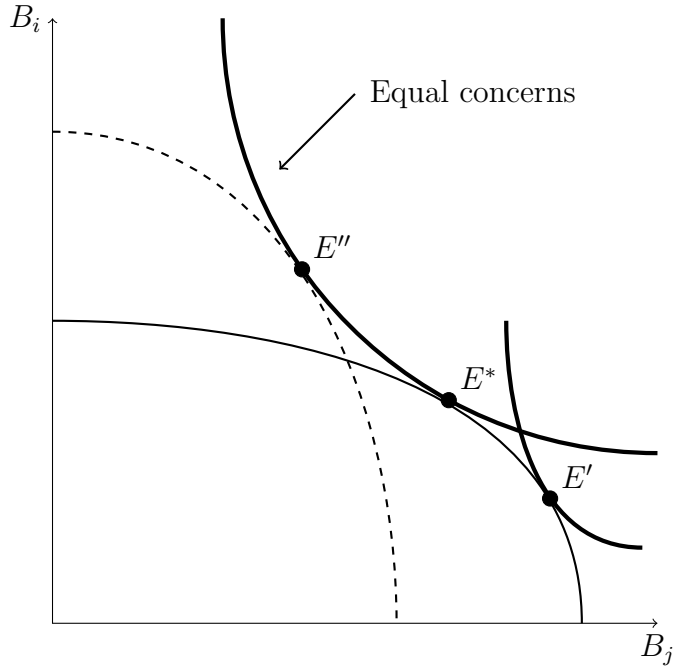

Figure 8: Asymmetric Bequest Possibility Frontiers With and Without Equal Concern

Table 1: Descriptive Statistics – Dependent Variables

	(a)	(b)	(c)	(d)		
	All	Parents with step- and genetic children	Parents with genetic children only	Difference (b)-(c) (t-value)	N	n
A. No will						
Core files						
All	0.418	0.475	0.406	0.069*** (18.152)	117,189	23,984
Divorced	0.623	0.663	0.617	0.046*** (3.784)	13,703	3,754
Widowed	0.376	0.395	0.373	0.022** (2.580)	27,308	7,679
Exit files						
All	0.375	0.401	0.371	0.030* (1.957)	7,416	7,416
Divorced	0.570	0.587	0.567	0.020 (0.356)	702	702
Widowed	0.348	0.370	0.346	0.024 (0.928)	3,220	3,220
B. Will includes all children						
Core files						
All	0.746	0.462	0.805	-0.343*** (76.840)	60,994	14,275
Divorced	0.734	0.293	0.808	-0.515*** (29.636)	4,363	1,456
Widowed	0.761	0.358	0.834	-0.476*** (52.965)	14,597	4,583
Exit files						
All	0.587	0.618	0.581	0.037* (1.816)	4,567	4,567
Divorced	0.801	0.774	0.806	-0.033 (0.547)	337	337
Widowed	0.856	0.876	0.853	0.022 (0.878)	1,956	1,956
C. Equal intended and actual bequest						
Core files						
All	0.676	0.390	0.735	-0.345*** (71.539)	60,994	14,275
Divorced	0.641	0.245	0.708	-0.462*** (23.747)	4,363	1,456
Widowed	0.679	0.291	0.749	-0.459*** (45.638)	14,597	4,583
Exit files						
All	0.473	0.421	0.484	-0.063*** (2.998)	3,878	3,878
Divorced	0.604	0.453	0.639	-0.186** (2.511)	280	280
Widowed	0.712	0.608	0.729	-0.120*** (3.656)	1,610	1,610

Note: N=number of observations; n=number of individuals. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$.

Table 2: Descriptive Statistics – Explanatory Variables

	All	Parents with a will	Parents with step- and genetic children	Parents with step-children and a will	Parents included in the exit files[a]
	(a)	(b)	(c)	(d)	(e)
1 if has step- and genetic children	0.223	0.196	1.000	1.000	0.136
Demographics					
Female	0.564	0.557	0.559	0.573	0.529
Age	68.59	70.76	65.64	68.65	78.17
	(10.59)	(10.32)	(10.81)	(10.66)	(10.39)
1 if white	0.829	0.927	0.797	0.910	0.833
1 if married or partnered	0.644	0.672	0.692	0.699	0.476
1 if separated, divorced or never married	0.123	0.078	0.123	0.082	0.096
1 if widowed	0.233	0.250	0.185	0.218	0.429
Number of marriages	1.355	1.312	1.920	1.951	1.347
	(0.668)	(0.612)	(0.815)	(0.767)	(0.664)
Health					
1 if in poor/fair health	0.297	0.246	0.286	0.242	0.622
Education					
1 if below high school	0.368	0.317	0.350	0.314	0.423
1 if high school	0.341	0.350	0.338	0.349	0.306
1 if college or more	0.292	0.333	0.312	0.337	0.271
Employment					
1 if in the labor force	0.412	0.366	0.459	0.392	0.068
1 if disabled	0.082	0.046	0.099	0.056	0.154
1 if retired	0.506	0.588	0.443	0.551	0.778
Child variables					
Number of children	3.522	3.274	5.004	4.852	3.464
	(2.092)	(1.860)	(2.436)	(2.272)	(2.219)
Number of bio children	3.092	2.889	3.075	2.887	3.129
	(1.791)	(1.551)	(1.878)	(1.691)	(1.993)
Number of stepchildren	0.430	0.384	1.929	1.965	0.335
	(1.149)	(1.077)	(1.741)	(1.682)	(1.102)
Coefficient of within-family variation for children's predicted income[b]	0.411	0.398	0.449	0.433	0.414
	(0.356)	(0.265)	(0.382)	(0.217)	(0.230)

(cont.)

(cont.)

	(a)	(b)	(c)	(d)	(e)
Financial variables					
Real annual household income[c]	26,940 (205,093)	28,271 (157,141)	29,788 (44,663)	32,492 (56,093)	7,630 (18,500)
Real wealth[d]	267,702 (1,268,856)	387,954 (1,543,720)	231,881 (1,084,812)	351,730 (1,370,953)	238,948 (1,521,039)
1 if gave money to at least a child[e]	0.362	0.411	0.379	0.424	0.255
1 if gave money to all children equally[e]	0.079	0.101	0.032	0.415	0.081
N	117,189	68,248	26,111	13,348	7,071
n	23,984	12,763	5,082	2,342	7,071

Note: Figures are means and standard deviations (for continuous variables only) are in parentheses. N=number of observations; n=number of individuals.

[a] Values are from the last year of observation in the core files. For some of the variables, N and n are different from the values given at the bottom of the table. They are available from the authors.

[b] Based on 60,055 observations from 8,776 individuals.

[c] In 1995 values, and based on 74,099 observations from 13,323 respondents.

[d] In 1995 values, and based on 52,078 observations from 10,830 respondents; includes values of financial and real estate properties.

[e] Based on 78,773 observations from 15,493 respondents.

