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# **A Strategic Gift Motive? Evidence from European Inheritance Tax Reforms**

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## **Abstract**

One of the potential explanations for a limited bequest motive underpinning family social contact lies in the presence of other types of financial incentives such as gifts. This is especially the case when equal bequests are the common patterns in Europe. However, evidence of the latter is limited. In this paper, we study whether the intensity of parent-child social contact is influenced by financial incentives, and more specifically the presence of a strategic gift motive, amidst a decline in bequests taxation. We examine this question using a sample of adult children and their older parents from a large longitudinal data from the Survey of Health, Aging and Retirement in Europe (SHARE) between 2004 and 2015. We draw upon an instrumental variable strategy where we exploit evidence of changes in inheritance tax legislation across Europe as a source of an exogenous variation in gift giving. We find that changes in gift giving resulting from several inheritance tax reforms modify the intensity of family social contact with parents. We estimate that a gift (exceeding an annual value of 250€) to a child increases the frequency of social contact in 0.73 units out of an average of 5.7 units (ranging from 1 no contact to 7 daily contact). These findings are robust and consistent with the presence of a ‘*strategic gift-giving*’ hypothesis as explaining family social contact.

*Keywords:* Gift giving, inter-vivo transfers, inheritance tax-reforms, social interactions, social contact, Europe.

*JEL codes:* J14, H29.

## 1. INTRODUCTION

Family ties are especially important in an ageing population, where social contact with family members might be a major source of social interactions. However, over time families have undergone considerable changes in the composition and the support they provide to older parents, which reflect in changes in social contact, which in turn have been influenced by the introduction of new information technologies (e.g., extension of mobile phones, introduction of cost free calls such as skype ad WhatsApp). Such changes are important insofar as they can explain a rise in loneliness among older populations, which is increasingly a problem affecting a large share of older people (Heylen, 2010, de Jong Gierveld and Tesh-Romer, 2012).

Traditionally, children's contact with their parents has played an important role in alleviating loneliness (Litwin, 2001) and improving the wellbeing for older people (Mancini and Blieszner, 1989). However, we still know little about the underlying motivations for such family social contact. Household characteristics such as the numerous siblings, differences in income and wealth as well as parental and children age and health might explain differences in the children's social contact with parents. Similarly, among the potential sources of social contact, one can identify the role of financial incentives, namely the expansion of children's budget constraint e.g., resulting from inter-vivos transfers (gifts) regularly taking place within families, in exchange of upstream social contact with their parents. This is what we define as a '*strategic gift motive*'. The rest of the paper is devoted to document evidence of such effect.

Whether social contact responds to financial motivations largely depends on the underlying motivation of intergenerational interactions, namely whether they respond to altruism and/or exchange. Previous studies suggested that under exchange motives, financial decisions within the families such as bequests and gifts are a function of some level of contact

or support received from children (Becker, 1974, Bernheim et al, 1985, Cox 1987). In many western countries, bequests make at least 30% of net worth and gifts accrue more than 10% of children's net worth (Villanueva 2005, Gale and Scholz, 1994). However, so far there has been very limited causal empirical evidence on the effect of financial gifts on family social contact. Europe is an important setting to undertake such analysis as unlike in the United States, inheritance taxes are largely decentralised to member states, given that the European union has limited tax powers. Hence, it is possible to examine whether the exposure to higher inheritance taxation changes the family decision to gift v bequest. Although gifts are generally subject to tax, smaller gifts under significant amounts are typically tax free. Hence, a reduction in both the inheritance tax rate or tax base is an exogenous variation in the decision of parents to gift on behalf of children.

This paper draws on longitudinal data from unique data from the Survey of Health Aging and Retirement in Europe (SHARE) alongside a ready built dataset recording the changes in inheritance and gift tax regulations over the last decade 2004-2015. We use child level data to examine whether changes in gifts resulting from such tax reforms influence children's social contact which is our main variable of interest. We observe other related variables such as cohabitation and residential distance, however in such a case social contact is harder to extrapolate. Hence, we rely on a precisely measure of social contact between parents and their children over more than a decade worth of time.

Our analysis begins by documenting evidence of heterogeneity of gifts and bequests in Europe, and we show that while gifts are largely unevenly distributed within households, but bequests are not. Hence, we draw on such variation in gift giving across households to examine whether it exerts an influence on both the intensive and the extensive margin of family social contacts.

