

Are bequests preceded by a will? Evidence from Europe, US, and Australia

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Abstract

How can accidental bequests be distinguished from planned bequests is a crucial question when accounting for bequest behavior. It is not easy to answer this question, because there is no direct indication of willingness to bequeath that must precede the execution of bequests. The aim of this article is to assess how often bequeathing is planned using Polish, European, US, and Australian data. Four areas of analysis are used in this study, three of which use writing down a will as an explicit indication that bequests had been planned in advance. The proportion of individuals planning to bequeath must be at least as large as the proportion of individuals writing down a will. Finally, in the fourth exercise subjective probabilities to bequeath are used. The main finding of the empirical analysis is that at least a non-negligible part of bequests are left intentionally. It implies that further research on why people exactly plan to bequeath is needed.

Keywords: bequest behavior, planned bequests, accidental bequests, making a will, subjective probability to bequeath.

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Introduction

A bequest is an act of transmission of personal property to heirs after the death of the donor. Mostly, bequests are made to family members belonging to the generation following that of the donor. The transfer can be executed either according to the will that specifies who inherits and how much, or according to a law that specifies legal rules of wealth division if a will is lacking or invalid. Regardless of the form of the transfer, it is executed after the death of the donor, and its amount and division is in the public view.

Like all financial transfers, a bequest cannot occur in the absence of resources. Since not all forms of personal property can be bequeathed, a distinction between bequeathable and non-bequeathable wealth needs to be made. The division of bequeathable wealth depends on the family situation, especially on the number of children. Moreover, the presence and division of bequests between heirs can be affected by the fact that the will is publicly announced after one dies. In the absence of a will, district courts announce who has a claim to the estate. Such publicity makes bequest behavior different from private inter-vivos transfers that often remain a matter exclusively between the donor and the beneficiary.

Bequests are irreversible and they cannot be accompanied with a reverse gift (a gift that a beneficiary of the initial private transfer provides to the donor). In addition, the bequeathed assets are under the full control of the heirs, which is not the case of other transfers; since the donor is not alive, he or she cannot control the disposition of the transferred wealth, which is possible in the case of inter-vivos transfers.

Bequests being a special type of private transfers cannot be fully explained by models developed in order to account for inter-vivos transfers. Unlike bequests, inter-vivos transfers cannot be given by accident. If bequests are accidental, they do not bring utility. Then a classical microeconomic model of optimal choice maximizing utility from bequests subject to a budget constraint is inapplicable. If bequests are planned, then specific motives underlying the intention to bequeath can be represented in terms of the utility function. Thus, two separate approaches to modeling bequest behavior are possible.

The question which of the approaches is accurate when accounting for bequest behavior needs testing. Knowing whether bequests are left intentionally or accidentally is crucial to build a model properly accounting for bequest behavior. Possibly, some bequests are accidental and some are planned. In that case, a distinction between planned and accidental bequests is needed before predictions derived from theoretical models are empirically tested.

In this study we aim to assess how often bequests are planned in advance. We propose to use the making of a will as an explicit indicator of the intention to bequeath. We assess if bequests are planned in four approaches. Firstly, some

stylized facts of wills using evidence from administrative data for Poland, US, and Australia are presented. Secondly, a case-study using data from a district court in Poland assesses the proportion of bequests accompanied by a will. Thirdly, data on will-making from the surveys on the elderly in Europe and in the US are studied. Finally, subjective probabilities to bequeath are used to assess the proportion of individuals with and without an intention to bequeath. The results suggest that at least a non-negligible part of bequests are left intentionally.

The structure of this paper is as follows. Section 1 delineates conceptual framework employed in four areas of research discussed in Section 2. Section 3 presents and discusses results. The final section concludes briefly.

1. Conceptual framework

Bequests are transferred after death, so the decision on whether to and how much to bequeath must be made in advance. In the opinion of psychologists (see Ossowska, 1949; Ajzen, 1991), an act of human behavior is preceded by an intention to undertake the behavior. The intention in turn is derived from individual desires (Miller et al., 2004), that in economic sciences are usually referred to as preferences. Let us now conceptualize the process of making decision on bequeathing and on the amount of optimal bequests that individuals plan to pass down after their death.