Table 3: Effect of Having Stepchildren on the Probability of Not Having a Will

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	0.006	0.003	-0.017	-0.014	-0.028
	(s.e.)	(0.020)	(0.024)	(0.020)	(0.023)	(0.030)
	N	117,189	78,773	67,615	51,761	32,199
	n	23,984	21,178	16,198	15,041	9,285
Mothers	Estimate	-0.009	-0.017	-0.051*	-0.045	-0.037
	(s.e.)	(0.029)	(0.033)	(0.030)	(0.032)	(0.036)
	N	66,098	52,419	36,763	33,001	25,084
	n	13,498	12,662	9,055	8,824	6,854
Fathers	Estimate	0.024	0.032	0.011	0.019	0.011
	(s.e.)	(0.026)	(0.033)	(0.025)	(0.033)	(0.056)
	N	51,091	26,354	30,852	18,760	7,115
	n	10,509	8,530	7,152	6,225	2,435
Widows and widowers	Estimate	-0.049	-0.052	-0.026	-0.028	-0.007
	(s.e.)	(0.032)	(0.032)	(0.020)	(0.021)	(0.024)
	N	27,308	26,986	21,135	20,972	16,104
	n	7,679	7,638	6,662	6,637	5,248
Widows	Estimate	-0.074**	-0.069**	-0.043**	-0.041**	-0.019
	(s.e.)	(0.033)	(0.034)	(0.019)	(0.020)	(0.024)
	N	22,416	22,196	17,179	17,073	13,152
	n	5,960	5,935	5,158	5,142	4,085
Widowers	Estimate	0.019	-0.007	0.046	0.022	0.044
	(s.e.)	(0.072)	(0.071)	(0.066)	(0.063)	(0.076)
	N	4,892	4,790	3,956	3,899	2,952
	n	1,725	1,709	1,509	1,500	1,166
Divorced parents	Estimate	0.033	0.048	0.106**	0.105**	0.116**
	(s.e.)	(0.031)	(0.034)	(0.048)	(0.051)	(0.056)
	N	13,703	13,140	10,087	9,853	7,006
	n	3,754	3,653	3,034	2,999	2,118
Divorced mothers	Estimate	-0.019	0.020	0.107	0.097	-0.050
	(s.e.)	(0.054)	(0.051)	(0.073)	(0.078)	(0.138)
	N	8,916	8,690	6,496	6,425	4,715
	n	2,346	2,311	1,878	1,872	1,372
Divorced fathers	Estimate	0.076*	0.082*	0.118*	0.121*	0.195***
	(s.e.)	(0.044)	(0.048)	(0.062)	(0.065)	(0.060)
	N	4,787	4,450	3,591	3,428	2,291
	n	1,411	1,344	1,156	1,127	746

Note: The figures are marginal effects of the parent with stepchildren indicator from random effects probit models. The comparison group is given by parents with genetic children only. See the text for an explanation of specifications (a)–(e).

N=number of observations; n=number of individuals. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Effect of No Contacts on the Probability of Not Having a Will

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	0.055**	0.050*	0.024	0.021	0.029
	(s.e.)	(0.024)	(0.026)	(0.028)	(0.029)	(0.031)
	N	41,075	34,127	24,437	22,450	18118
	n	12,739	11,868	8,767	8,529	6,927
Mothers	Estimate	0.041	0.025	0.004	-0.004	0.001
	(s.e.)	(0.028)	(0.031)	(0.032)	(0.033)	(0.035)
	N	33,844	27,895	19,196	17,628	14381
	n	9,847	9,259	6,557	6,401	5,246
Fathers	Estimate	0.103**	0.120**	0.068	0.075	0.088
	(s.e.)	(0.047)	(0.048)	(0.052)	(0.054)	(0.060)
	N	7,231	6,232	5,241	4,822	3,737
	n	2,900	2,615	2,211	2,129	1,682
Widows and widowers	Estimate	0.091***	0.092***	0.057*	0.055*	0.056*
	(s.e.)	(0.035)	(0.036)	(0.029)	(0.030)	(0.031)
	N	14,384	14,291	11,224	11,164	9,198
	n	5,352	5,331	4,653	4,634	3,804
Widows	Estimate	0.060	0.060	0.034	0.031	0.030
	(s.e.)	(0.038)	(0.039)	(0.030)	(0.030)	(0.030)
	N	11,887	11,815	9,167	9,121	7,514
	n	4,237	4,220	3,667	3,652	2,992
Widowers	Estimate	0.202**	0.200**	0.140*	0.139*	0.159*
	(s.e.)	(0.081)	(0.080)	(0.077)	(0.077)	(0.085)
	N	2,497	2,476	2,057	2,043	1,684
	n	1,118	1,114	987	983	813
Divorced parents	Estimate	0.027	0.027	-0.001	0.002	0.023
	(s.e.)	(0.023)	(0.024)	(0.046)	(0.046)	(0.049)
	N	7,897	7,817	5,893	5,847	4,391
	n	2,792	2,776	2,280	2,264	1,699
Divorced mothers	Estimate	0.026	0.022	-0.010	-0.002	0.030
	(s.e.)	(0.028)	(0.029)	(0.064)	(0.063)	(0.064)
	N	5,483	5,441	4,026	4,005	3,073
	n	1,851	1,848	1,504	1,499	1,150
Divorced fathers	Estimate	0.040	0.044	0.016	0.015	0.021
	(s.e.)	(0.040)	(0.040)	(0.065)	(0.065)	(0.073)
	N	2,414	2,376	1,867	1,842	1,318
	n	943	930	776	765	549

Note: The figures are marginal effects of the no-contact parent indicator from random effects probit models. See the note to Table 3 for further explanations.
N=number of observations; n=number of individuals. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Effect of Having Stepchildren on the Probability that the Will Includes All Children

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	-0.279***	-0.311***	-0.305***	-0.328***	-0.385***
	(s.e.)	(0.017)	(0.020)	(0.021)	(0.024)	(0.029)
	N	60,994	39,761	37,446	28,031	19,435
	n	14,275	12,328	9,762	8,956	6,168
Mothers	Estimate	-0.360***	-0.359***	-0.391***	-0.377***	-0.365***
	(s.e.)	(0.022)	(0.026)	(0.030)	(0.032)	(0.034)
	N	33,529	25,862	19,639	17,535	15,302
	n	7,827	7,243	5,267	5,112	4,589
Fathers	Estimate	-0.190***	-0.251***	-0.215***	-0.266***	-0.435***
	(s.e.)	(0.025)	(0.032)	(0.031)	(0.038)	(0.057)
	N	27,465	13,899	17,807	10,496	4,133
	n	6,460	5,091	4,500	3,848	1,581
Widows and widowers	Estimate	-0.421***	-0.398***	-0.393***	-0.374***	-0.377***
	(s.e.)	(0.040)	(0.041)	(0.042)	(0.043)	(0.045)
	N	14,597	14,402	12,620	12,514	11,075
	n	4,583	4,554	4,207	4,187	3,817
Widows	Estimate	-0.444***	-0.433***	-0.419***	-0.408***	-0.410***
	(s.e.)	(0.044)	(0.045)	(0.046)	(0.047)	(0.048)
	N	11,911	11,776	10,247	10,178	9,064
	n	3,548	3,529	3,247	3,235	2,975
Widowers	Estimate	-0.343***	-0.258***	-0.288***	-0.225**	-0.219**
	(s.e.)	(0.101)	(0.010)	(0.104)	(0.101)	(0.107)
	N	2,686	2,626	2,373	2,336	2,011
	n	1,039	1,029	963	955	843
Divorced parents	Estimate	-0.604***	-0.629***	-0.605***	-0.630***	-0.589***
	(s.e.)	(0.068)	(0.073)	(0.078)	(0.080)	(0.097)
	N	4,363	4,172	3,664	3,573	2,960
	n	1,456	1,413	1,257	1,237	994
Divorced mothers	Estimate	-0.495***	-0.477***	-0.467***	-0.469***	-0.462***
	(s.e.)	(0.117)	(0.132)	(0.147)	(0.154)	(0.166)
	N	2,818	2,741	2,385	2,356	2,042
	n	877	863	763	759	645
Divorced fathers	Estimate	-0.633***	-0.678***	-0.623***	-0.660***	-0.581***
	(s.e.)	(0.086)	(0.088)	(0.095)	(0.097)	(0.137)
	N	1,545	1,431	1,279	1,217	918
	n	580	550	494	478	349

Note: See the note to Table 3.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Effect of Having Stepchildren on the Probability that Stepparents Intend to Divide their Estate Equally Among All Children

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	-0.285***	-0.310***	-0.288***	-0.311***	-0.375***
	(s.e.)	(0.016)	(0.020)	(0.021)	(0.024)	(0.028)
	N	60,994	39,761	37,446	28,031	19,435
	n	14,275	12,328	9,762	8,956	6,168
Mothers	Estimate	-0.371***	-0.365***	-0.376***	-0.358***	-0.347***
	(s.e.)	(0.021)	(0.025)	(0.028)	(0.031)	(0.033)
	N	33,529	25,862	19,639	17,535	15,302
	n	7,827	7,243	5,267	5,112	4,589
Fathers	Estimate	-0.185***	-0.233***	-0.195***	-0.246***	-0.427***
	(s.e.)	(0.025)	(0.032)	(0.031)	(0.038)	(0.051)
	N	27,465	13,899	17,807	10,496	4,133
	n	6,460	5,091	4,500	3,848	1,581
Widows and widowers	Estimate	-0.404***	-0.386***	-0.382***	-0.362***	-0.357***
	(s.e.)	(0.038)	(0.039)	(0.041)	(0.041)	(0.043)
	N	14,597	14,402	12,620	12,514	11,075
	n	4,583	4,554	4,207	4,187	3,817
Widows	Estimate	-0.422***	-0.413***	-0.404***	-0.392***	-0.386***
	(s.e.)	(0.041)	(0.042)	(0.044)	(0.045)	(0.047)
	N	11,911	11,776	10,247	10,178	9,064
	n	3,548	3,529	3,247	3,235	2,975
Widowers	Estimate	-0.325***	-0.265***	-0.275***	-0.225**	-0.206*
	(s.e.)	(0.096)	(0.100)	(0.102)	(0.103)	(0.111)
	N	2,686	2,626	2,373	2,336	2,011
	n	1,039	1,029	963	955	843
Divorced parents	Estimate	-0.468***	-0.502***	-0.478***	-0.497***	-0.469***
	(s.e.)	(0.060)	(0.064)	(0.069)	(0.071)	(0.085)
	N	4,363	4,172	3,664	3,573	2,960
	n	1,456	1,413	1,257	1,237	994
Divorced mothers	Estimate	-0.368***	-0.370***	-0.324**	-0.303**	-0.284*
	(s.e.)	(0.108)	(0.121)	(0.132)	(0.140)	(0.152)
	N	2,818	2,741	2,385	2,356	2,042
	n	877	863	763	759	645
Divorced fathers	Estimate	-0.468***	-0.510***	-0.493***	-0.523***	-0.524***
	(s.e.)	(0.077)	(0.079)	(0.084)	(0.085)	(0.114)
	N	1,545	1,431	1,279	1,217	918
	n	580	550	494	478	349

Note: See the note to Table 3.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 7: Robustness: Fixed Effects and Instrumental Variable Estimates

		Stepparents			No-Contact Parents		
		No will (a)	Inclusion of all children in the will (b)	Equal division (c)	No will (d)	Inclusion of all children in the will (e)	Equal division (f)
Benchmark: Random Effects							
	Estimate	0.006	-0.279***	-0.285***	0.055**	-0.201***	-0.278***
	(s.e.)	(0.019)	(0.017)	(0.016)	(0.024)	(0.020)	(0.021)
A. Fixed Effects							
	Estimate	-0.023***	-0.195***	-0.163***	0.005	-0.047***	-0.083***
	(s.e.)	(0.008)	(0.017)	(0.019)	(0.008)	(0.016)	(0.019)
	N	117,189	60,994	60,994	41,075	19,811	19,811
	n	23,984	14,275	14,275	12,739	6,920	6,920
B. Instrumental Variables							
First stage	Estimate	-0.002***	-0.002***	-0.002***	-0.001**	-0.002**	-0.002**
	(s.e.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
	χ^2	45.523	16.064	15.467	10.527	12.360	12.043
	p-value	0.0000	0.0001	0.0001	0.0012	0.0004	0.0005
Second Stage	Estimate	0.207***	-0.255***	-0.307***	0.062	-0.397***	-0.707***
	(s.e.)	(0.046)	(0.026)	(0.039)	(0.118)	(0.074)	(0.077)
	N	69,461	36,959	36,959	27,302	13,499	13,499
	n	20,304	11,704	11,704	11,024	5,884	5,884

Note: Random effects figures are marginal effects from a random effect probit model. Fixed effects figures in panel A are estimated from a fixed effect linear model. Regression specifications as in column (a) of Tables 3 and 4. All figures are computed on the core files.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Changes in Parents' Bequest Intentions

	Transition					
	'No will' ⇒ 'Will'		'Not all children in the will' ⇒ 'All children in the will'		'Not all children in the will' ⇒ 'All children equally in the will'	
	(a)	(b)	(c)	(d)	(e)	(f)
Panel A: Parents with Stepchildren						
Parent has stepchildren	0.001	0.016	-0.085***	-0.083***	-0.078***	-0.058**
	(0.009)	(0.017)	(0.016)	(0.027)	(0.015)	(0.025)
Parent has stepchildren ×		0.012		-0.238***		-0.169***
from married to divorced		(0.039)		(0.032)		(0.048)
Parent has stepchildren ×		-0.012		-0.150***		-0.113***
from married to widowed		(0.022)		(0.029)		(0.029)
N	22,455	8,146	8,759	4,243	11,470	5,279
n	7,945	4,076	4,212	2,522	5,290	3,089
Panel B: No-contact Parents						
No-contact parent	0.005	0.016	-0.165***	-0.257***	-0.181***	-0.229***
	(0.011)	(0.041)	(0.022)	(0.066)	(0.018)	(0.056)
No-contact parent ×		0.322*		-0.271**		-0.142
from married to divorced		(0.172)		(0.127)		(0.181)
No-contact parent ×		0.066		-0.023		-0.086
from married to widowed		(0.083)		(0.166)		(0.137)
N	10,392	2,402	2,553	867	3,717	1,136
n	4,529	1,455	1,604	647	2,211	840
Panel C: Widowed Parents and Parents with Stepchildren						
Widowed parent	0.099***	0.114***	0.083***	0.147***	0.050**	0.085***
	(0.016)	(0.020)	(0.024)	(0.032)	(0.020)	(0.025)
Parent has stepchildren		0.039*		-0.114***		-0.091***
		(0.022)		(0.035)		(0.031)
Widowed parent ×		-0.032		-0.127***		-0.092***
Parent has stepchildren		(0.021)		(0.035)		(0.033)
N	4,191	4,191	2,336	2,336	2,917	2,917
n	2,167	2,167	1,448	1,448	1,776	1,776
Panel D: Widowed Parents and No-contact Parents						
Widowed parent	0.112***	0.111***	0.168***	0.190***	0.092***	0.120***
	(0.020)	(0.024)	(0.035)	(0.046)	(0.029)	(0.039)
No-contact parent		0.043		-0.263***		-0.229***
		(0.046)		(0.065)		(0.058)
Widowed parent ×		0.035		-0.031		-0.095
No-contact parent		(0.075)		(0.164)		(0.136)
N	2,848	1,979	1,246	786	1,704	1,043
n	1,507	1,183	826	589	1,111	774

Note: See the notes to Tables 3. All figures are computed on the core files.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 9: Effect of Having Stepchildren on Actual Bequest Decisions from the Exit Files

Probability of:		No will		Inclusion of all children in the will		Equal division	
		(a)	(b)	(a)	(b)	(a)	(b)
All parents	Estimate	-0.003	0.007	-0.009	0.075**	-0.093***	-0.043
	(s.e.)	(0.023)	(0.024)	(0.031)	(0.033)	(0.031)	(0.035)
	N	7,674	7,221	3,952	3,753	3,952	3,753
Mothers	Estimate	-0.015	-0.020	0.003	0.033	-0.045	-0.029
	(s.e.)	(0.038)	(0.040)	(0.050)	(0.049)	(0.053)	(0.056)
	N	4,052	3,833	1,951	1,861	1,951	1,861
Fathers	Estimate	-0.013	0.022	0.031	0.102**	-0.077**	-0.043
	(s.e.)	(0.029)	(0.030)	(0.039)	(0.044)	(0.036)	(0.041)
	N	3,622	3,385	2,001	1,890	2,001	1,890
Widowed parents	Estimate	0.022	0.019	0.048	0.032	-0.078	-0.094*
	(s.e.)	(0.039)	(0.041)	(0.032)	(0.036)	(0.053)	(0.057)
	N	3,233	3,134	1,597	1,548	1,597	1,548
Widows	Estimate	0.033	0.018	0.060	0.054	0.004	0.001
	(s.e.)	(0.050)	(0.052)	(0.046)	(0.046)	(0.067)	(0.068)
	N	2,428	2,350	1,169	1,132	1,169	1,132
Widowers	Estimate	-0.035	-0.002	-0.031	-0.068	-0.265***	-0.352***
	(s.e.)	(0.067)	(0.070)	(0.056)	(0.070)	(0.091)	(0.101)
	N	805	783	428	415	428	415
Divorced parents	Estimate	0.022	0.071	-0.071	-0.039	-0.228	-0.216
	(s.e.)	(0.086)	(0.097)	(0.123)	(0.121)	(0.139)	(0.145)
	N	715	684	281	273	281	273
Divorced mothers	Estimate	0.195	0.249	-0.138	-0.137	-0.418*	-0.473**
	(s.e.)	(0.164)	(0.176)	(0.231)	(0.222)	(0.222)	(0.211)
	N	387	376	144	142	144	142
Divorced fathers	Estimate	-0.032	0.018	-0.024	0.049	-0.168	-0.102
	(s.e.)	(0.101)	(0.115)	(0.155)	(0.153)	(0.178)	(0.191)
	N	328	307	137	131	137	131

Note: See the text for an explanation of specifications (a)–(b).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 10: Probability that a Stepchild is Explicitly Mentioned in His/Her Stepparent's Will

	(a)	(b)	(c)	(d)	(e)
Mean of dependent variable	0.254	0.254	0.239	0.261	0.268
Stepparent has own	-0.042***	-0.042***	-0.031**	-0.035***	-0.040**
genetic children	(0.014)	(0.014)	(0.014)	(0.017)	(0.019)
Years spent with stepparent	0.005***	0.005***	0.004***	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age at marriage: 0-6[a]	-0.006	-0.006	0.040*	0.073**	0.056*
	(0.016)	(0.016)	(0.023)	(0.031)	(0.033)
Age at marriage: 7-12[a]	-0.015	-0.015	-0.001	0.018	0.009
	(0.013)	(0.013)	(0.017)	(0.022)	(0.024)
Age at marriage: 13-18[a]	-0.004	-0.004	0.010	0.008	0.012
	(0.010)	(0.010)	(0.013)	(0.016)	(0.018)
Stepchild is female	0.008	0.008	0.012	0.063***	0.052***
	(0.006)	(0.006)	(0.007)	(0.012)	(0.013)
Age of stepchild	-0.001	-0.001	0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is female	0.001	0.003	0.016	-0.003	0.014
	(0.010)	(0.010)	(0.011)	(0.014)	(0.016)
Stepparent age	0.004***	0.004***	0.003***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is in	-0.045***	-0.045***	-0.057***	-0.056***	-0.062***
poor/fair health	(0.007)	(0.007)	(0.008)	(0.010)	(0.011)
Stepparent takes care		0.064***	0.082***	0.079**	0.071**
of stepchild's child(ren)		(0.019)	(0.029)	(0.032)	(0.034)
Stepchild is main recipient			0.143***	0.127***	0.125***
of inter vivos transfers			(0.021)	(0.024)	(0.026)
Log of stepchild's income				0.128***	0.116***
				(0.013)	(0.014)
Stepparent expects help from					0.144***
stepchild in the future					(0.023)
Stepchild's predicted income is below genetic children's income by:					
1–49 percent				0.061***	0.052***
				(0.018)	(0.019)
50+ percent				0.037***	0.033**
				(0.014)	(0.015)
N	26,983	26,983	13,904	11,106	9,551
n	13,288	13,288	8,762	7,268	6,393

Note: Figures are marginal effects from probit regressions. Standard errors are in parentheses. N=number of observations; n=number of stepchildren.