The core of the paper focuses on testing whether an exogenous change in gifts gives rise to change in intergenerational social contact. More specifically, we exploit the exogenous source of variation of the inheritance tax legislations across European Countries, which is used as an instrument for the decision to give gifts to their offspring. The intuition behind the instrument is that legislations affect the decisions between bequeathing and gifts (or inter-vivos transfers), independently from the relationship between the parents and the offspring. Examining gifts in European context is useful for three reasons: i) first, bequests are predominantly equally distributed among children both due to cultural reasons and due to legislations which protect children (i.e. children must receive a large part of the inheritance as a statutory share), ii) European countries are important as welfare state might influence the role of gifts (Kotlikoff, 1992). iii) Finally, Europe provides a convenient setting because of the existing variation in inheritance taxes across countries.

Next section reports a summary of the main insights of the related literature on intergenerational gifts giving and bequests, alongside the evidence of the motivation family social contact. Section three reports the data and empirical strategy. Section Four contains the main results, and a final section concludes.

## 2. INTERGENERATIONAL GIFTS AND BEQUESTS

This section provides the main insights on the determinants of intergenerational gifts and bequests, alongside intergenerational social contact, explaining the intensity of social interactions with family members.

*Bequests motives.* Although, older evidence suggests that consumption does not vary between child and childless families (Hurd 1987, 1989), more recent evidence employing strategic surveys finds that some evidence of bequests motives among middle class individuals in the US who exhibit some aversion to rely on Medicaid if they do not receive intergenerational support (Americks et al, 2007). This is consistent with Kotlikoff and Summers (1981) seminal paper that argues for a motive as driving savings behaviour. If individuals are averse to relying on public support at old age, they might still not reduce spending before death which is part reflective of the lack of long-term care insurance. Individuals without children appear to save more due to precautionary reasons as opposed to bequest motives.

However, it appears important to understand the underlying mechanisms and motivations of such behaviours' and Li (2014) find evidence of exchange as opposed to altruism in explaining family transfers in China, which regulate the so called 'filial piety'. However, motivations might differ across the population income distribution, where altruism might well be more prevalent among low income parents (Cai *et al*, 2006). Hence, one would expect cross-country differences in how children react to changes in gifts and family wealth.

A number of contributions question the role of bequests motives in favour of precautionary motivations. Hurd (1987) shows evidence consistent with precautionary motives. Structural approaches show that bequests motives do not seem to explain major savings behavioural

patterns (DeNardi et al, 2006). Indeed, they show that assets decrease at a very low pace over time. One of the main problems notes by Dynan, Skinner and Zeldes (2002) is that it is often complex to disentangle bequest and precautionary motives.

*Gift giving and family altruism.* Gift giving results from implicit contracts between family members, that offers advantages with respect to bequests to reward children's attention to older parent, including hidden characteristics such as gratitude, and duty. Transfers can result from altruism, exchange and mutual altruism. Parents are more likely to give more gifts to children with low earnings and similarly, adult children are more likely to transfer resources to low income parents (Becker, 1974, Sloan et al 2002). Time and money transfers can be seen as substitutes. However, strategies to reduce tax burden on relatively wealthy individuals include 'strategical inter-vivos transfers' (Bernheim et al, 2001, 2004, Page 2003) and even have suggested investing in delating death itself (Slemrod and Kopczuk, 2001). One of the issues is that parents might only report large transfers, and often gifts and other in-kind transfers such as free home sharing might not be included (Ermish and Di Salvo, 1987). Altonji et al (2000) examines inter-vivos transfers and time transfers and find weak evidence of an exchange, and Ioannides and Khan (2000) examining inter-vivos transfers find evidence of two-sided altruism. Hurd et al (2011) finds that parents transfers respond to the onset of disability and economic resources are important for single and couples. Norton and van Hutven (2006) find evidence that inter-vivos transfers are larger for children who provide informal care, and that the expectation of future transfers motivates informal care decision (Norton et al, 2013). Hence, it appears that gifts are heterogenous depending on the provision of care, and are sensitive to the underlying motivations of gift giving. However, most of the evidence described does not follow from an exogenous source of variation.

*Literature gap.* One of those sources of variation includes changes in inheritance taxes as we examine in this study. That is, we examine the variation of families that have wealth to distribute to their children on children's interactions, and that have more than one child as Chang (2009) finds that financial constraints may prevent parents from making transfers with a larger number of children and sibling rivalry. Similarly, although children might wish to make altruistic decisions, they might be resource constrained. Hence, in examining intergenerational contact one needs to consider a number of potential interactions (Horioka et al, 2000), which is affected by the heterogeneity between parental and children's housing wealth. When parents have higher wealth, children are more likely to co-reside with their parents. The next section discusses the empirical strategy to identify whether changes in gifts affect social contact.