Following Niebrzydowski (1995), we use the term a “motive to bequeath” for any reason or desire to bequeath. The motives enter one’s preferences. According to some (Ossowska, 1949), a distinction between motives and intention can be neglected, but we find it useful. There may be more than one motive for a single intention, as defined by Ajzen (1991). An individual is aware of an intention to bequeath, but does not have to be aware of all the motives to bequeath that operate during the associated decision making processes (Wójtowicz, 1984). A “willingness to bequeath” occurs when there is at least one motive to bequeath. If a budget constraint yields positive optimal bequests, there is an “intention to bequeath” (a plan to bequeath). The willingness to bequeath is a feature of individual preferences that might turn into the intention to bequeath as a result of decision making. The optimal amount of bequest derived from the maximization of the utility functions is called “planned bequest”. Planned bequests are chosen prior to death. They can differ from “actual bequests” left after death.

An application of microeconomic modeling to bequest behavior can be found in Barro (1974), where individuals make decisions taking into account not only own consumption but also the utility of members of the subsequent generation. This feature of individual utility function was referred to by Becker (1974) as intergenerational altruism. Theoretical literature offers a number of motives for planned bequests captured by respective utility functions yielding optimal posi-

tive bequests, for example, different types of altruism (Becker, 1974; Barro 1974; Wilhelm, 1996), strategic giving (Bernheim et al., 1985), warm-glow (Andreoni, 1990), reciprocity (Kolm, 2006) and the demonstration effect (Cox and Stark, 2005; Mitrut and Wolff, 2009). For a more detailed literature review on motives for planned bequeathing see Nicińska (2013).

Finally, let us define accidental bequests. “Accidental bequests” are left in an absence of a willingness to bequeath, i.e. no motive could make individuals consider bequeathing as bequests do not bring any utility whatsoever. Obviously, unwillingness to bequeath indicates the lack of an intention to bequeath. Note that the other case when such intention could be lacking is the un-operative bequest motive.

First explanation to accidental post mortem transfers was provided by the Life Cycle Hypothesis (LCH) in Modigliani’s seminal work (1988). Davies (1981) and Abel (1985) show that under the uncertainty of longevity and constant relative risk aversion, the LCH predicts positive accidental bequests. Current models accounting for accidental bequests raise the argument of the so called “reserve fund” kept for large and unpredicted expenses that might occur by the end of life (Rocha and Thornburn, 2007). In order to maintain such a reserve fund, the risk-averse elderly will not annuitize all their savings. The reserve funds are likely to be left unconsumed, constituting accidental bequests.

Writing down a will takes place only if the intention to bequeath occurs. A will is a document in which testators provide for the transfer of their property at death. In order to be a valid legal document it does not require registration in the notary office, so no major costs are associated with drawing a will. It is important to remember that lack of a will does not uniquely identify individuals without an intention to bequeath. Individuals without a will can either have no willingness to bequeath, no intention to bequeath despite such willingness, or have the intention to bequeath according to the legal rules of the bequests’ division.

In sum, numerous motives to bequeath can create a willingness to bequeath. The planned bequests are chosen according to the utility function maximization. If there is an internal solution, there is an intention to bequeath and planned bequests are positive. If the budget constraint is too tight, the corner solution indicates that despite the willingness to bequeath, no intention to bequeath occurs and planned bequests are zero. Planned bequests are not directly observed and they are known to the donor prior to the moment when they become known to the heir. As long as the donors are alive, they can revise their planned bequests. Actual bequests are directly observed after donor’s death. Accidental bequests are positive actual bequests left despite no willingness to bequeath.

2. Area of analysis

There is no direct way of testing whether actual bequests were planned or accidental. We cannot ask testators whether bequests left by them were planned or accidental, because bequests are executed after their death. Moreover, not all individuals with a willingness to bequeath can afford doing it. In their case, the motive to bequeath remains un-operative. Empirical results do not confirm that bequests are left accidentally (Kotlikoff and Summers, 1988), but they also do not reject the hypothesis of accidental bequests (Hurd, 1997). Therefore, in order to shed new light on the question whether bequests are planned or accidental, we analyze the act of making a will and subjective probability to bequeath as a measures of the intention (plan) to bequeath.

The act of making a will can be analyzed prior to testator's death or after testator's death depending on the source of data. The details of data sources used in the empirical analysis of will-making are discussed in Subsections 2.1, 2.2, and 2.3. They are used to assess the proportion of planned bequests or, in other words, the proportion of individuals intending (planning) to bequeath.

Table 1: Testamentary freedom allowed by law in selected European countries if there are at least one child and a surviving spouse

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	Adtikoz Kwdikaz	3/8
Italy	Codice Civile	1/3 if one child, 1/4 if more than one
Netherlands	Burgerlijk Wetboek, Boek 4	1/2
Spain	Código Civil	1/3
Sweden	Ärvdabalk (1958:637)	3/4
Switzerland	Schweizerisches Zivilgesetzbuch	3/8

Source: Angelini, 2007: 22.

The interpretation of the results obtained upon the data on wills reported before and after testator's death is similar. The facts that a will can be made at the very last moment of life and that a will does not need registration to be a valid legal document, might result in a downward bias of the proportion of individuals willing to bequeath. These concern executed wills to a lesser extent than the wills not executed yet. However, using data on executed wills does not prevent from possible underestimation of the fraction of individuals planning to bequeath. Firstly, no need for writing down a will occurs if legal rules reflect individual decision on bequests' division. Secondly, bequest laws limit testamentary freedom of individuals intending to bequeath, which might discourage them from writing down a will. Table 1 provides details on the legal rules operating in the division of bequests when testator's will is lacking. Nonetheless, will-making is a good indication of an intention to bequeath.

Subjective probabilities to bequeath are interpreted as the measure of expectations concerning future bequests according to the method developed by Manski (2004). Assuming finite risk aversion, a subjective probability to bequeath equal to 100% should be treated as an intention to bequeath (Fink and Redaelli, 2005). If rational agents unwilling to bequeath expected themselves to leave accidental bequests, they would undertake actions aiming to avoid bequeathing, and in turn, reducing the chances to bequeath. Zero probability to bequeath will report also those of the willing to bequeath, who cannot afford it. Thus, individuals reporting zero chances to bequeath do not intend (plan) to bequeath while individuals declaring subjective certainty of bequeathing, intend (plan) to bequeath. Other values of subjective probability do not inform about the intention to bequeath. The data on subjective probabilities to bequeath are discussed in more detail in Subsection 2.4.

2.1. Data on registered wills

Public administration does not always provide information on the registered wills at the country level. We find the public registry data on wills for the New South Wales in Australia. As for Poland, data on the number of wills registered at notary offices can be retrieved from the Polish Ministry of Justice records by a researcher granted access to the Ministry's archives. In addition to official public administration statistics for Poland and Australia, figures reported by commercial institutions in the US are taken into account. Unfortunately, international comparisons could not be conducted in this exercise due to data limitations.

2.2. Otwock District Court's data on executed bequests

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

case study using data gathered from the District Court in Otwock in 2007, are not representative for Poland. The Otwock district is located in Mazowieckie voivodship (województwo), 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 (gmina): 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 assess how often bequeathing in Otwock district in 2007 was under wills.

2.3. Survey data on drawing a will and bequeathing with a will

Longitudinal Survey on Health, Ageing and Retirement in Europe (SHARE) on individuals aged at least 50 (50+) in selected European countries¹, coordinated by the Munich Research Institute for the Economics of Aging (MEA), and harmonized with the US Health and Retirement Study (HRS) conducts the so called end-of-life interviews. This special type of interviews covers those respondents who took part in any wave of data collection and deceased before the latest wave of the data collection. The end-of-life interviews are conducted with the deceased respondent's proxy, who is usually a close family member able to provide accurate and reliable information on the last 12 months of the deceased respondent's life. Information if the deceased left any bequests and if they were accompanied with the will is available in the SHARE and HRS end-of-life interviews.

In addition to data on actual bequests in SHARE and HRS samples, the information from HRS asking all their respondents if they have a will made is used. In the first case we can find the proportion of deceased individuals who bequeathed with a will, in the other case we can find the proportion of living individuals having their wills already drawn.

¹ These are: Austria, Belgium, the Czech Republic, Denmark, France, Germany, Greece, Ireland, Israel, Italy, the Netherlands, Poland, Spain, Sweden, and Switzerland.

2.4. Survey data on the subjective probability to bequeath

SHARE reports data on the subjective probability to bequeath for the 50+ population in the selected European countries. Respondents were first asked: “Including property and other valuables, what are the chances that you will leave an inheritance totaling 50,000 Euro or more (in local currency)?” In the case of individuals having a spouse, the wording changed to “... what are the chances that you or your spouse will leave an inheritance?” Depending on the answer, one of the two follow-up questions of chances to bequeath was asked. If a respondent declared zero chances to bequeath at least 50,000 Euro or did not answer at all, the question: “What are the chances that you will leave any inheritance?” followed. If a respondent declared positive chances to bequeath 50,000 Euro or more, the question about the chances to bequeath 150,000 Euro or more was asked.

Usually in the studies employing subjective probabilities, the normality of distribution is assumed in order to obtain the exact expected amount (see for example Hurd et al., 2011). The original setting is insensitive to the timing of the execution of the expectation. In particular, the expectations concerning events prior to and after death are treated identically. We do not know everything on the process of subjective probabilities formation (Hurd 2009), but certainly the possibility of accidental bequeathing makes the interpretation of expected bequests problematic. An individual unwilling to buy a car is highly unlikely to declare positive subjective probability to do so, whereas an individual unwilling to bequeath is not. In other words, expected bequests capture both planned and accidental bequests. For this reason, we cannot treat the derived amount of expected bequests as the accurate measure of the planned bequests.

Instead, we use the information on the subjective probability to leave any bequests in order to identify the intention to bequeath. Assuming finite risk aversion, all those who report that such a subjective probability equals 100% may be treated as willing to bequeath (Fink and Redaelli, 2005). Individuals who report the subjective probability of leaving any bequest equal to 0% have no intention to bequeath. The remaining answers can be provided by both types of individuals: willing (either planning or not to bequeath) and unwilling to bequeath. Thus, we use the subjective probability to assess the proportion of individuals with the intention to bequeath and the proportion of individuals without such intention even if the estimates are likely to be downward biased. Similar analysis is conducted using analogous HRS data on subjective probability to bequeath. The population weights allow for generalizing the sample results over the whole population aged 50 and more.

3. Results

The areas of analysis delineated above, use very basic methods of descriptive statistics. We find them accurate for the first attempt to assess the proportion of planned bequests. Studies investigating bequest behavior mentioned in Section 1 are framed according to the theoretical models assuming certain motivation structure underlying the behavior. They are aimed at testing a particular reason for bequeathing, which is a step ahead of testing whether bequests are accidental or planned. Some bequests are planned and some are accidental. Using both types of bequests in testing theoretical predictions yields inaccurate results since no model can account simultaneously both for planned and accidental bequests. Therefore, we take a step back with this analysis and conduct a basic research aiming to distinct planned and accidental bequests. Then, we assess the proportion of planned bequests. Our findings from the four simple exercises are presented in the following subsections, respectively.

3.1. Stylized facts on registered wills

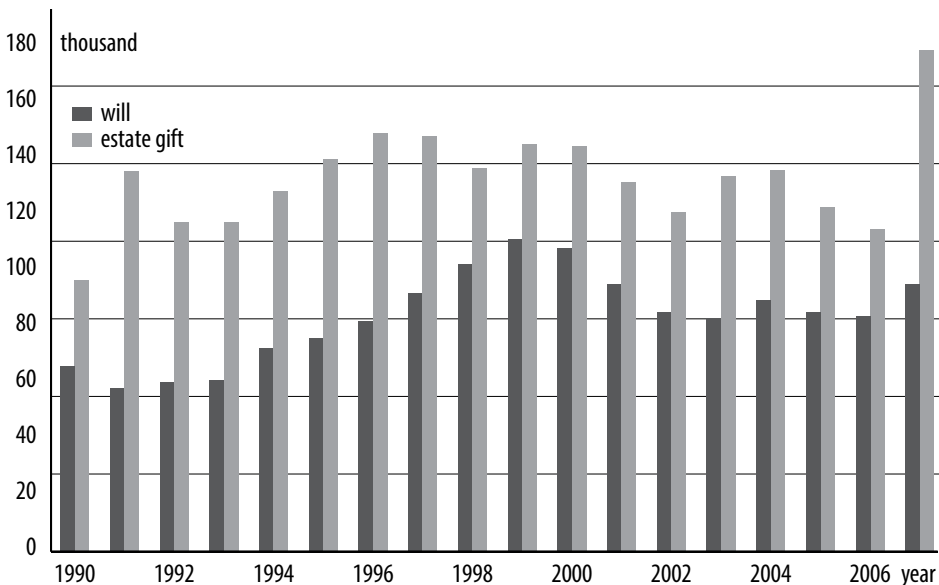
The introductory statistics provided by the legal offices in the US (Find Law, Martindale-Hubbell) state that 55–58% of American adults have not written a will (Martindale-Hubbell, 2008). Only 32% of African American adults and 26% of Hispanic American adults have wills, compared to 52% of white American 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), the proportion of Australians with a will has ranged between 50% and 60% of the adult population in Australia. These figures show that majority of the bequests were planned.

The data on the number of wills already 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% of the wills registered with Public Trustee NSW in 2006/2007 were made by individuals who had not had a will before. The number of wills registered every year is slightly increasing over time between 2001 and 2007, and a similar pattern holds for the number of persons with a will in Australia (Public Trustee NSW, 2007).

As far as similar data for Poland are concerned, the number of wills registered in 2007 was 94,253 (Polish Ministry of Justice, 2008). Assuming that each will made in 2007 was registered by a different person, 0.4% of the members of the Polish 30+ population made a will in 2007, compared to 1.4% 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 willingness 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, as shown in Figure 1. 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 in the analyzed period, 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. A similar level of the ratio is observed in years 1994–2006 (Polish Ministry of Justice, 2008).

Figure 1: The number of wills and the number of estate gifts made in Poland in 1990–2006



Source: Author's own calculations based on 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. The available data on registered wills in Poland are insufficient to assess the exact prevalence of planned bequests.

3.2. Evidence from a district court in Poland

There were 680 inheritance cases resolved by the Otwock District Court in 2007 capturing bequests left by 788 persons (572 cases of individual bequests, and 108 cases of joint bequests by married couples). In 14% 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. 13% of the women and 9% 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 have more impact on the bequests that their children receive from parents. The Otwock case indicates that at least 14% of all actual bequests in the Otwock District in 2007 were planned.

While, as already noted, there are no country statistics to which the Otwock data could be compared, the SHARE survey provides information on 96 respondents aged 50+ in Poland who died after the 2007 wave of data collection. According to wave 3 of 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. However, less than 50% of observed bequests were accompanied with a will in this sample.

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 may be associated with the fact that private ownership was officially abolished in the post-war Poland and Slovakia, even though some occupational groups managed to maintain private ownership still before 1989. It was not easy 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%), 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. It is a relevant finding as it suggests that individual's behavior concerning drawing a will can be most accurately analyzed after the individual's death.

3.3. Evidence from SHARE and HRS on will-making

The data from SHARE end-of-life interviews contain information on respondents who died after 2005 and before 2008. There were 1,188 such individuals and 84% of them left some bequest. For 998 of those who bequeathed, data on making a will are available. 29% of the testators had made a will before death, which was known to the proxy answering the questions in the end-of-life interview (98% of proxies). This fraction exceeds the fraction of respondents who reveal 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 HRS results might suggest that the American 50+ population is less likely to bequeath than their European peers. However, according to HRS, 54% of the 18,333 respondents who answered the question if they currently have a will, declared having it. This finding shows that majority of bequests are planned. Possibly, relatively large testamentary freedom in the US enhances drawing a will. Perhaps preferences concerning division of bequeathable wealth are more homogenous in Europe than in the US, and are better reflected by the bequest law. The actual proportion of individuals having made a will before death is expected to exceed 54%, because wills can be made till the last day of life.

