Chapter 2. Why do people bequeath?

The questions why people would like to, or would not wish to bequeath, do not lend themselves to easy answers. Recall Laffont's (1975) lead: "Another possibility is to accept the (radical?) idea that preferences and behaviour are endogenous to the system." Let this statement be a motto for further investigation of bequests.

2.1 Reasons for bequeathing

The question why people bequeath has occupied social scientists for a long time. A widely cited paper by Hartung (1976) credits primogeniture to natural selection. (Primogeniture is a system of inheritance by the eldest son.) Since men can pass on own genes continuously throughout their lifetime, they have a comparative advantage over women in reproduction. The reproductive success of postreproductive adults can be enhanced by transferring wealth to children, especially to sons as they are more efficient than daughters in the transmission of one's genes. If so, patrilineal inheritance is a strategy that evolved in natural selection processes (Hartung, 1976). Both the method and logics of the above reasoning were criticized (see Comments in Hartung, 1976). However, they concur that behavioral traits may be genetically controlled (Trigg, 1982) and that inherited resources positively affect reproductive success (for example, Mace, 1999); genes affect human behavior (Trigg, 1982).

A general question arises whether it is culture or nature that underlies human motivations. There is a tendency to reduce all psychological, social and cultural phenomena to evolutionary explanations (see Pinker, 2005; Wright, 1994). According to some observers, there is "no alternative to evolutionary analysis with respect to origins and maintenance of certain primary beliefs and preferences shaping human action" (Winterhalder and Smith, 1992). Bequeathing may be such a primary belief. Latour (2004) argues that the distinction between nature and culture is artificial. No phenomenon is reducible to pure culture or to pure nature; this applies also to bequest behavior. For this reason, reduction is not a proper method

⁴ Quoted from Coetzee, John M. (2009). *Summertime: Scenes from Provincial Life*. London: Vintage Books. (2010 Edition), p. 245.

for analysis of human behavior (Granovetter, 1985). Nonetheless, the concepts of nature and culture are helpful in organizing our knowledge about bequest behavior.

2.1.1 Nature

It is not enough to say that bequeathing is driven by genetic forces since, to some extent, all behavior is. A deeper insight into the natural selection mechanisms and their effect on animal and human behavior was provided by biologists investigating the evolution of non-selfish acts (Hamilton, 1964; Trivers, 1971). These biological concepts did not take into account the motivation structures underlying behavior (Bertram, 1982), but inspired economists to do so. Two main motives for bequeathing have been formulated: altruism (Becker, 1974) and strategic considerations (Bernheim et al., 1985).

2.1.1.1 Altruism

According to Hamilton (1964), altruism has evolved in the kin selection processes and its strength depends positively on genetic relatedness. It implies that parents are most altruistic towards own children. The kinship altruism was modeled by Becker (1974) in terms of utility function $U_a = U(C_a, U_o(C_o))$ that an altruist derives from own consumption C_a and from others' utility U_o , which in turn depends on their consumption C_o . The maximization of such a utility function subject to the budget of altruist $Y = C_a + C_o$ may lead to a transfer from the altruist to others. Since altruism is most pronounced towards children, transfers from parents to children will be observed most frequently. Parents in Oceania favor their biological children over the adopted ones as far as the division of bequest is concerned (Silk, 1980), which is in line with the kinship altruism as a motive for bequest.

Parental altruism provides an explanation for the transfer of wealth and thus is recognized as a motive for bequeathing (see, for example, Barro, 1974; Wilhelm, 1996), but it fails to predict whether one would choose bequests as opposed to inter-vivos transfers. It was already shown in Section 1.2 that the difference between bequests and inter-vivos transfers cannot be ignored. One may treat inter-vivos transfers as support provided in a particular situation as a means of ad hoc aid, but bequests can hardly be interpreted as aimed at solving a particular financial problem. Moreover, altruistic transfers are compensatory, which means that they are

inversely proportional to the utility of the beneficiary (and thus the beneficiary's consumption). The empirical research on the compensatory nature of bequests is ambiguous, as some results show that parents tend to provide equal bequests to their children (Menchik, 1980) even if the earnings of siblings differ (Hurd, 1997). Others find support for compensatory bequests among siblings in the US (Tomes, 1981).

Kinship altruism predicts that the more altruistic the parent, the greater the amount of transfers from the parent to the children. The more altruistic the parent, the greater the bequest the parent leaves, *given* a constant ratio between bequests and inter-vivos transfers. There is evidence that the relations between generations of older people and their adult children have altruistic nature within and beyond the family (Logan and Spitze, 1995). Altruism cannot be ignored as a reason for bequeathing, even though it fails to fully explain bequest behavior. According to psychological studies on prosocial behavior, there are multiple motivations operating simultaneously that underlie human behavior (Rutkowska and Szuster, 2008). In this study, it is assumed that altruism is a motive to bequeath, though not the sole one.