### **3. DATA AND EMPIRICAL STRATEGY**

#### *3.1 Data*

We use data from SHARE (Survey of Health, Ageing and Retirement in Europe) for Wave 1 (2004), Wave 2 (2007), Wave 4 (2011), Wave 5 (2013) and Wave 6 (2016)<sup>1</sup>. SHARE is the European equivalent of the Health and Retirement Survey (HRS) in the US, a panel dataset which collects extensive information on health, socioeconomic status and family interactions of individuals aged 50 in several European countries, including Austria, Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Israel, the Czech Republic, Poland and Ireland. SHARE is the most comprehensive dataset available across Europe to examine the effects of changes in long-term care subsidies among old age individuals. While sample sizes vary between countries, the pooled dataset exceeds 100,000 individuals, from which only 20% exhibit some form of dependency (defined as some ADL or IADL they cannot perform).

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<sup>1</sup> Unfortunately, wave 3 could not be included as it is not comparable with other waves.



### 3.2 *Sample*

Our analyses rely on samples of countries for which we have at least two waves of observations. This means that our analyses did not include data from Greece, Israel, Ireland and Czech Republic. Since our focus is on intergenerational transfers and social contact, we restrict our sample to respondents with children. In each household the family respondent, who is randomly selected in SHARE, provides basic data on all living children (gender, age and proximity), whereas more detailed information relevant for this study (frequency of contact between the child and the parent) is asked for up to four children.<sup>2</sup> Then, we reshaped the data to set it up at the child-level where the unit of observation is the child. This restriction resulted our sample sizes to vary approximately between 1800 and 4700 children coming from approximately between 680 and 1800 household, across the 11 countries in the first wave. [See Table 3, last column].

### 3.3 *Empirical Strategy*

A pre-condition for strategic bequest and gift motives to exist, there needs to be some variation in the probability of bequeathing and gifting across the children within a family. SHARE data provides opportunity to look into the distribution of bequest and gifts within the family, through its end of life exit interviews. Evidence from the end of life interviews shows that unlike in the US where the rate is 60% (Groneck, 2017), bequests are equally distributed among the children in 95% of the cases, hence we can conclude that it is unlikely that there is a generalised bequests motive in Europe. In contrast to bequests, in the result section (4.1), we start showing evidence about how unequally distributed the gifts are within the family in our data. Upon establishing

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<sup>2</sup> When there are more than four children, the program sorts them in ascending order by minor, proximity and birth year, where minor is defined as 0 for all children aged 18 and over and 1 for all others, and then selects the first four.

this, we take advantage of changes in inheritance tax legislations between 2004 and 2015 across the countries as an exogenous source of variation in parental resources which could affect gift giving.

We assume individuals face two choices: gifting now and/or bequeathing later. These choices will be affected by our treatment, which is the changes in the tax base and rate of the inheritance taxes to the individual. Theoretically, consumption smoothing and moral hazard motive implies individuals would prefer to insure themselves against depleting their assets before the end of their life. Hence, changes in inheritance taxes can influence on the margin whether individuals give gifts as opposed to bequests.

We argue that country-specific changes in inheritance taxes would reduce or increase the value of future bequeathable wealth which may generate incentives for parents to change their gift giving behaviour. However, in the European context in general, we expect the gift giving to be preferred over bequeathing for two important reasons. First, in Europe there is strong social norm against unequal bequests, which, unlike in the US, is accompanied by strict legal restrictions that assign a substantial fraction of the inheritance to the children and/or partner (the so-called statutory share), independently of the deceased's will. This generates incentives for parents over gift giving rather than unequal bequeathing. Second, gift giving is less likely to be affected directly by the gift taxes. People are assumed not to be responsive to gift taxes, because it is possible to divide the gifts in smaller magnitudes to avoid the tax (e.g., assuming small transfer are less traceable, individuals might gift strategically marginally below the threshold, gifts can be in kind, or they can be transferred in cash). Indeed, in Table 1 we show that in 99.4% of cases gifts are below the taxable threshold. As a result, individuals will react

to the inheritance taxes by changing the decision to giving more or less gifts in order to avoid inheritance taxes upon death.

**[Insert Table 1 about here]**

We estimate versions of the baseline two stage least square (2SLS) specification where gifts are instrumented by changes in inheritance taxes. We employed the predicted gifts across children within a household to estimate the effect on social contacts with old age parents as follows:

$$Gift_{ijct} = \alpha_1 + \mathbf{x}'_{ijct}\boldsymbol{\beta}_1 + \gamma Inheritance\ Tax\ Change_{ct} + \mu_c + \lambda_t + \theta_j + \varepsilon_{ijct} \quad (1)$$

$$Social\ Contact_{ijct} = \alpha_2 + \mathbf{x}'_{ijct}\boldsymbol{\beta}_2 + \delta \widehat{Gift}_{ijct} + \mu_c + \lambda_t + \theta_j + u_{ijct} \quad (2)$$

Where  $Gift_{ijct}$  is a dummy equal to 1 if child  $i$  of household  $j$  living in country  $c$  received a gift from her parents in year  $t$  and  $\mathbf{x}_{ijct}$  is a vector including both the characteristics of the child and of the responding parent (gender and a full set of age dummies).  $Inheritance\ Tax\ Change_{ct}$  is a dummy variable equal to 1 if in country  $c$  the inheritance tax system is more generous in period  $t$  than in the previous observation period, and equal to 0 if there has been no change. An increase in generosity might mean that inheritance taxes been abolished, that the exemption threshold has increased or that the tax rate has decreased. To have a cleaner control group, we exclude from our sample those countries and years in which the inheritance tax system became more stringent (which in our sample period happened for Italy, France and Germany). Our main dependent variable  $Social\ Contact_{ijct}$  is the frequency of contact between child  $i$  and her parents in household  $j$  on a scale from 1 to 7, where 1 corresponds to never and 7 to daily.

Our exclusion restriction is that gifts are affected by inheritance tax changes, and they only affect social contact through gift giving. An important point to notice is that gifts are only affected by the instrument if a person is able to give gift in the first place. In other words, part of the distribution who would not be able to give gift, we assume that the instrument will not affect them. This is important because social contact might be on average higher for those people who are unable to give monetary gift in theory, because they might be compensating by time donations, which could inflate the number of social contacts for this group. But this is less of a concern because we use an IV that is not affecting these guys. The compliers in our case are those that are able to afford giving gift. That is, changes in inheritance taxes do not affect individuals provided they do not have financial wealth to distribute. The summary statistics also show that those who give gift on average are reporting higher levels of social contact, which is reassuring as this suggests that there is no substitution between time and money transfers.

Overall, our estimates meet the expected conditions for an instrumental variable strategy, namely theoretical validity and statistical test that suggest the instrument is not weak, more specifically, the F-tests are well above the cut-off value and the instrument is significant as we show below. We are confident that our estimates provide a local average treatment effect (LATE) estimate of the effect of gifts on social contact.

### *3.4 Descriptive evidence*

Figures 1 and Table 2 provide evidence of the association between gift giving across European countries and social contact. As expected, the evidence suggests a positive association between gift giving and the frequency of social contact with old age parents (Fig 1). Additionally, we

report evidence of a negative association between gift giving and co-residence in the appendix (A1), which indicates that given that co-residence provides a gift in kind, alternative gifts in cash tend to be negatively associated with co-residence. Although this is in line with our expectations, in the remaining part of the paper, we do not use co-residence as one of the outcomes, since gift giving between co-residing family members is difficult to measure. We will come back to the implications of excluding co-residence as an outcome and co-residing family members in the discussion section of the paper.

**[Insert Figure 1 and Table 2 about here]**

Figure 2 shows the distribution of wealth by gift giving. Those who declare to have given gifts are on average slightly wealthier although there is large amount of variation within each group. This indicates that gift givers can be located anywhere in the wealth distribution and financial wealth does not necessarily pattern our findings.

**[Insert Figure 2 about here]**

## **4. RESULTS**

### *4.1. Bequests are Equal among Children, Gifts are Not*

In Table 3 we first show how unequally distributed gifts are across children within a family using the first two waves of SHARE where we can observe both the probability of gift giving, alongside its magnitude, and discuss evidence of strategic gift-giving. We find evidence of significant heterogeneity which is consistent with evidence from Villanueva (2005) who shows that gifts from living parents to adult children account for at least 11% of aggregate net worth. We draw on Cox (1987) which conceptualises transfer as emerging from exchange motivations

in explaining inter-vivos transfers. Cox and Rank (1992), using data from the National Survey of Families and Households, find evidence consistent with an exchange motive.

**[Insert Table 3 about here]**

Table 3 also shows the median values of the gift amount by country among those who give gifts. The difference between median and mean values of the gift amount shows that there is substantial skew in the gift amount distribution. Average gift amount can be 2 to 5 times larger than the median gift amount depending on the country. Keep in mind that in our empirical strategy we do not exploit variation in gift amount but instead use the extensive margin measure of whether giving gift or not. Thus, this skewness has no implication on our findings. This needs to be taken together with the finding on Figure 3, where we show that the binary variable indicates large variation in wealth.

#### *4.2 Baseline Results*

In Table 4 we analyse the relationship between gift giving and intergenerational social contact. We exclude from the analysis children who co-reside with their parents as for them contacts are hard to measure. However, our results are robust when we include co-residing children and we assume that they are in contact with their parents every day. The specifications include country fixed effects, year fixed effects, year of birth fixed effects for both the parent and the child and gender of both the parent and the child. The first three columns of Table 4 report the least squares (OLS) estimates to provide a benchmark comparison, while in columns (4) and (5) we estimate IV regressions in which we use an increase in the generosity of the inheritance tax system as an instrument for gift giving. The OLS estimates and our IV estimates are

reported with both individual and household fixed effects<sup>3</sup>. Estimates for both measures of social contact for both OLS and IV show the same sign and support the presence of a strategic gift giving motive: children who receive financial gifts from their parents are more likely to contact them. Given that our instrument is binary and our dependent variable is not, our IV estimated coefficients are inflated, although we can still interpret their sign and significance. Therefore, in the last column we report the estimates using control function and bootstrapping the standard errors: gift giving increases the frequency of contact by 0.732 on a scale from 1 to 7.

**[Insert Table 4 about here]**

#### *4.4 Heterogeneity and robustness Checks*

One potential threat to the identification is that family social contact is driven by the presence of grandchildren, and hence gifts are to grandchildren as opposed to their children. Table 5 reports the effect of our baseline estimates to the presence of grandchildren and the provision of childcare, as both are measures that are available in our data. Our estimates are significant and consistent with the baseline, irrespectively of the sample considered. However, the effect size is larger when there are no grandchildren in the family. Hence, our estimates are consistent with a strategic gift giving effect with children, rather than grandchildren.

**[Insert Table 5 about here]**

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<sup>3</sup> We measure social contacts both as the frequency of contacts on a scale from 1 (never) to 7 (daily) and as translated into number of contacts (see Bernheim, 1985) as follows: never - 0, less than once a month - 3, about once a month - 12, about every two weeks - 26, about once a week - 52, several times a week - 156, daily - 312. The variable is then normalised to be equal to 1 if the child provides the maximum amount of contacts possible (daily contacts).

Next, another explanation is that strategic gift giving is driven by parental health. Children react more to unhealthy parents. However, Table 6 reports the estimate of gifts on social contact for healthy parents, and we find that the effect size is larger when parents are healthy. Hence, we discard that our estimates are driven by parental ill-health, which might be a proxy to proximity to death.

**[Insert Table 6 about here]**

Finally, we examine another potential threat to the specification, namely that changes in inheritance tax affect individuals' expectations of bequests and gifts. The argument being that the effect is not driven by changes in gifts but by expectations. As in SHARE we do not have longitudinal information on expectations, to test this effect we use data from the 2010 and 2015 waves of the Household Finance and Consumption Survey (HFCS). We use a difference-in-difference design to estimate the effect of tax reforms on inheritance expectations, in which we exploit the fact that in Germany there was an inheritance tax reform between the two waves, while in Belgium there were no changes in the tax. Table 7 reports the estimates of the interaction of gifts from Germany after the reform in 2015, and we find no evidence of an effect on expectations.

**[Insert Table 7 about here]**

## **5. CONCLUSIONS**

We show that unlike in the United States, in Europe bequests tend to be equally distributed whilst gifts are unequally distributed among children, which opens the question of whether there is a strategic gift motive as underpinning family social contacts. This paper reports causal empirical evidence of the effect of changes in gift giving on social contacts. More specifically,



and consistently with the strategic gift motive, we show that an exogenous variation in gift giving from changes in inheritance taxes increases family social contacts from parents to adult children (inter-vivos transfers).

The effect is robust to the inclusion of a number of controls and it is driven by healthy individuals and it is stronger when there are no grandchildren and when parents do not provide child care. Finally, we document evidence from a different dataset to show that a change in inheritance tax in Germany does not result in an adjustment of expectation of bequests or gifts. Instead, our preferred explanation is that actual intergenerational gifts change family social contacts.

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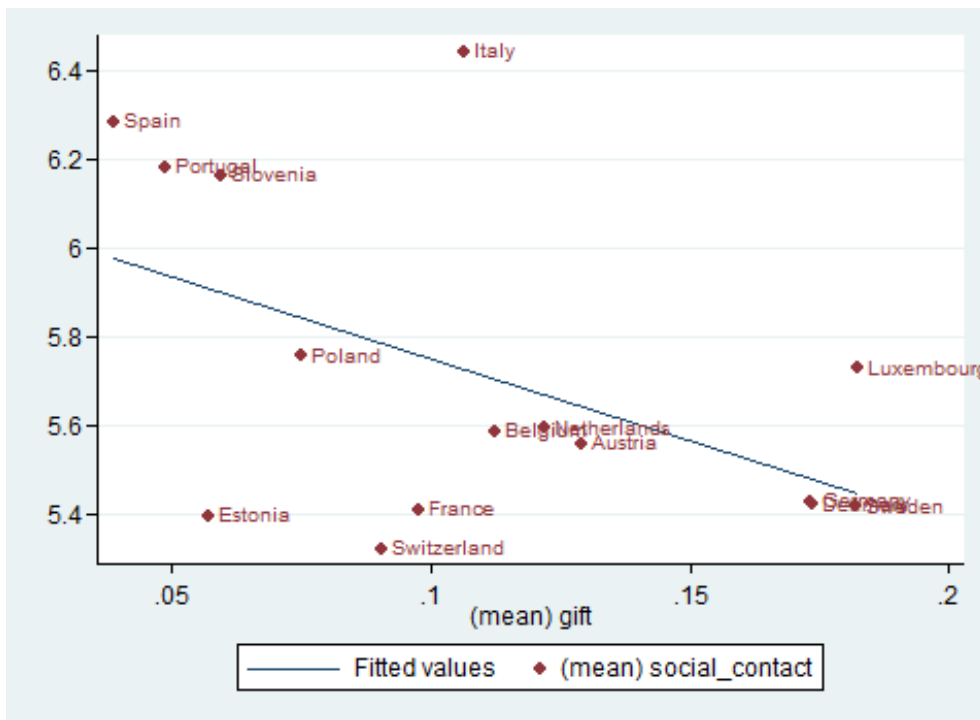
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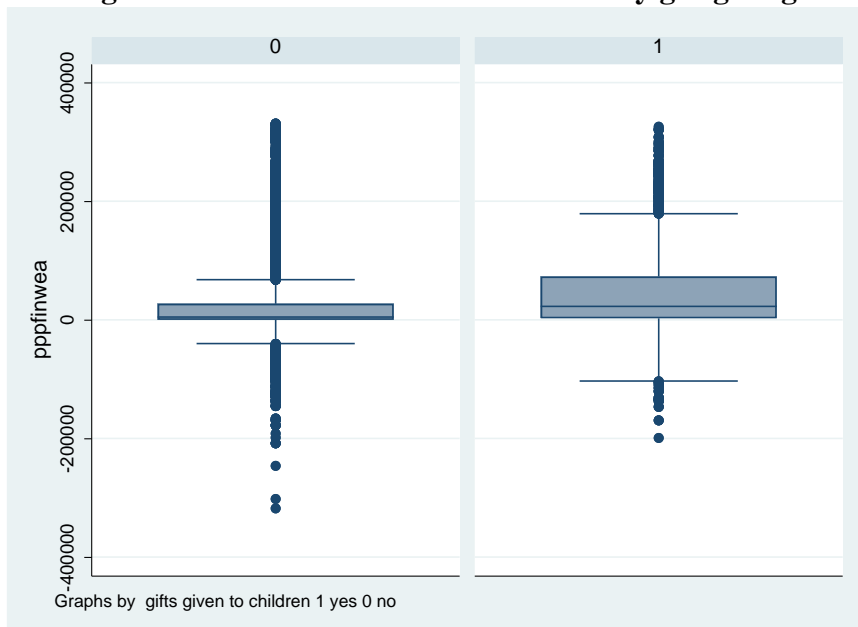
## Figures and Tables

### Figure 1. Social Contact and Gift Giving



Note: SHARE data waves 1-6.

### Figure 2. