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Abstract

We provide a comprehensive empirical study on the factors that drive citizens' policy preferences regarding inheritance taxation. It builds on a representative survey among more than 1.000 German citizens in 2014 and 2015. Support for inheritance taxation is found to be driven by monetary self-interest and redistributive preferences. It is lower among females and among subjects who overestimate the tax burden. We look beyond the narrow scope of inheritances and account for other forms of transfers in the family, in particular the provision of long-term care. More than 75 percent of our respondents consider it fair that family members who provided long-term care receive higher inheritances in exchange. This fairness preference does not drive policy preferences, but acceptance for inheritance taxation is higher among subjects who expect the typical German family to reward intrafamilial care-giving through a higher inheritance.

1. Introduction

Since World War II, the industrialized world has seen an unprecedented accumulation of wealth. Every year, portions of this wealth are passed on from one generation to the next. Wiktor (2010) estimate the average wealth transfers to exceed 4 trillion dollars per decade in the next 50 years. In Germany alone, researchers estimate the amount of 4,6 billion euro to be transferred in the next decade (see Sieweck, 2011). Some of these transfers are given inter vivos but the largest part of private wealth transfers between generations take the form of bequests. Given these huge wealth transfers and the financial restrictions of the public sector in many countries, it is puzzling to see that democratic societies leave wealth transfers largely untaxed (e.g., Aura 2004; Dowding, 2008; Prabhakar, 2008; Beckert, 2013). Rather than making increased use of this massive tax base, many western countries have reduced the effective taxes on wealth transfers (e.g. Conway and Rork, 2004, Berttochi, 2010). This seems even more puzzling if we realize that the bulk of tax revenues on wealth transfers stems from a small percentage of very high transfers. In Germany, around 90% of German inheritances are free of tax (e.g. Statistisches Bundesamt, 2013). In other words, the median voter can be certain not to pay taxes on wealth transfers but to benefit – in whatever form – from the extra budgetary means. Nevertheless, the acceptance even for a very moderate taxation of wealth transfers is low (e.g., Rowlingson and McKay, 2005; Prabhakar, 2012). Little research has been done to help understand where this resistance comes from. The current paper presents one of the first comprehensive empirical studies on this issue. Based on a representative survey among German citizens in 2014 and 2015, we analyze the factors that drive citizens' policy preferences regarding the taxation of wealth transfers: Which factors make some people support wealth transfer taxation and which factors make so many other people oppose it?

There is a growing body of literature explaining citizens' policy preferences for other taxes (e.g., McCaffery and Baron, 2006; Ansolabehere, 2007). This literature shows that self-interest

plays an important role: Subjects who expect to be burdened heavily by a certain tax tend to oppose this tax (e.g., Hammar et al., 2008). In the case of redistributive taxes, fairness preferences and the perceived inequality of the existing income distribution are found to drive policy preferences (e.g., Engelhardt and Wagener, 2014). The number of studies that focus explicitly on wealth transfer taxation is, however, limited. Slemrod (2006) shows that subjects generally expect wealth transfer taxes in the US to burden more citizens than it actually does. The acceptance of wealth transfer taxation is higher among those who have a more accurate view on the fraction of citizens actually taxed (e.g., Sides, 2011; Kuziemko et al., 2013). Hammar et al. (2008) shows that wealth transfer taxes are very unpopular in Sweden. He finds the degree of disapproval to be higher among older citizens. Based on focus group discussions in the UK, Prabhakar (2012) concludes that the citizens' attitudes are shaped by the stage of life they are in. Older people perceive wealth transfer taxes as the most unpopular tax whereas young people find fuel duties to be the most unpopular. Page et al. (2013) asked US citizens for the preferred tax rate on estate worth $10 million and on estate worth $100 million and found a significant difference in preferred tax rate on estate worth $100 million of general public (28.2%) and of wealthy Americans (19.2%). This result suggests that material self-interest plays a role in shaping citizens attitude towards wealth transfer taxes.[1]

While the existing studies provide valuable insights, a systematic study that covers the wider range of potential factors is still missing. A systematic study must view bequests as just one part of a system of intergenerational transfers within the family. This is what we do in the

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[1] Wrede (2013) provides a study on the role of tax planning on citizens' policy preferences on taxing the transfer of family-owned firms in Germany. Specifically, he asks for the acceptance of a tax exemption for the transfer of family-owned firms that leaves this type of transfer largely untaxed while a comparable transfer of other assets would lead to a substantial tax burden. He shows that policy preferences strongly depend on citizens' assumptions regarding the bequeathers' motive. The acceptance for tax exemptions for the transfer of family-owned firms is high when the firm exists for a long time. If, however, a terminally ill person founds a family-owned firm with the aim to save taxes, the acceptance for the tax exemption is low.

current paper. A special emphasis rests on the relationship between wealth transfers and long-term care provided by family members (e.g., Künemund and Rein 1999; Haberkern, 2009). The share of elderly who require time-consuming and intensive long-term care has increased dramatically in the last decade. In many cases, long-term care is provided by family members (e.g., Adam and Mühling, 2014). Some citizens argue that providing long-term care should be rewarded through larger bequests. We are interested to find out whether citizens who adhere to this conviction are more critical about the taxation of wealth transfers. The theoretical economics literature suggests that they should because wealth transfer taxation is potentially harmful to the level of intrafamilial care giving when care-giving subjects expect to be remunerated through larger bequests (for details, see section 2).

In this paper, we analyze data from a survey among German citizens conducted in 2014 and 2015. It asks subjects about their policy preferences regarding the inheritance tax – the form of wealth transfer taxation applied in Germany and many other European countries. We are interested in the general acceptance of inheritance taxation rather than in the evaluation of the tax schedule currently in place. Therefore we ask subjects whether they agree that inheritances beyond a certain amount should generally be taxed. The survey contains a set of specially designed questions to elicit subjects' view on the link between long-term care and the wealth transfers. We ask them whether they personally consider it fair that long-term care is remunerated through higher wealth transfers. In addition, we ask them whether they expect that this remuneration is typically granted in Germany. We control for the social norm of indirect reciprocity along with subjects' beliefs and knowledge about inheritance taxation in Germany. The large array of other factors analyzed includes biographical information like age, income, expected inheritance and family experience in giving long-term care and some general beliefs and attitudes. We also account for personality traits.

Our main results can be summarized as follows: Some 40 percent of respondents agree that inheritances should be taxed. Acceptance for inheritance taxation is higher among subjects who expect the typical family in Germany to give larger inheritances to children who provided long-term care. The question whether or not subjects regard this remuneration as fair does not influence their policy preferences. The same holds for the question whether or not the subjects themselves have provided long-term care to family members. On the other hand, female subjects who are typically at the heart of intrafamilial exchange relationships are more likely to oppose inheritance taxation than men. We find support for inheritance taxation to be driven by material self-interest: Acceptance for inheritance taxation is higher among subjects whose parents are dead while it decreases in household income. In line with previous findings, subjects who overestimate the effective tax burden are more likely to oppose inheritance taxation. Redistributive aspects are also found to matter: Believing that wealth transfers flow primarily to high-income households increases support for inheritance taxation. Contrary to previous studies, we find that that the support increases with age. Finally, policy preferences are found to depend on subjects' personality traits: Being conscientious makes subjects more likely to oppose inheritance taxation.

The remaining paper is organized as follows: Section 2 reviews the literature on intergenerational transfers within the family and the impact of taxation on these transfers. In section 3, we present the data and our main hypotheses. Section 4 presents the empirical results. In section 5, we discuss these results before section 6 provides concluding remarks.

2. Review of Literature

2.1 Intrafamilial transfers and the taxation of wealth transfers

Since their very beginning, human societies witnessed transfers of resources between generations. In modern times, a large share of these transfers in industrialized countries is administered by the state or public social security system. Nevertheless, a substantial part of intergenerational transfers still take place within the family. Some of these transfers are wealth transfers, especially gifts and bequests (e.g., DIW; 2004; Kopczuk and Lupton, 2007). Bequests from parents to their children and transfers to surviving spouses that eventually are transferred to children account the biggest share of all wealth transfers (e.g., Szydlik 2004; Rowlingson and McKay, 2005). In addition, time is often transferred, e.g. when grandparents look after their grandchildren or when relatives provide long-term care (e.g., Arrondel and Masson, 2001).

Many European countries tax the wealth transferred between generations by an inheritance tax (e.g., Büttner et al., 2004; Gift and Inheritance Tax Survey, 2014). This tax is levied on the wealth received by the heir and is paid by the heir – not by the bequeather. In the Anglo-Saxon countries like the US and Great Britain, the tax is levied on the bequest left behind by the bequeather (so-called estate tax). Both inheritance and estate tax are accompanied by a tax on gifts among the living. In most cases, transfers taking the form of parents paying for their children's education are not taxed and tax exemptions are granted for inter-vivos transfers of wealth below a certain threshold (per decade). In this section, we will not differentiate between inheritance and estate tax but speak generally of wealth transfer taxation. The main results reviewed here hold for both taxes. When we use the term wealth transfer tax(ation) in this paper, it refers to inheritance or estate tax plus the gift tax coming with it. In the empirical part of the paper, we will refer specifically to an inheritance tax because this is the form of wealth transfer taxation used in Germany where our survey is made (again accompanied by a gift tax).

A certain part of bequests observed in reality is likely to be accidental (e.g., Kopzuk, 2010). Given that the behavior of those who leave accidental bequests is not influenced by the wealth transfer taxes, we focus on intentional bequests. There is a broad consensus among scholars that a substantial share of bequests are intentional (e.g., Hurd, 1990; Hendricks, 2002). Two main motives behind intentional bequests are discussed in the literature. Some scholars argue that transfers from the older to the younger generation are motivated by altruistic motives, i.e. the wish to support their offspring (e.g., Barro, 1974; Coall and Hertwig, 2010).[2] Utility-maximizing parents chose the amount of transfer for which the marginal loss in utility from reducing own consumption is equal to the marginal utility gain from increasing the offsprings' consumption. The amount of transfer depends on their own life-time income, the life-time income of their children and the tax schedule applying to wealth transfers. This implies that an increase in wealth transfer taxation causes parents to increase the amount of wealth transferred to their children (e.g., Atkinson, 1971; Bernheim, 2002).