2.1.1.2 Strategic considerations

Group selection is an evolutionary mechanism that is capable of explaining transfers also between unrelated individuals. Trivers (1971) analyzed natural selection in the environment where organisms are characterized by a relatively long lifetime, interact repeatedly with the same small set of individuals regardless of their genetic relatedness, and are equally dependent on the interaction. In such circumstances, a "reciprocal altruism" is likely to evolve (Trivers, 1971). "Reciprocal altruism" is exhibited because a transfer given will be rewarded with a return transfer by a counterpart in the future. Such symbiosis is observed in cleaning behavior between different species of fishes, warning calls of birds, and in human behavior (Trivers, 1971). Stark (1999) discussed conditions under which interaction with strangers and siblings leads to the spread of prosocial behavior over the entire population.

A distinction between the motives underlying kinship altruism and "reciprocal altruism" is that "reciprocal altruism" is not exercised for the sake of improving the condition of the counterpart, which is the case in kinship altruism, but for the sake of benefits to be received in the future from the counterpart. In social science, "reciprocal altruism" is not classified as altruism at all, but constitutes a separate motive called exchange (Wilson, 1975) or strategic consideration (Bernheim et al., 1985). Bernheim et al. (1985) modify the standard altruistic model (Becker, 1974) by adding children's actions *A* (attention, care, visits to the parent, etc.), yielding the following utility function of an altruist with strategic considerations: $U_a = U(C_a, A, U_o(C_o, A))$. It is claimed that planned bequests provide an incentive for children to take care of elderly parents. Strategic bequests will be transferred to children only if the children meet parental expectations concerning *A*, otherwise the bequeathable wealth will be transferred to a third party (Bernheim et al., 1985). Only a reliable threat of disinheritance might induce selfish children to provide attention and care to elderly parents if bequests are exchanged for attention. Usually, a disinherited child may claim the right to a share in the bequest (the forced share). Once the forced share is substantial, which is the case in Europe, the threat of disinheritance is not credible, and thus it cannot affect children's behavior effectively. Also parental altruism weakens the credibility of a threat to disinherit (Cox and Stark, 1994). Even though the main assumption of the model is disputable, the model is still able to predict the amount of bequests left to children.

The hypothesis of strategic considerations does not reject altruistic motivations to bequeath. It introduces an intentional and strategic manipulation of incentives. Some empirical studies support the hypothesis that bequests are partly used by parents to induce their offspring to provide attention (Angelini, 2007), whereas other studies reject the strategic bequest motive (Tomes, 1981; Perozek, 1998). Altonji et al. (1992) tested whether transfers are motivated by altruism or by strategic considerations and they found empirical support for the altruistic links within the extended family, but there is still no consensus on the motive of transfers (Laferrère and Wolff, 2006).

2.1.2 Culture

There are other mechanisms leading to the prevalence and survival of an altruistic gene (see Smith, 1982), but the two discussed above appear to be the most prominent ones (Piliavin and Charng, 1990). There is no doubt that human behavior can be described in terms of evolution (Poleszczuk, 2004). The hypothesis of genetic roots of altruism cannot be rejected (Okasha, 2002), but it fails to fully explain human decisions as they involve, for example, ethical considerations as well. Let us recall the categorical imperative by Kant (1788), who claimed that people should and are able to act according to the transcendental practical reason that is

independent from any natural instinct. Incorporation of a cultural perspective in the framework allows to avoid oversimplifying assumptions of family as a domain for an exchange of goods and services (Chiappori, 1988), or an altruistic harmony (Becker, 1976), and delivers reciprocity, wealth, reputation, replication effect, and others as potential motives for bequeathing.

2.1.2.1 Reciprocity

The concept of reciprocity, even though similar to strategic considerations, emphasizes the cultural aspects of gift-giving after Mauss (1950). Reciprocity defined as treating others as they treat you (Kolm, 2006) recognizes intentional (McIntyre and Smith, 1984), communicational (Habermas, 1999), and dynamic aspects of giving, aiming to cover such complex phenomena as respect, fairness, gratitude, obligation, and commitment. The reduced model of the return gift *r* captures the initial gift *g*, altruism *a*, balance *b*, and continuation *c*, yielding r = r(g; a, b, c). Thus, there are three ideal types of reciprocity:

- liking (altruistic) reciprocity, which involves all feelings of any degree of liking, from care to love (Kolm, 2006);
- balance (comparative, matching) reciprocity, where each gift is followed by a return gift of a similar value in order to restore the balance;
- continuation (selfish) reciprocity, where gifts are a means of sustaining the interaction.

"Balance reciprocity" attributes human actions entirely to the sense of justice, which might offer an explanation to bequest behavior, provided that there is a moral obligation to bequeath. The phenomenon of liking is essential for individuals involved in the reciprocal gift-giving as it is only then that the gifts exchanged stop being just a moral duty and become a joy. Gifts are given out of one's own free will to benefit a counterpart, but also in order to signal liking. The signaling feature of liking reciprocity is especially relevant when bequests are concerned. Bequests are the very last gifts from parents to their children, and thus can be treated as the final expression of parental love, gratitude, and care for the offspring (Cox and Stark, 2005a). However inspiring the concept of reciprocity is, it fails to predict whether a bequest will take place, and if yes, what will be the optimal amount of bequest.