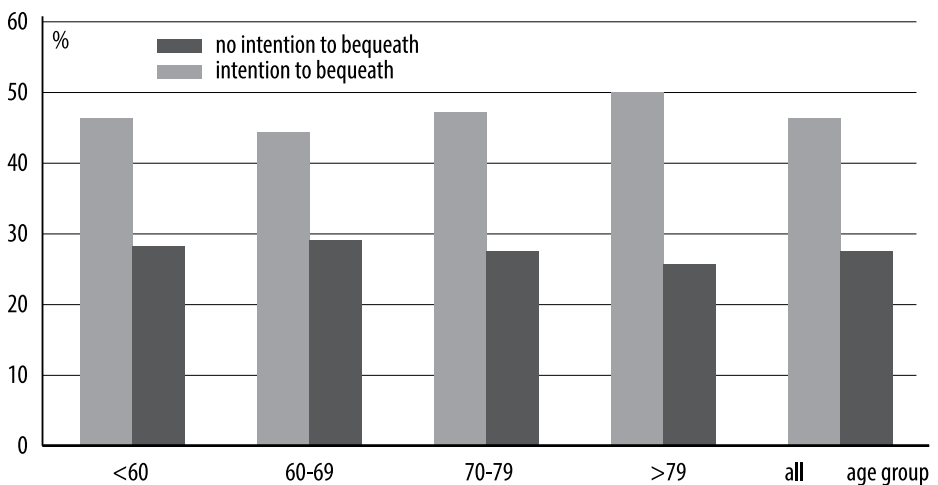
Proxies of 99% of the deceased HRS respondents provided data on wills. The data suggest that among the 1,310 individuals who died in the period between 2004 and 2006, 59% had a will, and thus almost 60% of them planned to bequeath. This proportion is substantially larger than the respective fraction of 29% observed in Europe. Again, the subsample of the deceased is not randomly drawn from the whole survey sample, but the fact that although Americans as often as the Europeans declare plans to bequeath, they seem to make wills more often, indicates an interesting cultural difference worth more detailed analysis in further research.

In sum, the results from the end-of-life interviews confirm that majority of bequests in the US are planned, whereas in Europe less than 30% were confirmed as intended.

3.4. The subjective probability to bequeath

Figure 2 depicts the percentages of all 9,529 respondents who declared the subjective probability of leaving any bequest, equal either to 0% or 100% in SHARE wave 2 conducted in 2006/07. 36% of all who answered the question declare subjective probability larger than 50% that they will leave any bequest in the future. The fraction of individuals that can neither be identified as having nor as not having an intention to bequeath is larger in the older age groups but for all of the groups it is relatively stable at around 9%.

Figure 2: Percentage of SHARE respondents with and without an intention to bequeath in age groups



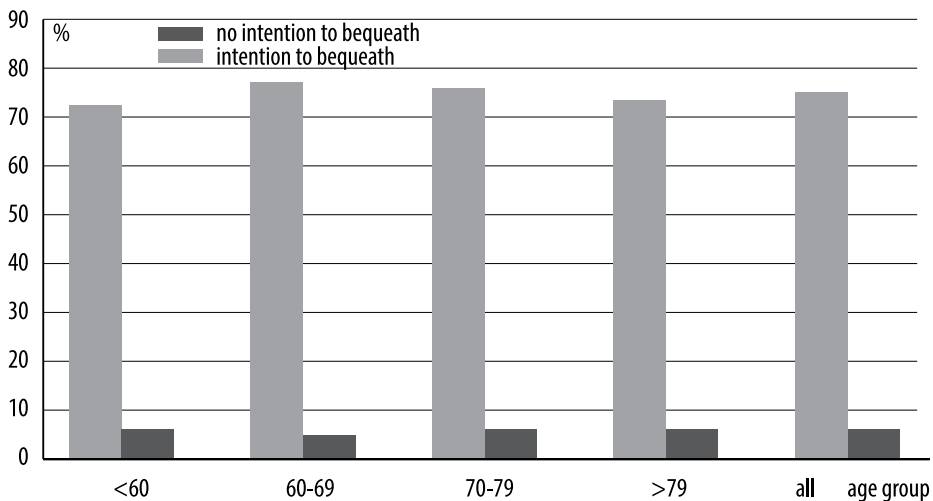
Source: Author’s own calculations based on SHARE wave 2, release 2.3.1.

Note: Fractions weighted by the population weights.

For all the age groups, respondents declare 0% subjective probability of bequeathing anything more often than being sure that they will leave a bequest, as shown in Figure 2. Only 27% of 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 intention to bequeath exceeds the fraction of those planning to bequeath by 19 percentage points 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. In sum, at least 20% of individuals aged 50+ living in Europe whose subjective probability to bequeath is known, intend (plan) to bequeath. Less than 50% of them does not intend (plan) to bequeath.

The SHARE data may be plausibly compared to HRS, as already mentioned. Since the HRS study was not conducted in 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% of all 18,469 US respondents provided an answer. The results are depicted in Figure 3. 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 3: Percentage of HRS respondents with and without an intention to bequeath in age groups



Source: Author's own calculations based upon HRS 2006.

It is surprising that about 75% of HRS respondents whose subjective probabilities to leave bequests are known declare certainty that they will not leave any bequest and only 6% are certain to leave a bequest while the same survey reveals that majority of them have made a will. This might indicate that SHARE and HRS respondents perceive differently the probability of future events, in particular bequeathing. Possibly, in addition to sole bequests plans, cultural differences in the risk aversion could account for the regional disparities. We do not know whether the probability of declaring positive chances of accidental bequests is the same in different populations. Better insight into how exactly people form their subjective probabilities, using for example vignette experimental methods, will be necessary to interpret this phenomenon.

Large difference in proportions of individuals planning to bequeath among all individuals whose subjective probability to bequeath anything is known, might be misleading when comparing the US and Europe. If we compare the proportion of individuals in the whole population 50+ with an intention to bequeath in Europe (13%) with a respective figure in the US (10%), the differences are substantially smaller. In case of the proportions of individuals 50+ without an intention to bequeath, the difference vanishes (1%). We can deduce from the subjective probabilities to leave any bequests that at least 10% of individuals aged 50+ in the US and Europe plan (intend) to bequeath.

Conclusions and final remarks

A conceptual framework of planned and accidental bequeathing was developed. Four areas of analysis were studied in order to find the proportion of planned bequests. The act of making a will was studied using three data sources together with the data on the subjective probability to bequeath. Table 2 summarizes results obtained in the four exercises. In some cases, empirical results confirm that majority of bequests are planned. In most cases however, obtained results confirm only that a substantial proportion of bequests are planned in advance.

All of the empirical exercises presented in this paper have their own limitations, but the evidence implies that at least a non-negligible part of actual bequests are planned. This holds in Poland at regional and country levels; in Australia and in the US, and in Europe in general. Moreover, we find in the case study that individual's behavior concerning drawing a will can be most accurately analyzed after the individual's death.

Table 2: Summary of results obtained in the four empirical exercises

Exercise and data source	Proportion of planned bequests	Majority of planned bequests
1		
Martindale-Hubbell	42-45% of American adults	No
Find Law	32% of African American adults	No
Find Law	26% of Hispanic American adults	No
Find Law	52% of white American adults	Yes
Public Trustee NSW	50-60% of adults in Australia	Yes
Polish Ministry of Justice	unknown	unknown
2		
Otwock District Court	14% of executed bequests	No
3		
SHARE end-of-life	32% of actual bequests	No
HRS end-of-life	59% of actual bequests	Yes
HRS	54% of respondents	Yes
4		
SHARE	27-54% of respondents	No
HRS	6-25% of respondents	No

Source: Author's own tabulation.

Relatively high prevalence of making a will observed outside Europe does not necessarily mean that the phenomenon of planned bequeathing is more pronounced in the US and Australia than in Europe and Poland in particular. In contrary to the US, bequest laws and substantially limited testamentary freedom in Europe might discourage from drawing a will. Therefore, international comparisons cannot be done without further investigation on the country-specific incentives for drawing a will. The cultural differences and wealth disparities between the analyzed geographical regions affect motives for bequeathing and probability that the motive remains un-operative. Differences in motivations (preferences) were not fully captured by this study. Also costs of and incentives for will-making differ between analyzed countries. These were not controlled for in this study, which would be worth investigating provided more refined data become available. In addition, experimental methods could be useful in the development of better understanding how subjective probabilities to bequeath are formed.

The observation that at least a non-negligible part of actual bequests are planned proves that theoretical models assuming that bequests are a choice made according to underlying motives, are useful. The motives resulting in the plan to bequeath can be captured in terms of the utility function that reigns bequest behavior. Thus,

we need two models accounting for bequest behavior. One should explain why individuals unwilling to bequeath leave bequests by accident. The other should explain how decisions on the amount of bequests are made by individuals willing to bequeath. Their predictions should be tested using only accidental or planned bequests, respectively. A first step for a definite distinction between the planned and the accidental bequests could be the use of will-making and of the subjective probabilities to bequeath.

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