Furthermore, altruistically motivated transfers imply what became known as Ricardian equivalence: Any government policy that increases parents' consumption at the expense of children's consumption will be neutralized by parents changing the amount transferred to their offspring. This holds for policies that provide more public consumption or tax cuts for the parents funded through public deficits as well as to equivalent changes in public social security systems, e.g. changes in pension age. An additional implication arises if we take into account the fact that inter-vivos transfers reduce the overall tax burden for a given amount of transfers. The tax exemption for inter vivos transfers provides incentives for parents to transfer some of their wealth early. Particularly high incentives are set to transfer wealth by paying for their children's

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[2] Some models assume that parents may (also) be motivated by a joy-of-giving similar to Andreoni's warm glow. As the joy of giving cannot be experienced post mortem, we expect this motive to apply primarily to inter-vivos transfers. If present, the joy of giving will cause substantial inter-vivos transfers even in the absence of inheritance taxation (e.g., Gale and Slemrod, 2001).

education. In other words, the specific treatment of inter vivos transfers causes a sizeable timing effect if parents are altruistic (e.g. McGarry, 2000; Joulfaian, 2001).[3]

A number of authors argue that parents do not transfer wealth – inter vivos or in the form of bequests – for altruistic reasons. Instead, wealth transfers are seen as part of a system of exchange and direct reciprocity. Accordingly, monetary support from the older to the younger generation is given in exchange for transfers the parents themselves received from their children. These transfers comprise long-term care, attention and access to the grand-children (e.g., Bernheim et al., 1985; Geurts et al. 2012). In this case, bequests are the "final payment" in a reciprocal relationship between generations. According to EU Report 'Long -Term Care of the Elderly: provisions and providers in 33 European Countries', between 7 and 21 percent of all employed care givers reduced their working hours. Between 3 and 18 percent of the non-employed care givers report that they had to quit work (European Union, 2012). In their study on intergenerational transfer relations in 12 European countries, Leopold et al. (2014) find that children who expect future benefits in the form of parents' bequests and life insurance benefits are more likely to provide long-term care.[4]

The exchange relationship is sometimes formalized in a contract between parents and children like in the "Altenteil"-arrangements (Germany) or "Ausgedinge"-arrangements (Austria) made in the agricultural sector (e.g., Held, 1982; Gjerde , 1997; Wagener, 2002). In many cases, however, a formal contract does not exist. Nevertheless, an implicit exchange contract may be in place. The exchange model of intergenerational transfers has implications that differ considerably from the case where bequests are given by altruistic parents without expecting

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[3] Some authors argue that altruistic parents are in danger of being exploited by their children because the latter can attract more transfers if they overconsume or reduce their own labor supply or human capital investment (e.g., Bruce and Waldman, 1990; Kaplow, 2010).

[4] On the other hand, some 30 percent of grandparents in Southern Europe spent 40 hours or more per week looking after their grand-children (Igel, 2012).

anything in return: First and most fundamentally, the inheritance tax places a tax wedge between the price parents pay for attention and long-term care and the price children receive for their services. This tax wedge reduces the incentives for children to provide long-term care to their parents and/or increase the wealth parents need to transfer in exchange for long-term care and attention. With respect to inter-vivos transfers, these transfers are expected to be lower than in the case of altruistic motives. In particular, the incentives to invest in their children' education is lower because this increases their opportunity costs of providing parents with attention and long-term care.[5]

2.2 Macroeconomic aspects of wealth transfers taxation

There are numerous studies focusing on the macroeconomic consequences of wealth transfer taxation. A particular emphasis rests on the impact on efficiency (capital accumulation) and inequality in wealth and income. In their survey of OLG-models with intergenerational transfers, Cremer and Pestieau (2011) show that the impact of wealth transfer taxation on key variables depend on the motives driving these transfers. The optimal tax rate is zero if wealth transfers are motivated by pure altruism. In the case of other motives, the results are ambivalent – both positive and negative tax rates are possible (e.g., Gale and Slemrod, 2001; Kopzuk, 2010). Kopzuk (2010) and Kaplow (2010) argue that wealth concentration may have negative externalities through the concentration of political power. These extensions justify taxation on efficiency grounds. The theoretical papers generally assume that the same tax burden applies to inter vivos transfers and bequests and thus ignore the timing effect. Grossmann and Poutvaara (2009) develop an OLG-model with altruistic parents that accounts for the timing effect. Their

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[5] The exchange model of intergenerational transfers implies that well-off and highly qualified children are less likely to provide long-term care and attention (e.g., Blinkert and Klie, 2000; 2001).

model suggests that a small positive inheritance tax improves efficiency by enhancing the incentives to invest in their children' human capital.

Next to efficiency aspects, the wealth transfer tax is likely to have an impact on the distribution of income and wealth. Inequality in wealth distribution partly stems from unequal inheritances (HFCS,2010). This impact can be reduced by taxing wealth transfers (e.g., Atkinson 1980). Using an OLG-model with heterogeneous households, Bossmann et al. (2007) show that – by increasing incentives to save – wealth transfer taxation can reduce the inequality in the distribution of wealth (see also Gale and Slemrod, 2001). On the other hand, Kopczuk (2003) points out that the inheritance tax provides the opportunity to reduce income taxes. This creates an insurance effect that is especially beneficial for very wealthy individuals. Piketty and Saez (2013) study the efficiency-equity trade-off using an OLG approach with a social welfare-function that gives higher weights to the lower end of the income and wealth distribution. They show that – under reasonable assumptions regarding parameter values – the gains from a reduction in labor income taxations outweigh the losses from an increased inheritance taxation. However, they do not consider the timing effect. Vandevelde (1997) argues that the timing effect may increase inequality: If the timing effect leads well-off parents to invest more in their children's education, the resulting inequality in the distribution of human capital is likely to increase inequality.[6]

The lessons from the literature review for our study of citizens' policy preferences can be summarized as follows: From a macroeconomic perspective, citizens' policy preferences may be influenced by whether or not they expect wealth transfer taxation to have a timing effect and by the expected distributional effect. Regarding intrafamilial relations, the literature provides

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[6] Bracewell-Milnes (1997) provides another argument why the distributional consequences of inheritance taxation may be negative: As most tax systems are progressive, the impact on the incentives to save differ across income classes. Consumption becomes cheaper especially for the rich. While the inequality in wealth may be reduced, the inequality in consumption increases.

arguments supporting the notion that subjects' policy preferences regarding the taxation of wealth transfers depend on the motive they consider to be the dominant driver of these transfers. If the exchange motive dominates wealth transfers, they expect taxation to interfere more heavily with the system of intergenerational exchange within families. The effects are less far-reaching if wealth transfers are motivated by altruistic motives.

3. Data and Hypotheses

3.1 Data: The GESIS survey

In this paper, we want to learn more about the factors that drive citizens' policy preferences regarding wealth transfer taxation. A special emphasis rests on the role of these wealth transfers in the system of intrafamilial exchange between generations. We used data from a representative survey among German citizens conducted in 2014 and 2015. In Germany, private wealth transfers are taxed by an inheritance tax. The German inheritance tax is a directly progressive with tax exemptions and tax rates depending on the degree of kinship between bequeather and recipient. The closer the relationship, the lower the tax rate and the higher the exemption. The inheritance tax is accompanied by a gift tax that applies the same schedule but allows substantial tax-free transfers among close relatives.

Our upcoming analysis is based on the answers of more than 1.000 individuals between the age of 19 and 71 living in Germany surveyed by Leibniz Institute for Social Sciences in Mannheim, Germany (GESIS survey). Subjects go through numerous waves of questions on a wide range of different topics. GESIS invited scientists to submit blocks of questions and selected some of the blocks that successfully passed a review process. We submitted a block of questions focusing especially on the topic of intergenerational transfers and inheritance taxation. These questions were used in two survey waves in 2014 and 2015. We make use of the answers to these questions in addressing our main research question. In addition, we use the

rich pool of additional information provided by the survey. When describing the data in the upcoming sections, we will refer to all questions that we submitted to GESIS as our questions. All other questions are attributed to GESIS without differentiating between questions created by the GESIS team and questions submitted by other scientists. Full descriptive statistics are provided in the appendix A.

3.2 Endogenous variable

In the survey, we do not ask for the evaluation of the current German tax schedule. Instead, we ask subjects for their acceptance of taxing inherited wealth in general:[7]

> "Many countries, among them Germany, levy taxes on inherited wealth. …. What do you think? Should inherited wealth that exceeds a certain amount generally be taxed, or should it not be taxed?"

The aim of our analysis is to identify factors that make some people accept inheritance taxation and others oppose it.

3.3 Exogenous variables and hypotheses

a) subjects' view on the relevance of the exchange motive

The literature reviewed in section 2 suggests that the answer to the tax acceptance question depends on whether or not subjects view bequests to be part of an intergenerational exchange relationship. This leads to our first hypothesis.

H1 (exchange motive and tax acceptance):

Subjects who regard bequests to be the last transfer in a system of exchange between generations are more likely to oppose inheritance taxation.

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[7] The question was first used in the Postbank Inheritance Survey (Postbank, 2012).

The expected impact of inheritance taxation on intrafamilial transfers provides the major argument behind this hypothesis: The tax wedge from the inheritance tax is likely to reduce the level of long-term care provided by family members if bequests are seen as part of a reciprocal exchange between generations. This runs against the widespread preference among elderly people to receive long-term care from family members (e.g., Tompson et al., 2013; Adam and Mühling, 2014). A comparable reduction of intrafamilial caregiving is not expected when bequests are motivated by altruism. In addition, exchange-believing subjects may expect the positive timing effects of inheritance taxation to be smaller than subjects who view altruistic motives as dominant.

In the survey, we include the following vignette to capture the degree to which subjects view bequests as part of an exchange relationship between generations (for the method of vignettes, see e.g., Rossi and Berk, 1985; Konow, 2009):

"The following questions deal with inheritance: Consider a couple with two grown-up daughters (Andrea and Beate). The couple has assets of 100.000 € and would like to settle the distribution of these assets between their daughters (in the form of inheritance). The daughters are equal with respect to marital status, number of children, income and health. The relationship between the couple and their daughters is good. Until recently, Andrea helped her parents to provide long-term care to her grandmother. For this reason, she only worked part time for three years and waived parts of her wage whereas her parents continued to work as before. Her loss of wage amounts to 40.000 €."

Subjects are asked to answer two questions: 1) "How should the couple divide the 100.000 € among their daughters? Which distribution do you personally regard as fair?" 2) "In reality, many couples are confronted with a situation similar to the one described above. What do you think? How do couples in reality typically divide their money?"