2.1.2.2 Wealth

The fact that bequests are typically observed among the wealthiest (Menchik and Jianakoplos, 1998) is especially pronounced in the US, where the greatest dynasty fortunes date back to the Civil War era (Masson and Pestieau, 1997), and in aristocratic England (Spring, 1993). Private ownership is a necessary condition for bequeathing. In feudal societies, bequests cannot be universal as peasants do not own any wealth. According to the family tradition model, descendants of peasants are less likely to bequeath insofar as they did not acquire a family tradition to do so. Those who are not able to consume own wealth in their lifetime will bequeath, even if there is an access to the annuity market and if there was no uncertainty about the time of death (Masson and Pestieau, 1997). Wealth as a bequest motive predicts a positive relation between the wealth of a donor and the amount of bequests, which holds also in the family tradition model to bequeath. The wealth motive fails to predict optimal planned bequests. It ignores the fact that leaving a bequest may be a goal to be reached. Wealth is held not only for its own sake, but there is also a desire to transfer the purchasing power over time and possibly over generations (Ioannides and Sato, 1987). According to Tomes (1981), 40-45% of individuals receive some inheritance. This group is heterogeneous and the assumption that it comprises only heirs of individuals so well-to-do that they failed to consume their accumulated wealth does not bite. Furthermore, there are societies where wealth is transmitted mainly trough bequests, and there bequests are observed even among the poorest (Mace, 1999).

2.1.2.3 Reputation

Reputation is a strong cultural motive of human behavior, as the quest for approval is one of the most pronounced mechanisms of moral choices (Smith, 1759), regardless of whether it emanates from self-interest (Hobbes, 1651), or from one's reason (Hume, 1740). One adjusts his own behavior to the norms that govern societies. If there is a norm of bequeathing to children and it is external (that is, shared by most members of the society (Rutkowska and Szuster, 2008)), then there is a need to obey the norm. Disinheritance is treated as a penalty, and in most societies children's rights to parental assets are protected by law. These observations might imply that, in general, there is a social norm that leaving bequest to own children is a just way of disposition of the accumulated wealth. In the case of bequests, reputation concerns the deceased, which makes the concept disputable as one cannot enjoy

reputation when dead. If so, then reputation would not have any impact on bequest behavior. However, one may derive utility from events that will take place in the future, even if distant and beyond one's lifetime. The concept of "post-mortem reputation" (Lundholm and Ohlsson, 1999) states that individuals care while alive about own reputation after death. Lundholm and Ohlsson (1999) credit equal sharing of bequests to "post-mortem reputation" that induces individuals to obey a social norm of equal division of bequests among children. The "post-mortem reputation," in the original setting, concerns only those who already plan to bequeath and does not affect the bequest behavior of others (Lundholm and Ohlsson, 1999). Moreover, it credits decision on equal bequests to an external social norm, but does not explain why and how much wealth will be bequeathed. It seems that one may treat "post-mortem reputation" as a motive to bequeath if there is a social norm to bequeath. Furthermore, the fact that individuals may enjoy events beyond their lifetime plays a crucial role in bequest behavior, even if there is no external norm to bequeath. The presence of the internal family tradition to bequeath forces individuals to take into account the distant future of their dynasty.

2.1.2.4 Replication effect

A replication effect is the other side of the demonstration effect, and thus these two can be discussed together. The demonstration effect predicts that in a family consisting of three generations, parents set an example to their children by treating their own parents in a desired way so that the children would replicate it later on towards the parents (Cox and Stark, 1994 and 2005a). Once the proper behavior is defined as providing care to the elderly, the demonstration effect facilitates transfers of attention, care and money to the grandparents, while the replication effect facilitates such transfers from children to parents. Empirical results provide support for the hypothesis in Spain (Giménez et al., 2007) and for Romanian young girls (Mitrut and Wolff, 2009). In the absence of grandchildren, the demonstration effect does not operate since there is no one to be thought the proper behavior (Cox and Stark, 2005a). The replication effect influences not only children but may also develop a sense of gratitude in grandparents that were taken care of. The gratitude may be the motive for bequeathing, but remains conditional on having grandchildren. In the two cases of strategic considerations and the replication effect, one may treat the care provided as services that are repaid through bequests. However, there is a substantial difference between the two models inasmuch as in the case of the replication effect, the bequests are the consequence of the attention received, while in strategic considerations the provision of care is a consequence of the promised bequests. The replication effect explains why bequests are planned, but fails to predict the amount of bequests.

2.1.2.5 Other reasons

The motives discussed above do not exhaust the list of reasons for planned bequeathing. The hypotheses of warm-glow (Andreoni, 1990), inequity aversion (Fehr and Schmidt, 1999), relative deprivation (Sen, 1976; Yitzhaki, 1979), and dishonesty aversion (Brandts and Charness, 2003; Gneezy, 2005) are mentioned in the literature explaining gift-giving, but they provide little illumination as to why exactly people bequeath. The warm-glow concept assumes that the act of giving brings utility to the donor, but in the case of bequests the donor is dead, and thus unable to enjoy any warm-glow. A post-mortem warm-glow would be a more suitable approach to bequest behavior. Inequity aversion is based on the observation that people care about inequity (Zizzo and Oswald, 2000), which inspires relatively wealthy parents to provide transfers to children, thereby reducing the inequity. Assuming that parents are able to define a reference group for their child and assess the relative deprivation of the child, then parents may be motivated to amass wealth in order to provide a bequest intended to reduce the relative deprivation of the child. This explanation is more suitable for intervivos transfers rather than bequests due to the timing and, in particular, the public nature of bequests. If children differ in terms of their income, an unequal division of bequests reveals information on those incomes and bequests might fail to reduce relative deprivation (Stark and Zhang, 2000). Dishonesty aversion might explain bequeathing if wealth was gained at the child's expense. However, this is rarely the case and, therefore, the presumed preferences for honesty can hardly be seen as a general motive for bequeathing.

2.1.3 Accidental bequests

The main motives behind the will to bequeath were discussed above. The question why there would be such motives at all is a question of human nature. Some scientists claim that there are neither motives nor even any intention to bequeath, and that wealth is left to heirs by pure accident. The Life Cycle Hypothesis (Modigliani and Brumberg, 1954) explains bequests via the addition of the precautionary motive for saving (Yaari, 1965; Levhari and Mirman, 1977), arising from the uncertainty of the time of death (Modigliani, 1988). Davies (1981) and Abel (1985) developed general models assuming uncertain lifetime and constant relative risk

aversion, which are sufficient conditions for bequests to occur despite the lack of a bequest motive. An individual aged t that survives to age τ with a probability $P(\tau | t)$, where the maximum lifetime equals T, maximizes the expected utility $\int_{t}^{T} P(\tau | t)\alpha(t)U(C(\tau))d\tau$ derived from consumption $C(\tau)$ at time τ with the rate of time preference $1 - P(\tau | t)\alpha(t)$. The model yields the optimal consumption path throughout the lifetime, which is positive as long as one does not reach the maximum age T. Whenever one dies at time D < T, the planned consumption $\int_{d}^{T} C(\tau)d\tau$ becomes a bequest, accidentally left to the heirs. Even though the model predicts the amount of the bequest, empirical findings prove the predictions wrong (Hurd, 1997) and reject the accidentality of bequests.

2.1.4 Why do people want to bequeath?

At least part of bequests are planned, otherwise people would not make wills at all. The modern approach to human behavior explains the evolution of different behavioral traits, though they remain environment-specific (Dunbar, 1982). In stationary populations, where parents die shortly before children reproduce, and tools are the only wealth and the only form of capital, bequeathing may be treated as a result of evolutionary adaptation. If any of the environmental elements changes, the behavior adjusts, but not instantaneously. For example, an increase in life expectancy may result in a shift of the time of the intergenerational transfers from bequests to inter-vivos transfers. Furthermore, once human capital becomes an important factor of production, other channels of transmission of capital to children may be considered. In order to understand the possible adjustments of bequest behavior to changes in environment, one needs to understand why and how much people plan to bequeath.

The family tradition model predicts optimal planned bequests, recognizes the distinction between inter-vivos transfers and bequests, and yields several testable claims concerning bequest behavior. The model of family tradition combines both nature and culture, but not in an additive sense. Both components of the utility function, namely altruism and family tradition, cannot be reduced either to pure nature or to pure culture. The motive to bequeath proposed in the family tradition model can be interpreted as an urge to leave something lasting longer than a lifetime, which is applicable mainly in a dynastic framework. The family tradition adds to the altruism motive for leaving bequests to children. An interesting puzzle arises when one considers a wealthy individual bounded by a family tradition but having no children. Even though Alfred Nobel did not have children, he left a will. He made a thoughtful decision to establish a prize financed out of his bequests. He experienced bankruptcy of his father's company and appreciated transfers from his father when the company was in a good financial position (Jaszuński, 1995). Individuals without tradition to bequeath may also decide to leave a bequest, provided that they are altruistic and sufficiently wealthy. Once they decide to do so, their heirs inherit not only the wealth but also the familial obligation to leave bequests to own children, viz., the family tradition. The experience of inheriting enhances the decision to bequeath and influences the amount of bequests. If heirs do not have children, they might still want to leave bequests, albeit to unrelated individuals.

2.2 When and how to tell that bequests are not accidental: the making of a will

The motives underlying bequest behavior are not fully revealed by the behavior of testators. The one who wishes to leave a bequest but is constrained by poor resources, or the one whose motivation is not strong enough to assure the interior optimum choice, will not bequeath despite the presence of such a wish. An individual unwilling to bequeath might leave nothing, but is also likely to bequeath accidentally. The intuition in support of the accidental nature of bequests suggests that the uncertainty concerning the time of death makes the risk-averse elderly save for future needs (Davies, 1981). Since typically one cannot predict the exact date of one's death, one is unlikely to consume all wealth before dying, even when there is no plan to bequeath altogether.

The distinction between individuals willing and unwilling to bequeath cannot be made on the basis of observed bequests. People willing to bequeath do not necessarily bequeath and vice versa; even those who do not wish to bequeath may leave a bequest. Thus, the bequest motive should be distinguished from the operative bequest motive. The answer to the question why people bequeath is not simply: because they want to. Moreover, we are unable to ask the donors whether the observed bequest is consistent with his or her will as it is executed after he or she has passed away. The mechanisms that stand behind bequest behavior are difficult to investigate due to data scarcity.

The crucial distinction that should be made when analyzing bequest behavior is that leaving bequests can be either accidental or planned, and there is no straightforward way to

distinguish between the two. The act of making a will is an explicit indicator that bequeathing is planned, which makes it a good instrument for identifying planned bequests. However, the information on making wills may underestimate the size of the population willing to bequeath since making a will is not a necessary condition for the transmission of wealth after death.

It being impossible to verify the theoretical hypotheses that credit bequests to different motives directly, numerous indirect tests were conducted. Most of them have not provided sufficient support for the presence of an operative bequest motive (Hurd, 1997). On the other hand, the Life Cycle Hypothesis predicting dissaving during the last period of life was rejected by cross-section data as the elderly usually keep saving (Blinder et al., 1981) or dissave but less than the hypothesis would predict (Kotlikoff and Summers, 1988). This fact might be credited to the plan to bequeath, especially if one controls for limitations coming from the nature of cross-section data that treat different cohorts as if they were the same.

Declarations about saving motives do not contribute much to the knowledge on plans to bequeath. Davies (1981) reports that 4% of respondents in the US in 1962 cited "providing an estate" as a saving objective. Even among the wealthiest American households (with incomes above \$10,000 in 1966 dollars), that were most likely to leave a bequest, only 23% of all affluent families declared saving to make a bequest (Barlow et al., 1966). Page's (2003) studies on the US tax law based upon the Survey of Consumer Finances (1983, 1986) are concluded with a statement that at least some fraction of bequests is planned. Similar results were obtained for Japan as the saving portfolio suggests that Japanese tend to keep their bequeathable wealth in assets that are subject to lower inheritance tax rates than other forms of assets (Barthold and Ito, 1992). These indirect tests of the accidental nature of bequests are contaminated by factors other than pure bequeathing intentions, thus calling for a proper way of verifying plans to bequeath.

2.3 Some stylized facts of wills

The individual decisions on bequeathing can be written down in the form of a will. A will is a legal document in which a person provides for the transfer of his/her property at death.⁵ It can

⁵ In the Middle Ages, a will was in the mains a religious document. As of the 18th century, the religious connotation of wills weakened. Tighter and more trustful family relations, facilitated substitution of oral wills for handwritten ones (Ariés, 2007).

contain either the directives on how the wealth should be divided between the heirs or it can express an intention to disinherit family members or relatives. If so, one may be sure that those who register a will of disinheritance (which occurs infrequently according to Menchik (1980)) do not have any intention to bequeath and those who write down a will desire to leave bequests.

However, this is only a part of the story as in all countries there is bequest law that operates as a default rule in the absence of a will. Possibly, all those who plan to divide own bequeathable wealth according to the local law, are less likely to make a will, especially if the law represents social preferences over the division of bequests. Usually, the law divides bequests equally between all children and this fact contradicts the predictions of compensatory transfers motivated by parental altruism (Becker, 1976). Most of the observed bequests are shared equally among siblings (Menchik, 1980) and this fact may contribute to the belief that bequests are accidental. On the other hand, there are reasons to treat bequests separately from other transfers and equal sharing may be the optimal choice that does not relatively deprive any child (Stark, 1998). If so, there would be little need for making an explicit will as the implicit law rules are in line with the plans of testator.

Country	Legal base	Disposable share
Austria	Allgemeines Bürgerliches Gesetzbuch	1/2
Denmark	Arveloven	1/2
France	Code Civil	1/2 if one child, $1/3$ if two, $1/4$ if three or more
Germany	Bürgerliches Gesetzbuch	1/2
Greece	Αδτικοζ Κωδικαζ	3⁄8
Italy	Codice Civile	1/3 if one child, $1/4$ if more than one
the Netherlands	Burgerlijk Wetboek, Boek 4	1/2
Spain	Código Civil	1/3
Sweden	Ärvdabalk (1958:637)	3⁄4
Switzerland	Schweizerisches Zivilgesetzbuch	3⁄8

Table 2.1: Testamentary freedom allowed by law in selected European countries if there are at
least one child and a surviving spouse

Source: Angelini, 2007.

Despite one may plausibly argue that democratic law reflects preferences of the majority, there is possibly a lot of heterogeneity as far as bequest behavior is concerned. Thus, the law may in effect limit the testamentary freedom of choice (at least for some part of a population)

by defining a fixed share of the disposable bequeathable wealth where the decedent leaves at least one child and a surviving spouse, as it is customary for children and the surviving spouse to be granted a statutory share, independently of the will made by deceased (Angelini, 2007).

Making a will does not require registration with any authority, as it is a valid legal document once the one who wrote it dies, unless it is not signed by the author or the decedent was mentally ill or legally incapacitated while drawing a will. Usually, registering a will involves certain costs, if not financial, then at least the hassle or psychological distress, which may, to some extent, prevent individuals from making a will. The available statistics on the number of wills made report only the registered wills, thus one may expect that the overall number of wills made exceeds the reported figure. However, registering a will has an important advantage as it is also a confirmation of the legal capacity of a donor. Without such confirmation there is a possibility to question a will. For this reason, one should expect that the downward bias of all wills made estimated by the registered ones is not overwhelming.

International comparisons of fractions of population with a will should be done carefully since there are different regulations on the minimum age at which one may make a will. The age ranges from 14 to 18 in continental European countries, while in the UK there is no age limit (Pazdan, 2005). Moreover, all those who would like to bequeath but are not wealthy enough to do so, are not going to make a will due to the lack of the operative bequest motive in spite of the presence of a general bequest motive.

The introductory statistics provided by the legal offices in the US (Find Law, Martindale-Hubbell) state that 55–58% of American adults have not written a will (Martindale-Hubbell, 2008). Only 32% of African American adults and 26% of Hispanic American adults have wills, compared to 52% of white American adults (Find Law, 2008). Similar statistics were found for Australia. The data on Australia report not only wills registered with the government authorities but also those made by the testators on their own. According to the data coming from the State of New South Wales (NSW), in the past five years the number of Australians with a will has ranged between 50% and 60% of the adult population in Australia. The data on the number of wills made somewhat differ from the number of persons that have drawn up a will, since the former covers also changes and updates to the wills already made. Public Trustee NSW registered 11,513 wills in 2006/2007 of about all 164,470 Australian

wills made that year, with the rest being made mostly with solicitors and a small fraction (2%) with private trustee companies. Around 10% of the wills was made using a range of do-it-yourself will kits available on the market. The number of wills exceeds the number of persons that have drawn up a will as only 48.55% of the wills registered with Public Trustee NSW in 2006/2007 was made by individuals who had not had a will before. The number of wills registered every year is slightly increasing over time and a similar pattern holds for the number of persons with a will in Australia (Public Trustee NSW, 2007).

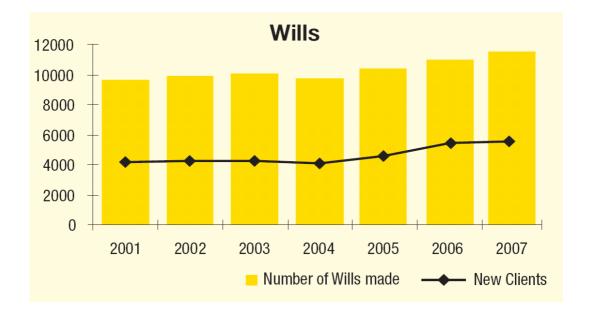


Figure 2.1: The number of wills made in years 2001–2007 in the State of New South Wales registered by the Australian government enterprise of Public Trustee NSW
Source: Public Trustee NSW, Annual Report 2006/07, Sydney, 2007.

As far as similar data for Poland are concerned, the number of wills registered in 2007 was 94,253. Assuming that each will made in 2007 was registered by a different person, 0.36% of the members of the Polish 30+ population made a will in 2007 (Polish Ministry of Justice, 2008), compared to 1.39% observed in the Australian 30+ population (Public Trustee NSW, 2007). However large is the difference, the gap between the countries may be partly credited to the difference in the general wealth level, as the rich are more likely to bequeath than the poor. Once the absence of the operative bequest motive removes a need to make a will despite the plans to bequeath, the less wealthy country may report a lower number of testaments.

The number of registered wills in Poland peaked in 1999 reaching 109,811, and after the drop in 2002 it has been growing. The number of wills is systematically lower than the number of estate gifts registered with the legal authorities in Poland. In such comparisons one should

note that both types of transfers are subject to different tax rules. The taxation of gifts was much more advantageous than the inheritance taxation, which made giving estate less costly than bequeathing it. The wills to estate gifts ratio was 73% in 2006 and 53% in 2007, when the number of estate gifts was substantially higher than in the previous years (see Figure 2.2). A similar level of the ratio is observed over the last twelve years (Polish Ministry of Justice, 2008).

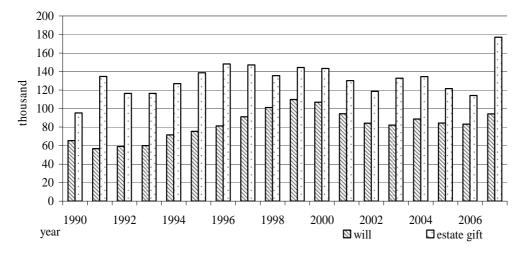


Figure 2.2: The number of wills and the number of estate gifts made in Poland in 1990–2006 *Source: Author's own calculations based upon the Polish Ministry of Justice resources, MS-Not24, 2008.*

The discussed fraction is always lower than one and fell below half only once in 1991. The number of wills made yearly equaled 63% of the number of estate gifts over the years 1990–2007 on average. These results are intriguing as there is no doubt that inter-vivos gifts of estate are major transfers of wealth and they are voluntary. If so, one may state that the number of planned bequests reported every year is lower but comparable to the number of large voluntary gifts made every year. The data show that the planned bequeathing phenomenon, even though less popular than the inter-vivos giving, cannot be neglected. Unfortunately, we cannot distinguish between new wills made and updates to the already existing wills as far as Poland is concerned. If the situation in Poland was similar to that observed in Australia, then the number of persons with wills made each year would correspond to about half of the wills made that year.

2.3.1 Evidence from a district court in Poland

In Poland, data on legal proceedings concerning bequests are recorded by district courts, but are not available at the aggregated country level. For this reason, the figures presented in this Subsection, gathered from the District Court in Otwock in 2007, are not representative for Poland. The Otwock district is located in Mazowieckie voivodship,⁶ which in 2007 had a population of 117,500 residents (Polish Central Statistical Office, 2008) living in the towns of Józefów and Otwock, and in the following urban-rural communes:⁷ Celestynów, Karczew, Kołbiel, and Wiązowna. According to the National Census conducted by the Central Statistical Office in 2002, 13.9% of the Otwock district residents were over 65 years old. There were altogether 1,115 cases of death among individuals aged 15 and more in the district in 2007.

According to the Polish law, district courts handle each case of death if any bequeathable wealth is involved. The applicable legal proceedings cover all those cases where the Court announced who has the right to receive an inheritance after a resident of the district has died. If the deceased made a will, the will was opened and announced publicly by the Court; when a person died intestate, the Court applied standard legal rules in naming heirs. We use these data to asses how often bequeathing in Otwock district in 2007 was under wills. There were 680 inheritance cases resolved by the Court capturing bequests left by 788 persons (572 cases of individual bequests, and 108 cases of joint bequests by married couples).⁸ In 13.7% out of the 680 cases concerning bequests examined by the District Court, a will was in place.

Gender and marital status are not directly reported in the data from the District Court. However, such information can be inferred from the name of an individual. Among the 684 individuals who died in Otwock district in 2007, and whose gender was unambiguously inferred from the names, 378 were men, and 306 were women. 12.7% of the women and 9.5% of the men made a will. One may attribute the larger fraction of women making a will to the fact that they usually outlive their partners and thus are exposed to a higher likelihood of receiving inheritance.

⁶ Voivodship (*województwo*) is the highest administrative tier in the Polish administrative system.

⁷ Commune (*gmina*) is the lowest administrative tier in the Polish administrative system.

⁸ There were 6 cases of married couples where one of the spouses made a will while the other did not, and his or her wealth was divided according to the legal regulations. Moreover, there were 6 wills made in a way that was not recognized by the Court and the legal rules were applied in spite of the will.

While, as already noted, there are no country statistics to which the Otwock data could be compared, the SHARE wave 3 in Poland provides information on 96 respondents who died after the 2007 wave of data collection. According to SHARE data for Poland, 65 of these deceased left a bequest, among which 9 died having a will. The 9/65 proportion of will making to bequest making is not overwhelming, but is substantial enough to indicate that the phenomenon of planned bequeathing is not negligible, suggesting that, to some extent, bequeathing is planned.

The incidence of will making is not very pronounced in Otwock in comparison to the US and to the SHARE countries other than Poland. It resembles the Slovak Republic, where from 10% to 15% of all legal proceedings concerning bequests involved the existence of a will (Global Property Guide, 2009). This is in line with the concept of family tradition that had relatively little opportunity to evolve in the post-war Poland, where private ownership was officially abolished, even though some occupational groups managed to maintain private ownership still before 1989. Only a few families were able to accumulate private wealth that could be bequeathed in Poland during the socialist era. This consideration could have contributed to the reported low incidence of will making in Otwock 18 years hence.

In the overwhelming majority of the cases (91.4%), the wills met the conditions needed to be recognized by the Court as a valid legal document. We know the exact date of 71 wills. 28% of the wills were made within the last year of life, 34% in advance of 1 up to 5 years before death, and the remaining 38% were made in advance of 5 years at least (20 years is the maximum observed advance). Among the wills made within the last year of life, 55% were made within the last week of life (mostly on the very day of death). It does not necessarily mean that individuals tend to make wills as they approach the end of their lives, since it is the most recent version of the will that constitutes a valid legal document, and any preceding versions are not reported in the data. However, this observation suggests that the older one is, the more likely one is to write and execute a will. The timing of making a will may follow the timing of receipt of an inheritance by the testator if the family tradition to bequeath operates. Thus, a reason why older individuals are more likely to draw a will is that they were more likely to experience inheriting. Unfortunately, we could not obtain any data on the experience of inheriting and relate such data to the act of bequeathing via a will.

2.3.2 Evidence from SHARE and HRS

According to the empirical research on the risk aversion of the elderly, it is large but finite. The estimates of risk aversion differ. Kotlikoff and Spivak (1981) in their simulation assume highest risk aversion at the level of 1.75, while Meyer and Meyer (2005) estimate that relative risk aversion may reach even 50. However high the estimates are, they are finite. For this reason, an indirect way of asking individuals whether they plan to bequeath, is to ask about the probability of leaving a bequest. Assuming finite risk aversion, all those who report that such a subjective probability equals one may be treated as willing to bequeath (Fink and Redaelli, 2005). The SHARE survey reports such data for the 50+ population in the selected European countries. The population weights allow for generalizing the sample results over the whole population aged 50 and more. Those without the operative bequest motive would report the subjective probability of leaving a bequest equal to zero. The remaining fraction can neither be identified as individuals with a motive to bequeath nor as those without it. 36% of all who answered the question declare subjective probability larger than one half that they will leave any bequest in the future.

Figure 2.3 depicts the percentages of all 9,529 respondents who, in SHARE wave 2 conducted in 2006/07, answered the question on the subjective probability of leaving any bequest. The fraction of individuals that can neither be identified as having nor as not having a bequest motive is larger in the older age groups but for all of the groups it is relatively stable at around 9%. For all the age groups, respondents declare zero subjective probability of bequeathing more often than being sure that they will leave a bequest. Only 27% respondents declare being certain to bequeath while 46% are sure that they will not leave any bequest. The fractions are relatively stable over the age groups, but not necessarily with age since we do not observe same cohorts over time. The fraction of individuals without the operative bequest motive exceeds the fraction of those with the bequest motive by 19 percentage points for all individuals on average and is largest for the eldest, reaching 24 percentage points. The difference is large but one should remember that among persons without the operative bequest motive are not only those who do not want to bequeath but also those who cannot afford it. Note that those who would like to bequeath, but are not sure whether they will afford it, are not included in the comparison.

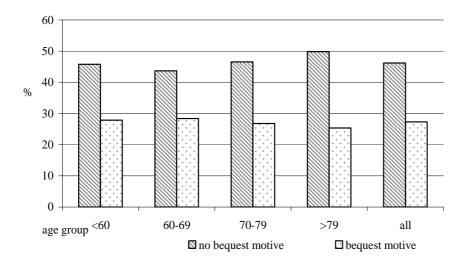


Figure 2.3: Percentage of SHARE respondents with and without a bequest motive in age groups

Source: Author's own calculations based upon SHARE wave 2, release 2.3.1. Note: Fractions weighted by the population weights.

However interesting the results of the SHARE survey may be, they cannot be extrapolated over the whole SHARE population, as only 28% of all respondents answered the question on the subjective probability to bequeath. The only conclusion from this and other surveys is that at least some fraction of respondents declares plans to bequeath.

The data from SHARE wave 2 contain information on the wave 1 respondents who died before 2007. There were 533 such individuals in the SHARE wave 1 sample and 478 of them have left some bequest. For 467 of those who bequeathed there are data on making a will. 32% of them had made a will before death. This fraction slightly exceeds the fraction of respondents who declare plans to bequeath. However, one should remember that the group of the deceased is not random and thus the densities of the bequest planning are not likely to be the same.

The SHARE data may be plausibly compared to the American HRS⁹ as the sample design and questionnaires are deliberately similar in the two surveys. Both of them collect information on individuals aged 50 and more in bi-annual waves. Since the HRS study was not conducted in

⁹ A Longitudinal Study of Health, Retirement, and Aging collects data about Americans over the age of 50 every two years. It is conducted by the University of Michigan and financed by the National Institute of Aging and the Social Security Administration. Together with ELSA and SHARE, it is involved in the process of database harmonization.

2007, we decided to use the 2006 wave in comparisons with SHARE wave 2. The same question as analyzed above was asked in HRS and 14.5% of all 18,469 US respondents provided an answer. It is surprising that about 75% of them declare certainty that they will not leave any bequest and only 5.7% are certain to leave a bequest while the respective fractions in Europe showed much less differentiation in plans to bequeath. The fractions remain relatively stable within age groups, similarly to Europe.

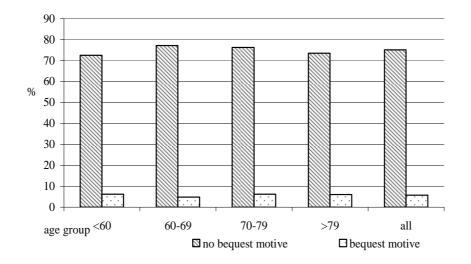


Figure 2.4: Percentage of HRS respondents with and without a bequest motive in age groups *Source: Author's own calculations based upon HRS 2006.*

The HRS results presented in Figure 2.4 might suggest that the American 50+ population is less likely to bequeath than their European peers. However, according to HRS, 54.5% of the 18,333 respondents who answered the question whether they currently have a will, declared having it. The exit interviews suggest that among the 1,310 individuals who died in the period between 2004 and 2006, 59.5% had a will, and thus almost 60% of them planned to bequeath. This proportion is substantially larger that the respective fraction of 31.7% observed in Europe. Again, the subsample of the deceased is not randomly drawn from the whole survey sample, but the fact that although Americans less often declare plans to bequeath, they seem to make wills more often than the Europeans, indicates an interesting cultural difference. Possibly, it results from the low response rate to this question in Europe, whereas the data on having wills by Americans aged 50+ are by far more reliable (99.3% respondents answered the question).

The size of the phenomenon of planned bequeathing needs further investigation. One of the potential sources of information could be the aggregation of juridical records on the fractions of inheritance cases where estate was disposed of according to the will made versus according to the default inheritance laws, so that these figures can be representative for the population of those who passed away leaving any bequest.