[a] The age reported here refers to the age of the stepchild at the time in which his/her parent formed a partnership with his/her stepparent (who writes the will). The reference category is 18 years or more.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 11: Probability that a Genetic Child is Explicitly Mentioned in His/Her No-contact or Infrequent-contact Parent's Will

	(a)	(b)	(c)	(d)	(e)
Mean of dependent variable	0.428	0.410	0.431	0.443	0.443
Frequency of contacts (base=frequent)					
Infrequent	-0.154***	-0.140***	-0.169***	-0.263***	-0.246***
	(0.007)	(0.009)	(0.045)	(0.039)	(0.045)
No contact	-0.236***	-0.213***	-0.312***	-0.329***	-0.284***
	(0.006)	(0.009)	(0.018)	(0.025)	(0.047)
Parent is female	0.033***	0.016*	0.034*	0.038**	0.035*
	(0.008)	(0.010)	(0.017)	(0.019)	(0.019)
Parent age	0.020***	0.018***	0.020***	0.021***	0.021***
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Child is female	0.004	0.127***	0.100***	0.103***	0.103***
	(0.005)	(0.007)	(0.011)	(0.012)	(0.012)
Child age	0.000	-0.001*	-0.001	-0.001	-0.001
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Parent is married	0.021***	-0.002	-0.132***	-0.136***	-0.134***
	(0.006)	(0.007)	(0.019)	(0.021)	(0.021)
Parent married more than once	-0.091***	-0.065***	-0.065***	-0.085***	-0.087***
	(0.007)	(0.008)	(0.013)	(0.014)	(0.014)
Parent takes care of child's children		0.002	-0.007	-0.003	-0.002
		(0.009)	(0.013)	(0.014)	(0.014)
Child is main recipient of inter vivos transfers		0.221***	0.189***	0.176***	0.176***
		(0.010)	(0.014)	(0.014)	(0.014)
Log of child's income		0.205***	0.186***	0.188***	0.187***
		(0.007)	(0.010)	(0.011)	(0.012)
Child is not spouse's genetic child			-0.084***	-0.071***	-0.053***
			(0.015)	(0.017)	(0.018)
Parent expects help from child in the future				0.006	0.002
				(0.011)	(0.011)
Child is not spouse's genetic child × infrequent contacts					-0.107**
					(0.054)
Child is not spouse's genetic child × no contacts					-0.281***
					(0.037)
Parent expects help in future × infrequent contacts					0.094
					(0.085)
Parent expects help in future × no contacts					0.394***
					(0.108)
N	157,173	94,003	39,300	34,145	34,140
n	73,522	54,423	26,902	23,928	23,982
p-value[a]	0.0000	0.0000	0.0018	0.1225	0.5355

Note: Figures are marginal effects and standard errors are in parentheses.

[a] Refers to the p-value of the test of equality between the coefficients of "Infrequent contacts" and "No contacts".

N=number of observations; n=number of children.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

References

American Bar Association. 2013. *Guide to Wills and Estates*, 4th edition. New York: Random House.

Andreoni, James. 1989. "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence." *Journal of Political Economy*, 97(6): 1447–1458.

Arellano, Manuel. 2003. *Panel Data Econometrics*. Oxford: Oxford University Press.

Barro, Robert J. 1974. "Are Government Bonds Net Wealth?" *Journal of Political Economy*, 82(6): 1095–1117.

Becker, Gary S. 1974. "A Theory of Social Interactions." *Journal of Political Economy*, 82(6): 1063–1093.

Becker, Gary S. and Nigel Tomes. 1979. "An Equilibrium Theory of the Distribution of Incomes and Intergenerational Mobility." *Journal of Political Economy*, 87(6): 1053-1189.

Behrman, Jere R. 1997. "Intrahousehold Distribution and the Family." In *Handbook of Population and Family Economics*, edited by Mark R. Rosenzweig and Oded Stark, vol. 1A. Amsterdam: North-Holland, pp. 125–187.

Behrman, Jere R., Robert A. Pollak, and Paul Taubman. 1982. "Parental Preferences and Provision for Progeny." *Journal of Political Economy*, 90(2): 52–73.

Behrman, Jere R., Robert A. Pollak, and Paul Taubman. 1986. "Do Parents Favor Boys?" *International Economic Review*, 27(1): 31–52.

Behrman, Jere R., Robert A. Pollak, and Paul Taubman. 1995. *From Parent to Child: Intrahousehold Allocations and Intergenerational Relations in the United States*. Chicago: University of Chicago Press.

Behrman, Jere R., and Mark R. Rosenzweig, 2004. "Parental Allocations to Children: New Evidence on Bequest Differences among Siblings." *Review of Economics and Statistics*, 86(2): 637–640.

Behrman Jere R., and Paul Taubman. 1986. "Birth Order, Schooling and Earnings." *Journal of Labor Economics*, 4(3, pt. 2): S121–S145.

Bernheim, B. Douglas, and Sergei Severinov. 2003. "Bequests as Signals: An Explanation for the Equal Division Puzzle." *Journal of Political Economy*, 111(4): 733–764.

Bernheim, B. Douglas, Andrei Shleifer, and Lawrence H. Summers. 1985. "The Strategic Bequest Motive." *Journal of Political Economy*, 93(6): 1045–1076.

Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian. 2009. "The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States." In *Social Security Policy in a Changing Environment*, edited by Jeffrey R. Brown, Jeffrey B. Liebman, and David A. Wise. Chicago: University of Chicago Press, pp. 167–195.

Blattmachr, Jonathan G. 2008. "Reducing Trust and Estate Litigation through Disclosure, In Terrorem Clauses, Mediation and Arbitration." *Cardozo Journal of Conflict Resolution*, 9(2): 237–266.

Brashier, Ralph C. 2004. *Inheritance Law and the Evolving Family*. Philadelphia, PA: Temple University Press.

Brown, Meta. 2006. "Informal Care and the Division of End-of-Life Transfers." *Journal of Human Resources*, 41(1): 191–219.

Bumpass, Larry, and Hsien-Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies*, 54(1): 29–41.

Cahn, Naomi R. 2005. "Adoptees, Families, Stepfamilies and Inheritance." *Adoption Quarterly*, 8(2): 57–66.

Card, David. 2001. "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems." *Econometrica*, 69(5): 1127–1160.

Carver, Charles S., Michael F. Scheier, Suzanne C. Segerstrom. "Optimism." *Clinical Psychology Review* 30(7): 879–889.

Chu, C.Y. Cyrus 1991. "Primogeniture." *Journal of Political Economy*, 99 (1): 78–99.

Collins, Dennis W. 2000. "Avoiding a Will Contest: The Impossible Dream?" *Creighton Law Review*, 34(1): 7–45.

Contemporary Studies Project. 1978. "A Comparison of Iowans Dispositive Preferences with Selected Provisions of the Iowa and Uniform Probate Codes." *Iowa Law Review*, 63(5): 1041–1152.

Cox, Donald. 1987. "Motives for Private Income Transfer." *Journal of Political Economy*, 95(3): 508–546.

Cox, Donald. 2003. "Private Transfers within the Family: Mothers, Fathers, Sons, and Daughters." In *Death and Dollars: The Role of Gifts and Bequests in America*, edited by Alicia H. Munnell and Annika Sunden. Washington, D.C.: Brookings Institution Press, pp.168-197.

Cox, Donald. 2007. "Biological Basics and the Economics of the Family." *Journal of Economic Perspectives*, 21(2): 91–108.

Cox, Donald, and Mark R. Rank. 1992. "Inter-Vivos Transfers and Intergenerational Exchange." *Review of Economics and Statistics*, 74(2): 305–314.

Cremer, Terin Barbas. 2011. "Reforming Intestate Inheritance for Stepchildren and Stepparents." *Cardozo Journal of Law and Gender*, 18(1): 89–108.