Subjects who state an unequal distribution of funds in favor of Andrea accept the exchange-model of intergenerational transfers as fair. The variable FAIR_CARE_EXCHANGE depicts the degree to which respondents consider it fair to compensate Andrea for her losses in income:

$$FAIR\_CARE\_EXCHANGE = \frac{proposed\ transfer\ to\ Andrea\ -\ 50.000}{20.000}$$

It is zero for all subjects proposing an equal division of the 100.000 €and positive for all subjects who propose some compensation. FAIR_CARE_EXCHANGE takes on the value 1 for those who suggest full compensation.

Subjects' answer to question 2 informs us about their expectations regarding the general acceptance of the exchange model in Germany. Subjects who state that the typical couple divides its money equally believe that the exchange model is not generally accepted. Subjects who expect an unequal distribution believe that the exchange model is generally accepted. The EXP_CARE_EXCHANGE is calculated in the same way as FAIR_CARE_EXCHANGE.

It is important to note that the two variables capture distinctly different aspects of subjects' view on the role of bequests. FAIR_CARE_EXCHANGE captures the degree to which subjects consider it fair that long-term care provided by family members is "paid for" by unequal inheritances. EXP_CARE_EXCHANGE captures the degree to which subjects expect that the average family in Germany does actually pay for it in the end.

[insert Figure 1 about here]

Figure 1 presents the histogram of the two variables. While a substantial share of respondents considered it fair to pay for the long-term care provided (at least partially) and propose a distribution favoring Andrea, only a small fraction expect the typical household in Germany to compensate for long-term care received. The correlation EXP_CARE_EXCHANGE

and FAIR_CARE_EXCHANGE is negligible (R = 0.0022) – suggesting that subjects clearly differentiate between what they consider fair and what they expect their fellow-citizens to do.[8] Hypothesis H1 predicts a negative sign for FAIR_CARE_EXCHANGE and EXP_CARE_EX-CHANGE.

b) monetary self interest

The existing literature shows that citizens are more likely to oppose taxes if they expect these to burden them heavily. This brings us to our second hypothesis:

H2 (self-interest and tax acceptance):

Subjects expecting to receive a significant wealth transfers are less likely to support the inheritance tax.

To capture this monetary self-interest, we introduce five variables. First, we ask subjects whether they expect to receive an inheritance in the near future. The dummy variable EX-PECT_INH is 1 for all subjects who do (0 else). The second variable is PARENTS_DEAD, taking on the value 1 for all subjects whose parents are dead already. These subjects are much less likely to be burdened by inheritance taxation. We expect a negative sign for EXPECT_INH and a positive one for PARENTS_DEAD. Third, we control for household income of subjects by calculating natural log of the equivalent household income HH_INCOME using the OECD-square-root-rule (OECD, 2008).[9] Subjects from high-income households are more likely to leave bequests to their offspring who then may have to pay inheritance tax. Given the high inter-generational correlation in income in Germany (e.g., Krause and Schäfer, 2005), they are also

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[8]   If there is a false-consensus effect (e.g., Bischoff and Egbert, 2013), it is negligible.

[9]   It is calculated using classified income data. We assumed that household's income equals the middle value of the range they reported the income to be in. The highest category [6.000 Euro or more] was excluded.

more likely to inherit wealth and pay inheritance tax in the future. Thus, we expect negative sign for HH_INCOME.

Brandt et al. (2009) report a strong correlation between the intensity of intergenerational exchange and physical distance between the home of parents and children. The shorter the distance, the easier it is to provide time and attention. Furthermore, there are many ways for greater families living in one house to transfer wealth from parents to children without having to pay inheritance taxes. For instance, parents can fill their children's refrigerator, share their car with them or pay an asymmetrically high share of housing costs. These transfers become increasingly difficult as the distance between parents and children increases. We asked subjects for the distance between their own home and their parents' home. The dummy variable PARENTS_SAME_HOUSE takes on value 1 if subjects' parents live in the same household or in the same house. We expect subjects whose parents live in the same house to be less concerned about a possible inheritance tax burden because many wealth transfers are likely to take part inter vivos and remain unnoticed by the tax authorities. Thus, we expect a positive sign for PARENTS_SAME_HOUSE. Brandt et al. (2009) furthermore argue that parents living far away tend to transfer money to their children, because it is very costly to provide attention and time (e.g. in the form of childcare). Thus, living far away from one's parents increases the probability of having to pay inheritance taxes. The variable PARENTS_DISTANCE_30MINPLUS takes on the value 1 if the distance between subjects and their parents is 30 driving minutes or more (0 else). We expect a negative sign for PARENTS_DISTANCE_30MINPLUS.

c) the role of women in intergenerational transfers

The empirical literature on citizens' policy preferences clearly shows that women are more supportive of policy interventions that reduce inequality (e.g., Corneo and Grüner, 2002; Bischoff et al., 2013). When it comes to inheritance taxation, however, sex-specific differences

in redistributional preferences are of minor importance. A number other differences are likely to be much more important: Women are more likely to inherit wealth from their spouse and thus finally decide about its distribution between their offspring (e.g., Postbank, 2011). In addition, they deliver the largest part of childcare (to their own children and grand-children) and long-term care (e.g., Haberkern and Szydlik 2008; European Union, 2012; Adam and Mühling; 2014) but they are also more likely to be in need of long-term care when they are old. In sum, women are at the heart of intergenerational exchange relations. As a consequence, women suffer more heavily from the tax wedge and the other micro-level negative consequences of inheritance taxation. This suggests that self-interest makes women more critical of inheritance taxation. In addition, however, there may be other differences, e.g. a stricter preference for in-family solutions for long-term care and childcare than exists among men. In any case, we arrive at the following hypothesis:

H3 (women and tax acceptance):

Women are less likely than men to accept the taxation of inherited wealth.

We account for subjects' sex by introducing a FEMALE-dummy (1 for female respondents, 0 for males). A negative sign is expected. It is important to note that men and women do not differ in their answers to our vignette-related questions. In particular, women and men are equally likely to consider a higher transfer to Andrea fair.[10] In other words, we do not observe a self-serving bias to push women into accepting the exchange model of intergenerational relations as fair just because they are more heavily involved in intrafamilial exchange.

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[10] The correlation between FEMALE and FAIR_CARE_EXCHANGE and EXP_CARE_EXCHANGE is negligible (-0.03 and 0.01 respectively).

d) inequality aversion

There is overwhelming evidence that subjects' policy preferences are strongly shaped by fairness norms and a general inequality aversion (e.g., Beckert, 2013; Bischoff et al., 2013). Our corresponding hypothesis reads:

H4 (inequality aversion and tax acceptance):

Subjects who believe that inherited wealth concentrates in high-income households are more likely to accept inheritance taxation in general.

We ask subjects whether inheritances a) concentrate in high-income households, b) distributes equally across income classes or c) concentrate in low-income classes. Based on the answers, we construct a dummy variable (INH_CONCENTRATE) taking the value 1 for subjects who chose option a) (0 for others). We expect a positive sign for INH_CONCENTRATE.

e) personal involvement in long-term care

Throughout this paper, we repeatedly argue that inheritances are just one element in a system of intergenerational transfers between family members. Giving long-term care has become the most important form of transfer in the last decade - the number of cases and the duration of needing long-term care has increased dramatically (e.g., European Union, 2012; Adam and Mühling, 2014). It is likely that the degree to which people think about long-term care when thinking about inheritance taxation depends on their personal exposure to the issue of long-term care. To account for this, we ask subjects for their personal experience regarding long-term care. The variable CARE_IN_FAMILY takes on the value 1 for all subjects who reported that a member of their greater family received long-term care in the last 5 years (0 else). The variable GAVE_CARE_PERS is 1 for all subjects who stated that they were involved in providing long-term care to a family member for a period of three months or longer (0 else). This includes subjects who only assisted occasionally while the main care-giving was in the hands of others

(including commercial providers). The variable is 0 for subjects who never provided long-term care.

f) inheritance-related beliefs and general political attitudes

Arrondel and Masson (2001) argue that the pattern of intergenerational transfers observed in many countries emerges from a system of indirect reciprocity. Accordingly, a certain generation of old people transfers wealth and time to the younger generation because they received the same support when they were young. Similarly, the young provide the old with attention and long-term care because they observed their parents to do the same when the latter were young. Arrondel and Masson (2001) argue that having observed intra-familial transfers among preceding generations creates a social norm that is passed on together with the wealth, attention etc. They call this the "demonstration effect" (see also Brandt et al., 2009). We expect that subjects who adhere to the social norm to keep up the system of indirect reciprocity are more likely to oppose inheritance taxation. They do so for similar reasons as those who regard bequests as a part of an intergenerational system of directly reciprocal exchange between consecutive generations.

We capture the existence of a demonstration effects and the corresponding social norm in a question on inter-vivos transfers that parents give to their children when the latter found their own family. The question confronts subjects with two statements and asks them to tick the one that more closely represents their own view. One statement says that people who receive start-up support from their parents are morally obliged to support their own children in the same way. The second statement says that every generation has to decide for itself whether or not to give their children start-up support. We construct a dummy variable IND_RECIPROCITY that takes on the value 1 for subjects who tick the first statement (0 else). It captures the degree to which subjects generally accept that transfers from preceding generations create a moral obligation to behave accordingly. A negative sign is expected.

Slemrod (2006) and Sides (2011) show that the acceptance of inheritance taxation is lower among subjects who overestimate the share of subjects who have to pay this tax. We use a question on the expected tax liability to differentiate between subjects with a biased perception of the effective tax burden from inheritance tax and subjects with a realistic perception. We ask subjects to state the tax liability of a child inheriting a bank deposit with 100.000 € We construct a dummy variable TAX_OVEREST that takes on the value 1 for those who overestimate the tax burden (0 else). We expect to replicate the result of the previous studies and thus expect a negative sign for the coefficient estimator.

Given the theoretical importance of Ricardian equivalence, we ask subjects whether they believe that parents in Germany neutralize the intergenerational consequences of government policies by adjusting savings. Those who believe that a large part of parents in Germany behave this way are classified as Ricardians (RICARDO = 1, 0 for others). We have no clear prediction regarding the sign of the coefficient estimator of RICARDO.

We also ask subjects what they regard as the most important motive for parents to give inter-vivos transfers to their children: 1) to express their trust in their children; 2) to save inheritance taxes, 3) to give a start-up support to their children. By ticking option 2, subjects express their belief that the inheritance tax has a timing effect (see section 2). We construct a dummy variable EXPECT_TIMING to capture this belief. It is 1 for subjects who ticked option 2 (0 else). Given that the timing effect is generally regarded as a positive aspect of inheritance taxation, we expect a positive sign for EXPECT_TIMING.

The typical heir in Germany is 40 years or older (e.g., Braun, 2011). We ask subjects whether they agree with the statement "The major decisions in life are made by the time heirs receive their inheritance. Thus, receiving an inheritance does not change the heirs' life in substance." We construct a dummy (INH_LIFE_UNAFFECTED) that takes on the value 1 for those who agree with the statement (0 else). We expect a positive sign.

As of August 2013, local governments in Germany have to provide childcare facilities for all children between the age of 1 to 6 (e.g., Leitner 2013; Adam and Mühling, 2014). Some citizens support this expansion of public childcare while others regard it an undue government intrusion to the sphere of the family. We ask subjects for their opinion on this issue. We constructed a dummy-variable CHILDCARE_INTRUSION that takes on the value 1 for subjects voicing the critical view (0 else). This variable informs us about subjects' general attitude regarding the optimal division of labor between family and government. Subjects who are critical about public childcare facilities are expected to favor a more active role of the family in general. If they do, they are also more likely to regard inheritance taxation as an undue intrusion into family matters (e.g., Beckert, 2007). Thus, we expect a negative sign for CHILDCARE_IN-TRUSION.

The survey contains a question that allows us to assess issues of intergenerational income distribution. Subjects are asked whether they expect the young generation to lead a better or a worse life than their parents. We construct a variable LIFE_YOUNG_WORSE that takes on 1 for subjects with a pessimistic view on the young generation's perspectives. We expect subjects entertaining this expectation to be more critical about inheritance taxation and thus expect a negative sign for LIFE_YOUNG_WORSE.

Finally, we control for citizens' trust in the (federal) government. The lower the trust, the more reluctant citizens are to support any kind of tax. The variable GOV_TRUST is 1 for those subjects who have much or very much trust in the local government (0 else). We expect a positive sign for GOV_TRUST.

g) personality traits

Recently, political scientists have started to analyze the impact of personality traits on political attitudes. The studies show that subjects' personality traits shape their self-placement

on ideological scales (leftwing versus rightwing or conservative versus liberal) as well as their voting behavior (e.g., Caprara et al., 2006; Gerber et al., 2010). While the theoretical underpinning for these findings is still ad hoc and needs to be investigated further, certain results are found to be quite stable (e.g., Gerber et al., 2011). For instance, conscientiousness is generally associated with more conservative policy preferences and agreeable persons are more reluctant to favor policies that violate social norms (e.g. Gerber et al., 2011). In addition, subjects scoring low in the dimension of neuroticism are likely to be less concerned about the future and thus are less likely to support redistributive policies. The GESIS survey uses the Big-Five-Inventory 10 proposed by Rammstedt et al. (2012) to characterize subjects' personality in the dimensions neuroticism, openness to experience, agreeableness, conscientiousness, extraversion on a 5-point Likert-like scale. Two questions are devoted to each personality trait and subjects' score is combined to an ordinal measure capturing the degree to which a certain trait is present within the subject. Following the standard procedure in the political psychology literature, we use the ordinal measure as exogenous variable (e.g., Müller and Schwieren, 2012). The existing evidence suggests that the variables CONSC_10 and NEUROT_10 reduce a support of inheritance taxation while we have no predictions regarding OPEN_10, AGREE_10 and EXTRA_10.

h) additional variables

The findings of Hammar et al. (2008) and Prabhakar (2012) suggest that acceptance for inheritance taxation decreases with age. Age defines the expected proximity to death and increases the probability of requiring long-term care. In addition, age informs us about the stage of life a person is in. Depending on this stage of life, subjects are likely to have distinctly different perspectives on the topic of bequest and inheritance: The old cannot expect any inheritance from their parents because these have already passed away. Instead, they are only in the position of bequeathers. The young are very far from their own expected death. In most cases, they cannot expect large inheritances from the old because private wealth transfers generally

go from one generation to the directly following one (e.g., Szydlik and Schupp, 2004; Wolff and Gittleman, 2014). On the other hand, they can expect huge transfers if capital accumulation continues at the pace of recent times. The in-betweens can expect to receive wealth transfers from their parents – provided these have accumulated wealth. But they are also likely to be confronted with the question whether or not to provide long-term care. Finally, in-betweens who have children are potential bequeathers in the future. In the upcoming regressions, we use respondents' age as exogenous variable directly. In addition, we classify individuals as "old" (born before 1955) and "in-betweens" (born between 1956 and 1975). The dummy variables OLD_GENERATION and MIDDLE_GENERATION capture these categories. We expect negative coefficients for all three variables.

The variable NO_CHILDREN is introduced to account for the notion that subjects who have own children are less likely to support inheritance taxation. The variable takes on the value 1 for all subjects who do not have children (0 else). We predict a positive sign. We generate a dummy MARRIED that takes on the value 1 for the subjects who are married (or in civil union) and currently live together with their spouse (0 else). We construct a dummy HIGH_EDU that takes on the value 1 for subjects whose school education qualifies them to enter higher education (0 else). We also control for the fact that some citizens were born outside of Germany. The corresponding dummy BORN_OUTSIDE_GER is 1 for those born outside Germany (0 else). In addition, we ask subjects for the quality of their family ties. The dummy variable FAMILY_TIES_GOOD is 1 if subjects state these ties to be good (0 else). We have no clear predictions regarding the signs of these variables.

We ask subjects whether they have received an inheritance in the recent past. The dummy RECEIVED_INH takes on the value 1 if the answer is affirmative (0 else). Finally, we asked subjects whether they or their parents own a house that has been in the hand of their family in earlier generations. The corresponding dummy variable HOUSE_FAMILY takes on

the value 1 for all those who own such a house (0 else). We expect these subjects to be more critical about inheritance taxation because they are likely to feel morally obliged to pass it on to the next generation.

4. Empirical analysis

The aim of our analysis is to identify the factors shaping citizens' policy preferences regarding inheritance taxation: What make some people accept inheritance taxation and others reject it? Based on subjects' answers to the tax acceptance question (see section 3.2), we create a binary variable PRO_TAX that takes on the value 1 for subjects who consider inheritance taxation to be generally fair (0 else). Some 40 percent of all respondents accept inheritance taxation. We use a Probit-model to estimate the impact of the exogenous variables described above (see Table 1).

[table 1 about here]

In our baseline model in column 1, we include all exogenous variables described in section 3.3 with generational dummies OLD_GENERATION and MIDDLE_GENERATION but exclude AGE to avoid collinearity. The performance of our vignette-related variables is not in line with the predictions. FAIR_CARE_EXCHANGE is insignificant and EXP_CARE_EXCHANGE is significant but with a positive sign instead of the predicted negative one. Among the variables capturing subjects' material self-interest, PARENTS_DEAD, PARENTS_SAME_HOUSE and HH_INCOME are significant – all with the predicted sign. Subjects whose parents live in the same households and subjects whose parents are dead are more likely to support inheritance taxation while the support for inheritance taxation decreases with household income. As predicted in section 3.3, female respondents are less likely to support inheritance taxation. The corresponding FEMALE-dummy produces a significantly negative sign. Overestimating the tax

burden of small inheritances reduces the support for inheritance taxation while trust in the government increases support (see TAX_OVEREST resp. GOV_TRUST). The significantly positive sign of INH_CONCENTRATE is in line with our prediction (H4): Subjects who expect the inheritances to concentrate in high-income families are more likely to accept inheritance taxation in general. Among the other inheritance-related beliefs, only EXPECT_TIMING is significant (with a negative sign). INH_LIFE_UNAFFECTED, IND_RECIPROCITY, RICARDO and CHILDCARE_INTRUSION are insignificant. We find both generational dummies to be positive and highly significant. A test reveals that the coefficient for OLD_GENERATION is significantly larger than the one for MIDDLE_GENERATION. Thus, support for inheritance taxation increases with age. Subjects with high-school education and subjects who are married are more supportive of inheritance taxation. As hypothesized, subjects with a high score on the conscientiousness-scale are less likely to accept inheritance taxation. A weakly significant and positive coefficient is reported for NO_CHILDREN and NEUROTICISM. HOUSE_FAMILY is weakly significant and negative. All other variables are insignificant.

In model 2, we replace the variables OLD_GENERATION and MIDDLE GENERATION by the AGE. We find it to be positive and highly significant. PARENTS_DEAD and HOUSE_FAMILY become insignificant, NO_CHILDREN and NEUROTICISM become significant and positive at the 5 percent level and MARRIED drops to 10 percent level of significance. The performance of the other exogenous variables remains unchanged.

Looking at the numerous biographical variables, one might be concerned that there are collinearity problems even if the direct correlation between the biographical variables is limited.[11] In particular, the variables NO_CHILDREN, MARRIED, PARENTS_DEAD, PARENTS_SAME_HOUSE and PARENTS_DISTANCE_30MINPLUS jointly explain AGE and

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[11] The correlation matrix is provided in the supplementary material.

our generational dummies quite well. To control for this issue, we run two additional models in which we exclude all biographical variables not directly referring to age (model 3) or all age variables (model 4). In both models, HH_INCOME drops to the 10 percent level of significance. In model 4, the variable EXPECT_TIMING, NEUROTICISM and CONSCIENTIOUSNESS become insignificant while HOUSE_DYNASTY and GOV_TRUST become significant at the 5 percent level. Apart from that, the performance of all variables included is qualitatively identical to their performance in the baseline model.

In model 5, we introduced two additional variables. The dummy variable STARTUP_RECEIVED takes on the value 1 for subjects who received a startup support by their parents or expect such a support when they found a family (0 else). It captures the extent to which subjects are personally exposed to the demonstration effect. We also introduce the interaction of STARTUP_RECEIVED and IND_RECIPROCITY because we expect the resistance against inheritance taxation to be particularly strong among subjects who received a startup-support <u>and</u> accept the social norm of indirect reciprocity. We expect a negative sign for both variables. However, neither of them is found to be significant. The variable PARENTS_SAME_HOUSE and HOUSE_FAMILY become insignificant, INH_LIFE_UNAFFECTED turns out to be weakly significant. The performance of all other variables is qualitatively the same as in the baseline model.

In models 6, 7 and 8 we introduce the interaction of the variable FAIR_CARE_EXCHANGE with GAVE_CARE_PERS, CARE_IN_FAMILY and FEMALE respectively. The rationale behind these interaction terms is the following: Hypothesis H1 predicts that subjects who consider it fair that long-term care is paid for through higher inheritances are more likely to oppose inheritance taxation. While the sign of FAIR_CARE_EXCHANGE is generally in line with this prediction, the coefficient estimator is far from significant. Possibly, the underly-

ing fairness preference only drives policy preferences among subjects who have been personally involved in giving care and thus consider it fair to be personally remunerated. In this case, the interaction FAIR_CARE_CHANGE_X_GAVE_CARE_PERS is expected to yield a negative coefficient estimator (model 6). A similar though more indirect course of argumentation suggest that it is worthwhile to test the interaction terms with CARE_IN_FAMILY and FEMALE (model 7 and 8 respectively). However, none of the interaction terms turn out to be insignificant. The performance of the other variables remain largely identical to their performance in the baseline model. We run a number of additional models in which we replace some indicators used in table 1 by alternative indicators capturing similar theoretical concepts. In addition, we introduce a number of additional control variables. The results of these additional regressions are qualitatively identical to the ones reported in this section (see appendix B).

Looking at the marginal effect reveals that a number of variables have a sizeable influence on the probability that a certain individual regards inheritance taxation as acceptable in general. PARENTS_SAME_HOUSE reveals the largest marginal effect of almost +14 percentage points, followed by INH_CONCENTRATE and HIGH_EDU with almost +12 percentage points. PARENTS_DEAD and EXP_CARE_EXCHANGE increase the probability of supporting inheritance taxation by 9 to 11 percentage points while a negative marginal effect of similar size is reported for FEMALE. An income in equivalent household income of 500 €reduces the probability of supporting inheritance taxation by 6 percentage points. Overestimating the tax burden for small inheritances reduces the probability by 6 percentage points. Finally, the marginal effect of AGE in model (2) is +0.92 percentage points per year.

5. Discussion

In this paper, we present an empirical analysis of the driving factors of citizens' general acceptance of inheritance taxation. Some of the results are well in line with the theoretical predictions while others are not. We find strong support for our hypothesis H2 (monetary self-

interest): Support for inheritance taxation is lower among subjects who (or whose family) are more likely to be burdened by inheritance taxes because their income is higher and support is higher among subjects who are less likely to be burdened by the tax because their parents are dead already. Similarly, support is higher for subjects whose parents live in the same house and thus have the possibility to transfer wealth without causing tax liabilities. The significantly positive impact of MARRIED also points in this direction because tax exemptions are higher and tax rates are lower if transfers involve members of the nuclear family.

We also find strong support for our hypothesis H3 that women oppose inheritance taxation more strongly than men. The FEMALE-dummy remains significant even when important components of material self-interest, various inheritance-related beliefs, distributive preferences and personal involvement in long-term care is controlled for. This hints that being at the heart of intrafamilial exchange relations makes women take a distinctly different position on the division of labor between government and family.

Our results are well in line with the literature showing that inequality aversion drives policy preferences (H4): Subjects who expect inheritances to concentrate in high-income households are more supportive of inheritance taxation. In line with theory and previous studies, our results show that support is higher among subjects who trust the government and lower among those who overestimate the tax burden of the current tax regime.

Some of our results are at odds with the existing literature. First, the strong and positive impact of age contradicts the result of previous studies (e.g., Hammar et al., 2008; Prabhakar, 2012). One might put forward a formal argument to rationalize this result: In the German inheritance tax, it is not the bequeather but the recipient who formally bears the tax burden. In addition, one might argue that wealth transfers are accumulating over generations so that the young generation is more likely to be burdened by the inheritance tax than the middle generation and the middle generation is more likely to be burdened than the old generation. These

explanations are, however, ad hoc. Further research is needed to understand the impact of age on policy preferences regarding inheritance taxation.

The variable EXPECT_TIMING is the second variable that yielded a result contradicting our hypothesis: We expected a positive sign because scholars generally view the timing effect of inheritance taxation to be an important side-effect (see section 2). However, EXPECT_TIMING is found to have a negative impact on subjects' acceptance of inheritance taxation. Possibly, this results from the fact that they see early inter-vivos transfers to be a reaction that is forced upon the parents against their will.

The most puzzling result is the performance of our vignette-related variables. Our central hypothesis (H1) states that subjects who view inheritances as the last payment in a relationship of intergeneration exchange are more likely to oppose inheritance taxation. The insignificance of FAIR_CARE_EXCHANGE does not support this hypothesis. Believing that it is fair to remunerate care-giving through higher inheritances does not make subjects more critical about inheritance taxation. This result holds even when FAIR_CARE_EXCHANGE is interacted with variable capturing subjects' personal involvement in care-giving. It is equally puzzling to see that the variable EXP_CARE_EXCHANGE is significant with a positive rather than the predicted negative sign: Subjects who expect parents to compensate care-giving heirs with higher inheritances are more likely to accept inheritance taxation as fair. One possible explanation for this result is the following: Subjects who expect the typical family in Germany to reward the care-giving child by a larger inheritance may argue that parents makes use of the possibility to offset some of the negative effects of inheritance taxation on their children's willingness to provide care. Thus, these subjects are less concerned about the tax wedge from inheritance taxation than are subjects who do not expect the typical family to make use of this possibility. However, this explanation is ad hoc and further research is needed to explore the role of citizens' view on intrafamilial transfers of wealth and time in more detail.

Beyond the task of explaining policy preferences, the answers to the vignettes themselves provide an additional subject of inquiry: What differentiates citizens who consider it fair to pay for long-term care via higher inheritances from those who do not? Why do so many subjects support an unequal distribution in favor of Andrea while at the same time so few of them expect the typical German family to actually give more to Andrea in the end?

From a methodological perspective, our study once again supports the value of using vignettes to elicit subjects' views on specific issues. In particular, they prove a suitable tool to elicit independent answers to the question of what subjects consider fair and what they expect their fellow-citizens to do. Especially from an economic perspective, this distinction is essential. Our result suggests that economists should make much more use of this instrument.

Finally, our study contributes to the increasing body of literature on the impact of personality traits on policy preferences. The performance of conscientiousness is in line with the previous literature. As suggested by previous studies on general political attitudes and personality traits, conscientious subjects are less likely to accept inheritance taxation as fair. At the same time, neuroticism is – at least in some models – associated with more acceptance for inheritance taxation. While these results support the notion that personality matters for policy preferences, we cannot provide a straightforward explanation why this is the case. More research is needed on the theoretical underpinnings (e.g., Gerber et al., 2011). Economic experiments may be a suitable instrument to help progress in this field (e.g. Müller and Schwieren, 2012; Bischoff and Ihtiyar, 2015) as they enable scholars to control the environment more fully and thereby discriminate between possible chains of cause and effect that are difficult to disentangle using survey data.

6. Conclusion

Wealth transfers of unpreceded volume await the middle and young generation in the developed worlds in the next decades. Given the tight budget constraints that many countries face recently, it seems surprising that so many citizens prefer to leave these wealth transfers largely untaxed. To understand where the resistance may come from, we provide a first comprehensive study on the driving factors behind citizens' policy preferences regarding inheritance taxation. It is based on a survey among more than 1000 German citizens in 2014 and 2015. The survey question providing the endogenous variable asks subjects whether they find it acceptable that inheritances beyond a certain amount are generally taxed. In line with studies on other taxes, material self-interest, redistributive preferences and the perceived tax burden are found to influence citizens' acceptance for the taxation of inheritances. Unlike the few other studies on wealth transfer taxation, we find tax acceptance to increase rather than decrease in age. We argued that it is necessary to go beyond the scope of these standard factors and account for the fact that inheritances are just one element in a system of intergenerational transfers within families. In particular, it is necessary to account for the fact that many citizens assume a nexus between inheritances and long-term care provided to family members. These citizens regard inheritances as the final payment given in exchange for attention and long-term care received. When inheritances are part of an intergenerational exchange, inheritance taxes are harmful for intra-family transfers. They drive a tax wedge between the "price" the old generation has to pay for long-term care and the "price" the younger generations receive for providing long-term care. Thus, we hypothesized that subjects who regard inheritances as part of an exchange between generations are more critical of inheritance taxation. However, we find support for the opposite: Support for inheritance taxation is higher among subjects who expect the typical German family to give higher inheritances in exchange for long-term care received.

Whether or not this remuneration is regarded as fair does not influence subjects' policy preferences, nor do we find any evidence that the individual or family history in long-term care provision drives policy preferences.

Summing up, our results support our general approach: Viewing inherticances as part of a system of transfers between generations improves our understanding of citizens' policy preference on inheritance taxation. However, the interrelations we find are at odds with what economic theory predicts. Another results goes in the same direction: Support for inheritance taxation is lower among subjects who believe that inheritance tax makes parents transfer more wealth inter vivos than without inheritance tax while many economists view this timing effect as one of the positive side-effects of inheritance taxation. Thus, much remains to be done in future research.

In future research projects, it seems a promising endeavor to explore in more detail subjects views on the mechanisms underlying intergenerational exchange of time and wealth and the implications arising for wealth transfer taxation. From a methodological perspective, our paper has – once more – underlined the potential of vignettes as an instrument to elicit subjects' beliefs and preferences in surveys.

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APPENDIX A: Descriptive statistics

Variable	Mean	Std.Dev.	Min	Max
pro_tax	.4267516	.4946772	0	1
Female	.5070404	.4999833	0	1
born_outside_ger	.1477722	.3548974	0	1
high_edu	.3769475	.4846536	0	1
hh_income	7.327626	.4968071	5.991465	8.411833
neurot_10	5.743356	1.661611	2	10
extro_10	6.450444	1.765439	2	10
open_10	6.787245	1.731791	2	10
agree_10	6.234728	1.425699	2	10
consc_10	7.82441	1.449881	2	10
married	.5507189	.4974538	0	1
parents_dead	.2654545	.4416323	0	1
parents_same_house	.1309091	.3373447	0	1
parents_distance_30minplus	.2490909	.4325427	0	1
no_children	.2900619	.4538518	0	1
family_ties_good	.7549428	.4301771	0	1
middle_generation	.4271615	.4946986	0	1
old_generation	.2117384	.4085673	0	1
care_family_members	.3273495	.469308	0	1
gave_care_pers_strong	.2284574	.4198947	0	1
received_inh	.3391281	.4734767	0	1
expect_inh	.1186395	.3234072	0	1
house_family	.2525066	.4345076	0	1
startup_received	.3507605	.4772837	0	1
fair_care_exchange	.682104	.518929	-1.5	2.5
exp_care_exchange	.2019253	.3846262	-2	2.5
ind_reciprocity	.2251527	.4177408	0	1
ricardo	.3131472	.4638464	0	1
inh_life_unaffected	.821037	.3833781	0	1
inh_concentrate	.7366483	.4405192	0	1
expect_timing	.3352273	.4721369	0	1
childcare_intrusion	.1908549	.3930307	0	1
tax_overest	.5667015	.4956173	0	1
gov_trust	.1220874	.3274264	0	1
life_young_worse	.4833135	.4997544	0	1
care_in_family	.4061506	.4911784	0	1
gave_care_pers	.2849162	.4514346	0	1
paid_inh_tax	.0807703	.2725184	0	1
expect_pay_tax	.0573112	.2324674	0	1
vivos_transfers_express_trust	.1741477	.3792903	0	1
gov_reduce_ineq	.6677063	.4710922	0	1
leftwing	.1727207	.3780511	0	1
age	45.52525	14.66909	19	71

APPENDIX B: Additional models

Table B.1 reports a number of additional models in which we replace some indicators used in table 1 in section 4 by alternative indicators capturing similar theoretical concepts. In addition, we introduce a number of additional control variables. In model 1, we replaced the variables CARE_IN_FAMILY by CARE_FAMILY_MEMBERS and GAVE_CARE_PERS by GAVE_CARE_PERS_STRONG. The new variables capture a more strong personal involvement in long-term care than the original variables. The dummy variable CARE_FAMILY_MEMBERS is 1 for all subjects who had a case of long-term care in the family and whose family members were involved in providing long-term care (0 else). GAVE_CARE_PERS_STRONG is similar to GAVE_CARE_PERS but assigns the value 1 only to those cases where the personal involvement in giving care was substantial. Subjects who only assisted occasionally are assigned the value 0. Neither of the new variables is found to be significant. All other variables remain qualitatively identical in their performance compared to the baseline model in Table 1. In a next step, we test the interaction of the variable FAIR_CARE_EXCHANGE with GAVE_CARE_PERS_STRONG (model 2) and CARE_FAMILY_MEMBERS (model 3). Both interaction terms are found to be insignificant while the performance of all other variables remains qualitatively unchanged. In model 4, we replace the variable NO_CHILDREN by the NO_CHILDREN_NOT_YOUNG. It is 1 for all subjects older than 45 who do not have any children. The new variable itself is insignificant. The other variables perform like they do in the baseline model. In model 5, we replace EXPECT_INH by EXPECT_PAY_TAX. This dummy variable is 1 for all subjects who expect to pay inheritance tax in the near future. Furthermore, RECEIVED_INH is replaced by PAID_INH_TAX (1 for subjects who paid inheritance tax, 0 else). EXPECT_PAY_TAX is weakly significant and negative. The other results are qualitatively identical to those in the

baseline model. In model 6, we added two variables. The variable VIVOS_TRANSFERS_EX-PRESS_TRUST takes value of 1 for subjects that regard the expression of trust in their children as the most important motive for parents to give inter-vivos transfers to them (0 else). The second new variable GOV_REDUCE_INEQ is based on a survey question that asks subjects whether they regard it to be an obligation of the government to reduce income inequality. The dummy GOV_REDUCE_INEQ takes on the value 1 for subjects who do (0 else). A positive sign is expected. GOV_REDUCE_INEQ is weakly significant and positive while VI-VOS_TRANSFERS_EXPRESS_TRUST is insignificant. All other variables perform like they do in the previous models. In a last step, we add the variable LEFTWING that takes on the value of 1 for subjects who identify themselves as left-wing politically (0 else). The variable is found to be insignificant. All other variables remain qualitatively identical in their performance compared to the baseline model.

Table B.1: Additional regression models

VARIABLES	(1) Coeff.	(2) Coeff.	(3) Coeff.	(4) Coeff.	(5) Coeff.	(6) Coeff.	(7) Coeff.
female	-0.258***	-0.256***	-0.266***	-0.258***	-0.248***	-0.244***	-0.297***
	(0.0859)	(0.0860)	(0.0863)	(0.0858)	(0.0861)	(0.0861)	(0.0948)
born_outside_ger	-0.150	-0.149	-0.152	-0.155	-0.163	-0.145	-0.121
	(0.175)	(0.175)	(0.175)	(0.175)	(0.174)	(0.175)	(0.191)
high_edu	0.332***	0.332***	0.329***	0.348***	0.341***	0.357***	0.231**
	(0.0885)	(0.0885)	(0.0886)	(0.0889)	(0.0885)	(0.0900)	(0.0969)
hh_income	-0.203**	-0.207**	-0.200**	-0.193**	-0.200**	-0.188*	-0.178*
	(0.0954)	(0.0955)	(0.0955)	(0.0950)	(0.0952)	(0.0963)	(0.105)
neurot_10	0.0453*	0.0452*	0.0465*	0.0483*	0.0453*	0.0480*	0.0428
	(0.0252)	(0.0252)	(0.0252)	(0.0251)	(0.0252)	(0.0252)	(0.0278)
extro_10	0.00474	0.00511	0.00527	0.00686	0.00869	0.00881	0.00890
	(0.0236)	(0.0236)	(0.0236)	(0.0235)	(0.0235)	(0.0235)	(0.0257)
open_10	-0.00983	-0.00844	-0.00956	-0.00985	-0.00888	-0.0128	-0.0143
	(0.0238)	(0.0239)	(0.0238)	(0.0238)	(0.0239)	(0.0239)	(0.0267)
agree_10	-0.00546	-0.00586	-0.00424	-0.00460	-0.00305	-0.00559	-0.0141
	(0.0282)	(0.0282)	(0.0282)	(0.0282)	(0.0282)	(0.0282)	(0.0311)
consc_10	-0.0626**	-0.0641**	-0.0632**	-0.0653**	-0.0621**	-0.0639**	-0.0576*
	(0.0297)	(0.0297)	(0.0297)	(0.0296)	(0.0297)	(0.0297)	(0.0323)
married	0.193**	0.194**	0.195**	0.118	0.194**	0.194**	0.161
	(0.0940)	(0.0941)	(0.0941)	(0.0923)	(0.0941)	(0.0943)	(0.103)
parents_dead	0.257**	0.259**	0.256**	0.260**	0.268**	0.245**	0.276**
	(0.121)	(0.121)	(0.121)	(0.121)	(0.118)	(0.121)	(0.134)
parents_same_house	0.383***	0.386***	0.387***	0.420***	0.407***	0.368**	0.551***
	(0.145)	(0.145)	(0.145)	(0.146)	(0.146)	(0.146)	(0.159)
parents_distance_30minplus	0.0877	0.0912	0.0910	0.102	0.0943	0.0719	0.0859
	(0.107)	(0.107)	(0.107)	(0.106)	(0.106)	(0.107)	(0.119)
no_children	0.192*	0.191*	0.192*		0.193*	0.196*	0.203*
	(0.106)	(0.106)	(0.106)		(0.107)	(0.107)	(0.119)
family_ties_good	0.0446	0.0412	0.0486	0.0320	0.0350	0.0293	0.0724
	(0.0954)	(0.0955)	(0.0955)	(0.0953)	(0.0953)	(0.0960)	(0.105)
middle_generation	0.428***	0.428***	0.422***	0.362***	0.449***	0.432***	0.517***
	(0.112)	(0.113)	(0.113)	(0.125)	(0.112)	(0.113)	(0.125)
old_generation	0.754***	0.757***	0.750***	0.690***	0.798***	0.771***	0.834***
	(0.147)	(0.147)	(0.147)	(0.155)	(0.146)	(0.147)	(0.164)
care_family_members	0.104	0.103	0.215				
	(0.0854)	(0.0854)	(0.146)				
gave_care_pers_strong	0.0766	0.195	0.0771				
	(0.0996)	(0.163)	(0.0996)				
received_inh	0.0617	0.0612	0.0648	0.0601		0.0643	0.0274
	(0.0875)	(0.0875)	(0.0875)	(0.0879)		(0.0881)	(0.0969)
expect_inh	-0.0295	-0.0232	-0.0257	-0.0202		-0.00798	-0.113
	(0.114)	(0.114)	(0.114)	(0.114)		(0.114)	(0.130)
house_family	-0.164*	-0.167*	-0.169*	-0.153*	-0.136	-0.157*	-0.0837
	(0.0913)	(0.0914)	(0.0915)	(0.0914)	(0.0916)	(0.0914)	(0.0995)
fair_care_exchange	-0.0127	0.0305	0.0429	-0.000520	-0.0130	-0.0127	-0.0140
	(0.0797)	(0.0925)	(0.0994)	(0.0796)	(0.0799)	(0.0798)	(0.0880)

exp_care_exchange	0.318***	0.326***	0.321***	0.309***	0.322***	0.305***	0.272**
	(0.107)	(0.108)	(0.107)	(0.107)	(0.107)	(0.108)	(0.116)
fair_care_times_care_strong		-0.166					
		(0.180)					
ind_reciprocity	0.0310	0.0352	0.0341	0.0293	0.0408	0.0323	-0.0253
	(0.0961)	(0.0962)	(0.0962)	(0.0960)	(0.0962)	(0.0975)	(0.104)
ricardo	0.0731	0.0724	0.0719	0.0675	0.0673	0.0642	0.0943
	(0.0893)	(0.0893)	(0.0893)	(0.0891)	(0.0892)	(0.0893)	(0.0983)
inh_life_unaffected	0.171	0.172	0.169	0.162	0.176	0.184*	0.209*
	(0.111)	(0.111)	(0.111)	(0.110)	(0.110)	(0.111)	(0.125)
inh_concentrate	0.340***	0.341***	0.339***	0.330***	0.334***	0.322***	0.383***
	(0.0953)	(0.0954)	(0.0954)	(0.0951)	(0.0951)	(0.0955)	(0.104)
expect_timing	-0.161*	-0.161*	-0.163**	-0.151*	-0.155*	-0.134	-0.182**
	(0.0826)	(0.0826)	(0.0826)	(0.0822)	(0.0826)	(0.0872)	(0.0907)
childcare_intrusion	-0.116	-0.113	-0.115	-0.102	-0.110	-0.0951	-0.103
	(0.105)	(0.106)	(0.105)	(0.105)	(0.106)	(0.106)	(0.113)
tax_overest	-0.187**	-0.187**	-0.188**	-0.183**	-0.179**	-0.188**	-0.187**
	(0.0837)	(0.0837)	(0.0837)	(0.0834)	(0.0830)	(0.0838)	(0.0922)
gov_trust	0.208*	0.213*	0.209*	0.213*	0.213*	0.221*	0.147
	(0.112)	(0.113)	(0.113)	(0.113)	(0.113)	(0.113)	(0.123)
life_young_worse	0.0578	0.0593	0.0600	0.0542	0.0505	0.0378	0.0948
	(0.0804)	(0.0804)	(0.0804)	(0.0802)	(0.0802)	(0.0808)	(0.0880)
fair_care_times_care _family_members			-0.154				
			(0.165)				
no_children_not_young				-0.0524			
				(0.145)			
care_in_family				0.00320	0.0137	-0.00359	0.0477
				(0.0825)	(0.0824)	(0.0829)	(0.0907)
gave_care_pers				0.0385	0.0381	0.0298	0.0376
				(0.0923)	(0.0921)	(0.0926)	(0.102)
paid_inh_tax					-0.0109		
					(0.141)		
expect_pay_tax					-0.275*		
					(0.165)		
vivos_transfers_express_trust						0.0878	
						(0.118)	
gov_reduce_ineq						0.148*	
						(0.0870)	
leftwing							0.166
							(0.118)
Constant	0.635	0.631	0.567	0.738	0.597	0.440	0.359
	(0.812)	(0.812)	(0.815)	(0.812)	(0.814)	(0.826)	(0.913)
pseudo-R²	0.1067	0.1072	0.1072	0.1031	0.1066	0.1068	0.1164
χ²-Stat	169.17***	170.02***	170.04***	163.49***	169.02***	169.06***	155.37***
Observations	1,144	1,144	1,144	1,144	1,144	1,142	964

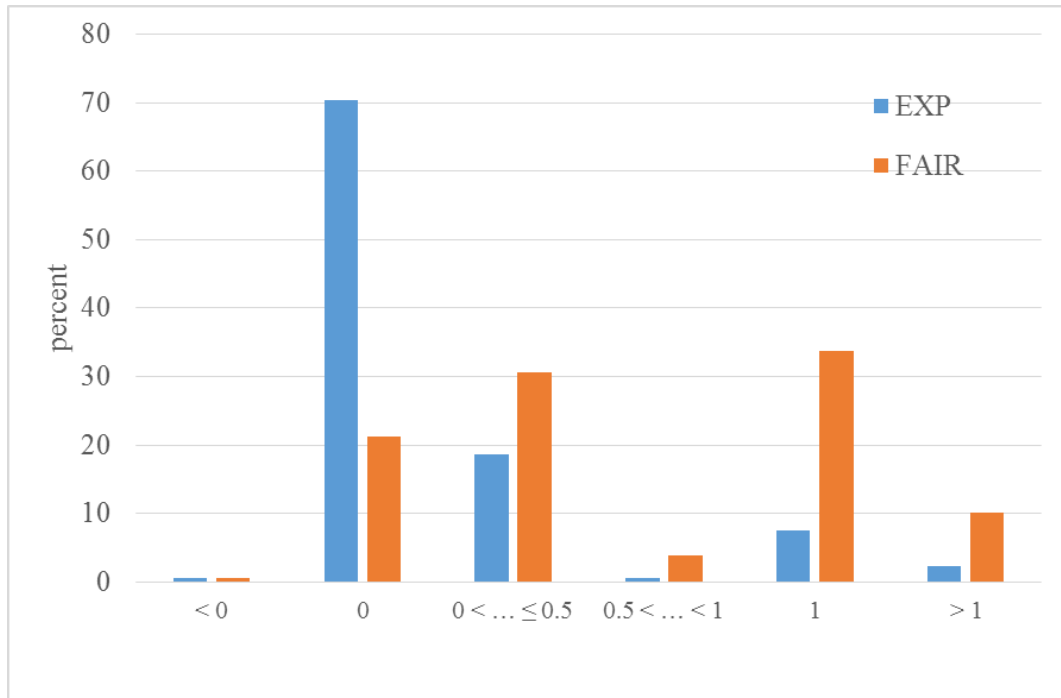Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 1: Histogram of FAIR_CARE_EXCHANGE and EXP_CARE_EXCHANGE

Table 1: Basic regression models

VARIABLES	(1) Coeff.	(1) ME	(2) Coeff.	(2) ME	(3) Coeff.	(3) ME	(4) Coeff.	(4) ME	(5) Coeff.	(5) ME	(6) Coeff.	(6) ME	(7) Coeff.	(7) ME	(8) Coeff.	(8) ME
female	-0.250***	-0.089***	-0.244***	-0.087***	-0.277***	-0.100***	-0.281***	-0.103***	-0.218**	-0.078**	-0.248***	-0.089***	-0.250***	-0.089***	-0.399***	-0.142***
	(0.0859)	(0.031)	(0.0862)	(0.031)	(0.0839)	(0.030)	(0.0850)	(0.031)	(0.0920)	(0.033)	(0.0860)	(0.031)	(0.0861)	(0.031)	(0.143)	(0.050)
born_outside_ger	-0.141	-0.050	-0.150	-0.053	-0.0847	-0.030	-0.166	-0.060	-0.271	-0.096	-0.136	-0.048	-0.141	-0.050	-0.138	-0.049
	(0.175)	(0.062)	(0.176)	(0.061)	(0.171)	(0.061)	(0.173)	(0.062)	(0.187)	(0.065)	(0.176)	(0.062)	(0.175)	(0.062)	(0.176)	(0.062)
high_edu	0.330***	0.116***	0.353***	0.124***	0.348***	0.124***	0.238***	0.086***	0.294***	0.104***	0.330***	0.116***	0.330***	0.117***	0.332***	0.117***
	(0.0885)	(0.307)	(0.0888)	(0.305)	(0.0860)	(0.030)	(0.0856)	(0.031)	(0.0943)	(0.033)	(0.0885)	(0.031)	(0.0885)	(0.031)	(0.0885)	(0.031)
hh_income	-0.204**	-0.072**	-0.218**	-0.077**	-0.173*	-0.062*	-0.175*	-0.063*	-0.220**	-0.078**	-0.207**	-0.073**	-0.204**	-0.072**	-0.198**	-0.070**
	(0.0954)	(0.034)	(0.0956)	(0.033)	(0.0920)	(0.033)	(0.0939)	(0.034)	(0.108)	(0.038)	(0.0955)	(0.034)	(0.0955)	(0.034)	(0.0955)	(0.034)
neurot_10	0.0464*	0.016*	0.0512**	0.018**	0.0471*	0.017*	0.0408	0.015	0.0503*	0.018*	0.0461*	0.016*	0.0464*	0.016*	0.0480*	0.017*
	(0.0252)	(0.009)	(0.0253)	(0.009)	(0.0248)	(0.009)	(0.0249)	(0.009)	(0.0275)	(0.010)	(0.0251)	(0.009)	(0.0252)	(0.009)	(0.0252)	(0.009)
extro_10	0.00791	0.003	0.0139	0.005	0.00654	0.002	-0.00333	-0.001	-0.00424	-0.002	0.00794	0.003	0.00786	0.003	0.00774	0.003
	(0.0235)	(0.008)	(0.0236)	(0.008)	(0.0230)	(0.008)	(0.0232)	(0.008)	(0.0259)	(0.009)	(0.0235)	(0.008)	(0.0235)	(0.008)	(0.0235)	(0.008)
open_10	-0.0102	-0.004	-0.0150	-0.005	-0.0121	-0.004	-0.00385	-0.001	-0.0233	-0.008	-0.00796	-0.003	-0.0102	-0.004	-0.0109	-0.004
	(0.0238)	(0.008)	(0.0239)	(0.008)	(0.0235)	(0.008)	(0.0236)	(0.009)	(0.0258)	(0.009)	(0.0239)	(0.008)	(0.0238)	(0.008)	(0.0238)	(0.008)
agree_10	-0.00337	-0.001	-0.00501	-0.002	-0.0121	-0.004	0.00356	0.001	0.00824	0.003	-0.00479	-0.002	-0.00342	-0.001	-0.00347	-0.001
	(0.0282)	(0.010)	(0.0283)	(0.010)	(0.0277)	(0.010)	(0.0279)	(0.010)	(0.0306)	(0.011)	(0.0282)	(0.010)	(0.0282)	(0.010)	(0.0282)	(0.010)
consc_10	-0.0637**	-0.023**	-0.0688**	-0.024**	-0.0692**	-0.025**	-0.0479	-0.017	-0.0511	-0.018	-0.0660**	-0.023**	-0.0637**	-0.023**	-0.0646**	-0.023**
	(0.0296)	(0.010)	(0.0297)	(0.010)	(0.0290)	(0.010)	(0.0292)	(0.011)	(0.0319)	(0.011)	(0.0297)	(0.010)	(0.0296)	(0.010)	(0.0297)	(0.010)
married	0.193**	0.069**	0.174*	0.062*			0.233**	0.084**	0.206**	0.073**	0.193**	0.069**	0.193**	0.069**	0.191**	0.068**
	(0.0940)	(0.033)	(0.0945)	(0.033)			(0.0928)	(0.033)	(0.0989)	(0.035)	(0.0941)	(0.033)	(0.0940)	(0.033)	(0.0942)	(0.033)
parents_dead	0.258**	0.093**	0.195	0.070			0.507***	0.185***	0.241*	0.087*	0.259**	0.093**	0.258**	0.093**	0.255**	0.092**
	(0.121)	(0.044)	(0.119)	(0.043)			(0.107)	(0.038)	(0.126)	(0.046)	(0.121)	(0.044)	(0.121)	(0.044)	(0.121)	(0.044)
parents_same _house	0.390***	0.136***	0.409***	0.142***			0.380***	0.136***	0.266	0.094	0.393***	0.137***	0.390***	0.136***	0.394***	0.138***
	(0.145)	(0.049)	(0.145)	(0.049)			(0.144)	(0.050)	(0.169)	(0.059)	(0.145)	(0.049)	(0.145)	(0.049)	(0.145)	(0.049)
parents_distance _30minplus	0.0779	0.028	0.0648	0.023			0.0774	0.028	0.0887	0.031	0.0842	0.030	0.0779	0.028	0.0797	0.028
	(0.106)	(0.037)	(0.107)	(0.037)			(0.105)	(0.038)	(0.117)	(0.041)	(0.107)	(0.037)	(0.106)	(0.037)	(0.107)	(0.037)
no_children	0.193*	0.068*	0.257**	0.089**			0.0560	0.020	0.114	0.040	0.192*	0.067*	0.193*	0.068*	0.200*	0.070*
	(0.107)	(0.037)	(0.109)	(0.037)			(0.101)	(0.037)	(0.119)	(0.042)	(0.107)	(0.037)	(0.107)	(0.037)	(0.107)	(0.037)
family_ties_good	0.0377	0.013	0.0371	0.013	0.0385	0.014	0.0379	0.014	0.0512	0.018	0.0343	0.012	0.0375	0.013	0.0432	0.015
	(0.0954)	(0.034)	(0.0955)	(0.034)	(0.0936)	(0.033)	(0.0944)	(0.034)	(0.104)	(0.037)	(0.0955)	(0.034)	(0.0955)	(0.034)	(0.0957)	(0.034)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
middle_generation	0.435***	0.149***			0.405***	0.141***			0.408***	0.141***	0.436***	0.149***	0.436***	0.149***	0.445***	0.152***
	(0.113)	(0.036)			(0.104)	(0.034)			(0.124)	(0.040)	(0.113)	(0.036)	(0.113)	(0.037)	(0.113)	(0.036)
old_generation	0.774***	0.274***			0.825***	0.293***			0.717***	0.257***	0.777***	0.274***	0.774***	0.274***	0.780***	0.275***
	(0.147)	(0.048)			(0.123)	(0.039)			(0.155)	(0.052)	(0.147)	(0.048)	(0.147)	(0.048)	(0.147)	(0.047)
care_in_family	0.00571	0.002	0.0135	0.005	-0.0158	-0.006	0.00287	0.001	0.00794	0.003	0.00448	0.002	0.00140	0.0005	0.0116	0.004
	(0.0826)	(0.029)	(0.0825)	(0.029)	(0.0809)	(0.029)	(0.0816)	(0.029)	(0.0887)	(0.032)	(0.0827)	(0.029)	(0.140)	(0.050)	(0.0828)	(0.029)
gave_care_pers	0.0309	0.011	0.0223	0.008	0.0551	0.020	0.0895	0.032	0.0302	0.011	0.195	0.069	0.0309	0.011	0.0310	0.011
	(0.0925)	(0.033)	(0.0927)	(0.033)	(0.0902)	(0.032)	(0.0910)	(0.033)	(0.0980)	(0.035)	(0.154)	(0.054)	(0.0925)	(0.033)	(0.0925)	(0.033)
received_inh	0.0641	0.023	0.0445	0.016	0.120	0.043	0.109	0.040	0.0385	0.014	0.0656	0.023	0.0642	0.023	0.0619	0.022
	(0.0878)	(0.031)	(0.0883)	(0.031)	(0.0844)	(0.031)	(0.0869)	(0.032)	(0.0932)	(0.033)	(0.0879)	(0.031)	(0.0878)	(0.031)	(0.0878)	(0.031)
expect_inh	-0.0135	-0.005	-0.0243	-0.009	-0.0505	-0.018	0.0353	0.013	0.0379	0.013	-0.00855	-0.003	-0.0137	-0.005	-0.0128	-0.005
	(0.114)	(0.040)	(0.115)	(0.040)	(0.111)	(0.040)	(0.113)	(0.041)	(0.124)	(0.044)	(0.114)	(0.040)	(0.114)	(0.040)	(0.114)	(0.040)
house_family	-0.155*	-0.055*	-0.136	-0.048	-0.157*	-0.056*	-0.190**	-0.069**	-0.111	-0.040	-0.161*	-0.057*	-0.155*	-0.055*	-0.155*	-0.055*
	(0.0913)	(0.032)	(0.0917)	(0.032)	(0.0893)	(0.032)	(0.0904)	(0.033)	(0.100)	(0.036)	(0.0915)	(0.032)	(0.0914)	(0.032)	(0.0914)	(0.032)
startup_received									-0.00564	-0.002						
									(0.103)	(0.037)						
ind_recip_times _startup									-0.327	-0.115						
									(0.208)	(0.071)						
fair_care_exchange	-0.0127	-0.005	-0.0133	-0.005	-0.0146	-0.005	-0.00836	-0.003	0.0135	0.005	0.0607	0.021	-0.0155	-0.005	-0.113	-0.040
	(0.0798)	(0.028)	(0.0798)	(0.028)	(0.0784)	(0.028)	(0.0791)	(0.029)	(0.0867)	(0.031)	(0.0970)	(0.034)	(0.108)	(0.038)	(0.111)	(0.039)
exp_care_exchange	0.315***	0.111***	0.311***	0.109***	0.291***	0.104***	0.303***	0.109***	0.242**	0.086**	0.324***	0.114***	0.314***	0.111***	0.309***	0.109***
	(0.107)	(0.038)	(0.108)	(0.037)	(0.106)	(0.037)	(0.106)	(0.038)	(0.116)	(0.041)	(0.108)	(0.038)	(0.107)	(0.038)	(0.107)	(0.038)
ind_reciprocity	0.0342	0.012	0.0336	0.012	0.0438	0.016	0.00873	0.003	0.171	0.061	0.0418	0.015	0.0341	0.012	0.0345	0.012
	(0.0960)	(0.034)	(0.0964)	(0.034)	(0.0948)	(0.034)	(0.0946)	(0.034)	(0.141)	(0.050)	(0.0962)	(0.034)	(0.0961)	(0.034)	(0.0961)	(0.034)
ricardo	0.0679	0.024	0.0660	0.023	0.0394	0.014	0.0727	0.026	0.0583	0.021	0.0662	0.023	0.0680	0.024	0.0673	0.024
	(0.0891)	(0.031)	(0.0896)	(0.031)	(0.0878)	(0.031)	(0.0883)	(0.032)	(0.0958)	(0.034)	(0.0892)	(0.031)	(0.0892)	(0.031)	(0.0892)	(0.031)
inh_life_unaffected	0.174	0.062	0.170	0.060	0.174	0.062	0.180	0.065	0.224*	0.079*	0.173	0.061	0.174	0.062	0.175	0.062
	(0.110)	(0.039)	(0.111)	(0.039)	(0.109)	(0.039)	(0.110)	(0.039)	(0.122)	(0.043)	(0.111)	(0.039)	(0.110)	(0.039)	(0.111)	(0.039)
inh_concentrate	0.332***	0.118***	0.351***	0.123***	0.313***	0.112***	0.329***	0.119***	0.339***	0.121***	0.335***	0.119***	0.332***	0.118***	0.335***	0.119***
	(0.0952)	(0.033)	(0.0956)	(0.033)	(0.0938)	(0.033)	(0.0943)	(0.034)	(0.102)	(0.036)	(0.0953)	(0.033)	(0.0952)	(0.033)	(0.0952)	(0.033)
expect_timing	-0.159*	-0.056*	-0.156*	-0.055*	-0.139*	-0.050*	-0.118	-0.043	-0.184**	-0.066**	-0.163**	-0.057**	-0.159*	-0.056*	-0.158*	-0.056*
	(0.0825)	(0.029)	(0.0824)	(0.029)	(0.0812)	(0.029)	(0.0813)	(0.029)	(0.0890)	(0.031)	(0.0826)	(0.029)	(0.0826)	(0.029)	(0.0826)	(0.029)

childcare_intrusion	-0.112	-0.040	-0.118	-0.042	-0.0802	-0.029	-0.124	-0.045	-0.0781	-0.028	-0.106	-0.037	-0.112	-0.040	-0.108	-0.038
	(0.105)	(0.037)	(0.106)	(0.037)	(0.104)	(0.037)	(0.104)	(0.037)	(0.113)	(0.040)	(0.106)	(0.037)	(0.105)	(0.037)	(0.105)	(0.037)
tax_overest	-0.180**	-0.064**	-0.157*	-0.056*	-0.182**	-0.066**	-0.225***	-0.082***	-0.194**	-0.070**	-0.180**	-0.064**	-0.180**	-0.064**	-0.176**	-0.063**
	(0.0835)	(0.030)	(0.0840)	(0.030)	(0.0821)	(0.030)	(0.0824)	(0.030)	(0.0892)	(0.032)	(0.0836)	(0.030)	(0.0835)	(0.030)	(0.0836)	(0.030)
gov_trust	0.212*	0.075*	0.215*	0.076*	0.190*	0.068*	0.224**	0.081**	0.170	0.061	0.216*	0.076*	0.212*	0.075*	0.205*	0.073*
	(0.112)	(0.040)	(0.113)	(0.039)	(0.112)	(0.040)	(0.112)	(0.040)	(0.119)	(0.042)	(0.113)	(0.040)	(0.112)	(0.040)	(0.113)	(0.040)
life_young_worse	0.0528	0.019	0.0406	0.014	0.0537	0.019	0.0805	0.029	0.0947	0.034	0.0533	0.019	0.0527	0.019	0.0431	0.015
	(0.0802)	(0.028)	(0.0807)	(0.028)	(0.0789)	(0.028)	(0.0793)	(0.029)	(0.0864)	(0.031)	(0.0803)	(0.028)	(0.0803)	(0.028)	(0.0806)	(0.029)
age			0.0263***	0.009***												
			(0.00434)	(0.001)												
fair_care_times _care_pers											-0.225	-0.079				
											(0.169)	(0.059)				
fair_care_times_ care_in_family													0.00604	0.002		
													(0.159)	(0.056)		
fair_care_times _female															0.207	0.073
															(0.159)	(0.056)
Constant	0.651		-0.120		0.843		0.701		0.719		0.626		0.655		0.665	
	(0.814)		(0.829)		(0.788)		(0.806)		(0.912)		(0.814)		(0.820)		(0.813)	
pseudo-R²	0.1051		0.1104		0.0963		0.0871		0.1008		0.1062		0.1051		0.1062	
χ²-Stat	166.65***		174.86***		155.51***		138.11***		138.78***		168.43***		166.66***		168.36***	
tail-probability test middle generation= old generation	9.49***				18.70***				7.54***		9.64***		9.49***		9.29***	
Observations	1,144	1,144	1,143	1,143	1,165	1,165	1,144	1,144	993	993	1,144	1,144	1,144	1,144	1,144	1,144

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1