Cutler, David M., Fabian Lange, Ellen Meara, Seth Richards-Shubik, and Christopher J. Ruhm. 2011. "Rising Educational Gradients in Mortality: The Role of Behavioral Risk Factors." *Journal of Health Economics*, 30(6): 1174–1187.

Dukeminier, Jesse and Robert H. Sitkoff. 2013. *Wills, Trusts, and Estates*, 9th edition. New York: Wolters Kluwer.

Erixson, Oscar, and Henry Ohlsson. 2015. "Estate Division: Equal Sharing, Exchange Motives, and Cinderella Effects." Uppsala University, *mimeo.*

Fellows, Mary L., Rita J. Simon, and William Rau. 1978. "Public Attitudes About Property Distribution at Death and Intestate Succession Laws in the United States." *American Bar Foundation Research Journal*, 3(2): 319–391.

Fried, Martin L. 1992. "The Uniform Probate Code: Intestate Succession and Related Matters." *Albany Law Review*, 55(4): 927–40.

Friedman, Lawrence M. 2009. *Dead Hands: A Social History of Wills, Trusts, and Inheritance Law.* Stanford, CA: Stanford Law Books.

Gary, Susan N. 2000. "Adapting Intestacy Laws to Changing Families." *Law and Inequality*, 18(1): 1–82.

Grossman, Joanna L., and Lawrence M. Friedman. 2011. *Inside the Castle: Law and Family in 20th Century America.* Princeton: Princeton University Press.

Hanson, Thomas M. 1995. "Intestate Succession for Stepchildren: California Leads the Way, but Has It Gone Far Enough?" *Hastings Law Journal*, 47(1): 257–286.

Hirsch, Adam J. 2004. "Default Rules in Inheritance Law: A Problem in Search of Its Context." *Fordham Law Review*, 73(3): 1031–1101.

Laferrère, Anne, and François-Charles Wolff. 2006. "Microeconomic Models of Family Transfers." In *Handbook of the Economics of Giving, Altruism and Reciprocity*, edited by Serge-Christophe Kolm and Jean Mercier Ythier. Amsterdam: North-Holland, pp. 889–969.

Laitner, John. 1997. "Intergenerational and Interhousehold Economic Links." In *Handbook of Population and Family Economics*, edited by Mark R. Rosenzweig and Oded Stark, vol. 1A. Amsterdam: North-Holland, pp. 189–238.

Laitner John, and Henry Ohlsson. 2001. "Bequest Motives: A Comparison of Sweden and the United States." *Journal of Public Economics* 79(1): 205–236.

Light, Audrey, and Kathleen McGarry. 2004. "Why Parents Play Favorites: Explanations for Unequal Bequests." *American Economic Review*, 94(5): 1669–1681.

Lundberg, Shelly, and Robert A. Pollak. 2014. "Cohabitation and the Uneven Retreat from Marriage in the U.S., 1950–2010."In *Human Capital in History: The American Record*, edited by Leah P. Boustan, Carola Frydman, and Robert A. Margo. Chicago: University of Chicago Press, pp. 241–272.

Lundberg, Shelly and Robert A. Pollak. 2015. "The Evolving Role of Marriage: 1950–2010." *Future of Children*, 25(2): 29–50.

Mahoney, Margaret M. 1989. "Stepfamilies in the Law of Intestate Succession and Wills." *U.C. Davis Law Review*, 22(3): 917–950.

Menchik, Paul. 1980. "Primogeniture, Equal Sharing, and the U.S. Distribution of Wealth." *Quarterly Journal of Economics*, 94(1): 299–316.

Menchik, Paul. 1988. "Unequal Estate Division: Is it Altruism, Reverse Bequests, or Simply Noise?" In *Modeling the Accumulation and the Distribution of Wealth*, edited by Denis Kessler and Andre Masson. New York: Oxford University Press, pp. 105–116.

McGarry, Kathleen. 1999. "Inter Vivos Transfers and Intended Bequests." *Journal of Public Economics*, 73(3): 321–351.

McGarry, Kathleen. 2008. "Inheritance and Bequests." In *The New Palgrave Dictionary of Economics,* Second Edition, edited by Steven N. Durlauf and Lawrence E. Blume. London: Palgrave Macmillan.

McGarry, Kathleen. 2013. "An Analysis of Family Transfers: Theory and Evidence." February, *mimeo.*

Noble, Andrew L. 2002. "Intestate Succession for Stepchildren in Pennsylvania: A Proposal for Reform." *University of Pittsburgh Law Review*, 64(4): 835–853.

Pezzin, Liliana E., and Barbara Steinberg Schone. 1998. "Parental Marital Disruption

and Intergenerational Transfers: An Analysis of Lone Elderly Parents and Their Children." *Demography*, 36(3): 287–297.

Pezzin, Liliana E., Robert A. Pollak and Barbara Steinberg Schone. 2008. "Parental Marital Disruption, Family Type, and Transfers to Disabled Elderly Parents." *Journal of Gerontology, Series B: Social Sciences*, 63(6): S349–S358.

Pollak, Robert A.. 1988. "Tied Transfers and Paternalistic Preferences," *American Economic Review Papers and Proceedings*, 78(2): 240–244.

Puri, Manju, and David T. Robinson. 2007. "Optimism and Economic Choice." *Journal of Financial Economics*, 86(1): 71–99.

Rasmussen, Heather N., Michael F. Scheier, and Joel B. Greenhouse. 2009. "Optimism and Physical Health: A Meta-Analytic Review." *Annals of Behavioral Medicine*, 37(3): 239-256.

Reid, Kenneth G.C., Marius J. de Waal, and Reinhard Zimmermann. 2011. *Testamentary Formalities*. Oxford: Oxford University Press.

Rosenbury, Laura. 2005."Two Ways to End a Marriage: Divorce or Death." *Utah Law Review*, 2005(4): 1227–1290.

Schanzenbach, Max M., and Robert H. Sitkoff. 2009. "The Equal Bequest Puzzle: A Legal Perspective." Harvard Law School, *mimeo*.

Scheier, Michael F., Charles S. Carver, and Michael W. Bridges. 1994. "Distinguishing Optimism from Neuroticism (and Trait Anxiety, Self-Mastery, and Self-Esteem): A Reevaluation of the Life Orientation Test." *Journal of Personality and Social Psychology*, 67(6): 1063–1078.

Scheier, Michael F., Karen A. Matthews, Jane F. Owens, George J. Magovern, R. Craig Lefebvre, R. Anne Abbott, Charles S. Carver. 1989. "Dispositional Optimism and Recovery from Coronary Artery Bypass Surgery: The Beneficial Effects on Physical and Psychological Well-Being." *Journal of Personality and Social Psychology*, 57(6): 1024–1040.

Schulz, Richard, Jamila Bookwala, Judith E. Knapp, Michael Scheier, Gail M. Williamson. 1996. "Pessimism, Age, and Cancer Mortality." *Psychology and Aging*, 11(2): 304–309.

Solberg Nes, Lise, and Suzanne C. Segerstrom. 2006. "Dispositional Optimism and Coping: A Meta-Analytic Review." *Personality and Social Psychology Review*, 10(3): 235–251.

Srivastava, Sanjay, Kelly M. McGonigal, Jane M. Richards, Emily A. Butler, and James J. Gross. 2006. "Optimism in Close Relationships: How Seeing Things in a Positive Light Makes Them So." *Journal of Personality and Social Psychology*, 91(1): 143–153.

Stevenson, Betsey, and Justin Wolfers. 2007. "Marriage and Divorce: Changes and their Driving Forces," *Journal of Economic Perspectives*, 21(2): 27-52.

Thaler, Richard H. and Cass R. Sunstein. 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.

Tomes, Nigel. 1981. "The Family, Inheritance and the Intergenerational Transmission of Inequality." *Journal of Political Economy*, 89(5): 928–958.

Tomes, Nigel. 1988. "Inheritance and Inequality Within the Family: Equal Division Among Unequals, or Do the Poor Get More?" In *Modelling the Accumulation and the*

Distribution of Wealth, edited by Denis Kessler and Andre Masson. New York: Oxford University Press, pp. 79–104.

Weisbord, Reid K. 2012. "Wills for Everyone: Helping Individuals Opt Out of Intestacy." *Boston College Law Review*, 53(3): 877–952.

Wilhelm, Mark O. 1996. "Bequest Behavior and the Effect of Heirs' Earnings: Testing the Altruistic Model of Bequests." *American Economic Review*, 86(4): 874–892.

Wooldridge, J. M. 2010. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: MIT Press, second edition.

Wypyski, Eugene M. 1984. *The Law of Inheritance in All Fifty States*. New York: Oceana.

Appendix

Table A1: Descriptive Statistics – Dependent Variables

	(a)	(b)	(c)	(d)		
	All	Parents have no contact with at least one child	Parents have contacts with all children	Difference (b)-(c) (t-value)	N	n
A. No will						
All	0.446	0.592	0.436	0.156***	41,075	12,739
				(15.768)		
Divorced	0.627	0.703	0.617	0.085***	7,897	2,468
				(4.991)		
Widowed	0.391	0.562	0.379	0.183***	14,384	4,073
				(11.207)		
B. Will includes all children						
All	0.822	0.567	0.836	-0.269***	19,811	5,734
				(22.302)		
Divorced	0.820	0.470	0.860	-0.390***	2,473	657
				(15.957)		
Widowed	0.832	0.513	0.849	-0.336***	7,461	2,045
				(17.600)		
C. Equal intended bequest						
All	0.756	0.465	0.772	-0.307***	19,811	5,734
				(22.716)		
Divorced	0.742	0.373	0.783	-0.409***	2,473	657
				(14.576)		
Widowed	0.751	0.402	0.770	-0.368***	7,461	2,045
				(16.630)		

Note: N=number of observations; n=number of individuals. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$. All figures are calculated on the core files.

Table A2: Effect of No Contacts on the Probability that the Will Includes All Children

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	-0.201***	-0.216***	-0.239***	-0.240***	-0.221***
	(s.e.)	(0.020)	(0.023)	(0.027)	(0.028)	(0.028)
	N	19,811	15,949	12,460	11,354	10,724
	n	6,920	6,365	4,842	4,680	4,470
Mothers	Estimate	-0.173***	-0.195***	-0.220***	-0.226***	-0.209***
	(s.e.)	(0.022)	(0.026)	(0.031)	(0.033)	(0.032)
	N	16,449	13,116	9,838	8,986	8,572
	n	5,418	5,013	3,632	3,529	3,404
Fathers	Estimate	-0.279***	-0.269***	-0.278***	-0.262***	-0.250***
	(s.e.)	(0.044)	(0.048)	(0.052)	(0.054)	(0.057)
	N	3,362	2,833	2,622	2,368	2,152
	n	1,503	1,353	1,210	1,151	1,066
Widows and widowers	Estimate	-0.231***	-0.233***	-0.205***	-0.201***	-0.196***
	(s.e.)	(0.035)	(0.036)	(0.038)	(0.038)	(0.037)
	N	7,461	7,401	6,515	6,472	6,221
	n	3,075	3,058	2,839	2,825	2,745
Widows	Estimate	-0.232***	-0.236***	-0.203***	-0.201***	-0.192***
	(s.e.)	(0.040)	(0.040)	(0.042)	(0.042)	(0.041)
	N	6,106	6,058	5,303	5,270	5,081
	n	2,415	2,400	2,226	2,215	2,157
Widowers	Estimate	-0.212***	-0.206***	-0.185**	-0.175**	-0.188**
	(s.e.)	(0.078)	(0.078)	(0.087)	(0.086)	(0.090)
	N	1,355	1,343	1,212	1,202	1,140
	n	661	659	613	610	588
Divorced parents	Estimate	-0.270***	-0.274***	-0.269***	-0.274***	-0.234***
	(s.e.)	(0.053)	(0.053)	(0.059)	(0.060)	(0.061)
	N	2,473	2,441	2,115	2,093	1,856
	n	1,012	1,004	899	891	783
Divorced mothers	Estimate	-0.239***	-0.253***	-0.263***	-0.291***	-0.250***
	(s.e.)	(0.071)	(0.073)	(0.083)	(0.087)	(0.085)
	N	1,678	1,661	1,447	1,437	1,313
	n	658	655	591	588	533
Divorced fathers	Estimate	-0.344***	-0.338***	-0.319***	-0.297***	-0.224**
	(s.e.)	(0.079)	(0.080)	(0.086)	(0.085)	(0.096)
	N	795	780	668	656	543
	n	354	349	308	303	250

Note: See the notes to Tables 3 and 4.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Effect of No Contacts on the Probability that Parents Intend to Divide their Estate Equally Among All Children

		Specification				
		(a)	(b)	(c)	(d)	(e)
All parents	Estimate	-0.278***	-0.302***	-0.327***	-0.332***	-0.316***
	(s.e.)	(0.021)	(0.024)	(0.028)	(0.029)	(0.030)
	N	19,811	15,949	12,460	11,354	10,724
	n	6,920	6,365	4,842	4,680	4,470
Mothers	Estimate	-0.246***	-0.276***	-0.313***	-0.324***	-0.309***
	(s.e.)	(0.025)	(0.028)	(0.034)	(0.035)	(0.036)
	N	16,449	13,116	9,838	8,986	8,572
	n	5,418	5,013	3,632	3,529	3,404
Fathers	Estimate	-0.366***	-0.371***	-0.354***	-0.343***	-0.337***
	(s.e.)	(0.042)	(0.047)	(0.050)	(0.052)	(0.057)
	N	3,362	2,833	2,622	2,368	2,152
	n	1,503	1,353	1,210	1,151	1,066
Widows and widowers	Estimate	-0.352***	-0.357***	-0.332***	-0.330***	-0.328***
	(s.e.)	(0.037)	(0.037)	(0.042)	(0.042)	(0.043)
	N	7461	7,401	6,515	6,472	6,221
	n	3,075	3,058	2,839	2,825	2,745
Widows	Estimate	-0.356***	-0.361***	-0.330***	-0.329***	-0.323***
	(s.e.)	(0.042)	(0.043)	(0.048)	(0.048)	(0.049)
	N	6,106	6,058	5,303	5,270	5,081
	n	2,415	2,400	2,226	2,215	2,157
Widowers	Estimate	-0.343***	-0.351***	-0.350***	-0.348***	-0.352***
	(s.e.)	(0.079)	(0.081)	(0.088)	(0.089)	(0.090)
	N	1,355	1,343	1,212	1,202	1,140
	n	661	659	613	610	588
Divorced parents	Estimate	-0.377***	-0.388***	-0.382***	-0.392***	-0.371***
	(s.e.)	(0.050)	(0.051)	(0.057)	(0.058)	(0.063)
	N	2,473	2,441	2,115	2,093	1,856
	n	1,012	1,004	899	891	783
Divorced mothers	Estimate	-0.338***	-0.371***	-0.377***	-0.416***	-0.399***
	(s.e.)	(0.071)	(0.073)	(0.082)	(0.084)	(0.087)
	N	1,678	1,661	1,447	1,437	1,313
	n	658	655	591	588	533
Divorced fathers	Estimate	-0.428***	-0.421***	-0.394***	-0.379***	-0.357***
	(s.e.)	(0.069)	(0.070)	(0.078)	(0.079)	(0.095)
	N	795	780	668	656	543
	n	354	349	308	303	250

Note: See the notes to Tables 3 and 4.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A4: Effect of Having Stepchildren and No Contacts on the Probability that Parents Intend to Divide their Estate Equally Among All Children — Alternative Sample Selection

		Specification				
		(a)	(b)	(c)	(d)	(e)
A. Parents with Stepchildren						
All parents	Estimate	-0.298***	-0.327***	-0.290***	-0.322***	-0.396***
	(s.e.)	(0.018)	(0.022)	(0.023)	(0.026)	(0.031)
	N	53,105	35,288	33,066	25,207	17,868
	n	13,504	11,528	9,255	8,418	5,870
B. No-contact Parents						
All parents	Estimate	-0.229***	-0.248***	-0.255***	-0.257***	-0.253***
	(s.e.)	(0.023)	(0.026)	(0.030)	(0.032)	(0.032)
	N	17,795	14,482	11,483	10,518	9,956
	n	6,574	6,003	4,624	4,467	4,281

Note: The estimating sample includes only parents with two or more children and a will that mentions *all* of the children. For other explanations, see the notes to Tables 3 and 4.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Probability that a Male Stepchild is Explicitly Mentioned in His/Her Stepparent's Will

	(a)	(b)	(c)	(d)	(e)
Mean of dependent variable	0.261	0.261	0.233	0.258	0.266
Stepparent has own	-0.060***	-0.060***	-0.048***	-0.072***	-0.090***
genetic children	(0.018)	(0.018)	(0.018)	(0.024)	(0.027)
Years spent with stepparent	0.004***	0.004***	0.003***	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age at marriage: 0-6[a]	-0.017	-0.016	0.023	0.047	0.046
	(0.021)	(0.021)	(0.029)	(0.040)	(0.044)
Age at marriage: 7-12[a]	-0.000	-0.001	0.040	0.073**	0.078**
	(0.019)	(0.019)	(0.026)	(0.035)	(0.040)
Age at marriage: 13-18[a]	-0.016	-0.015	-0.000	0.001	0.005
	(0.013)	(0.013)	(0.016)	(0.021)	(0.024)
Age of stepchild	0.000	0.000	0.002*	0.001	0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is female	0.003	0.005	0.034**	0.007	0.023
	(0.013)	(0.013)	(0.014)	(0.019)	(0.022)
Stepparent age	0.003***	0.003***	0.002**	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is in	-0.060***	-0.059***	-0.080***	-0.095***	-0.109***
poor/fair health	(0.008)	(0.008)	(0.010)	(0.012)	(0.014)
Stepparent takes care		0.090***	0.099**	0.074	0.085
of stepchild's child(ren)		(0.030)	(0.045)	(0.048)	(0.052)
Stepchild is main recipient			0.164***	0.160***	0.164***
of inter vivos transfers			(0.031)	(0.036)	(0.039)
Log of stepchild's income				0.131***	0.110***
				(0.018)	(0.020)
Stepparent expects help from					0.108***
stepchild in the future					(0.032)
Stepchild's predicted income is below genetic children's income by:					
1–49 percent				0.103***	0.085**
				(0.036)	(0.037)
50+ percent				0.046**	0.029
				(0.019)	(0.020)
N	13,598	13,598	6,989	5,562	4,782
n	8,198	8,198	5,001	4,080	3,569

Note: Figures are marginal effects from probit regressions. Standard errors are in parentheses. N=number of observations; n=number of stepchildren.

[a] The age reported here refers to the age of the stepchild at the time in which his parent formed a partnership with his stepparent (who writes the will). The reference category is 18 years or more.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Probability that a Female Stepchild is Explicitly Mentioned in His/Her Stepparent's Will

	(a)	(b)	(c)	(d)	(e)
Mean of dependent variable	0.272	0.272	0.245	0.265	0.269
Stepparent has own	-0.028	-0.028	-0.010	-0.003	0.009
genetic children	(0.018)	(0.018)	(0.018)	(0.022)	(0.022)
Years spent with stepparent	0.006***	0.006***	0.004***	0.005***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age at marriage: 0-6[a]	-0.004	-0.003	0.048	0.085*	0.055
	(0.024)	(0.024)	(0.034)	(0.046)	(0.047)
Age at marriage: 7-12[a]	-0.025	-0.024	-0.029	-0.021	-0.041
	(0.018)	(0.018)	(0.021)	(0.028)	(0.027)
Age at marriage: 13-18[a]	0.001	0.001	0.016	0.007	0.006
	(0.015)	(0.015)	(0.019)	(0.023)	(0.025)
Age of stepchild	-0.002**	-0.002*	-0.001	-0.001	-0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is female	0.005	0.007	0.002	-0.008	0.012
	(0.014)	(0.014)	(0.015)	(0.019)	(0.022)
Stepparent age	0.005***	0.005***	0.005***	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Stepparent is in	-0.038***	-0.038***	-0.034***	-0.021	-0.019
poor/fair health	(0.010)	(0.010)	(0.011)	(0.015)	(0.017)
Stepparent takes care		0.060**	0.062*	0.081*	0.059
of stepchild's child(ren)		(0.026)	(0.037)	(0.045)	(0.045)
Stepchild is main recipient			0.156***	0.122***	0.117***
of inter vivos transfers			(0.030)	(0.033)	(0.036)
Log of stepchild's income				0.142***	0.135***
				(0.019)	(0.021)
Stepparent expects help from					0.165***
stepchild in the future					(0.032)
Stepchild's predicted income is below genetic children's income by:					
1–49 percent				0.031	0.032
				(0.022)	(0.024)
50+ percent				0.019	0.025
				(0.021)	(0.023)
N	13,385	13,385	6,915	5,544	4,769
n	8,198	8,198	5,082	4,159	3,635

Note: Figures are marginal effects from probit regressions. Standard errors are in parentheses. N=number of observations; n=number of stepchildren.

[a] The age reported here refers to the age of the stepchild at the time in which her parent formed a partnership with her stepparent (who writes the will). The reference category is 18 years or more.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.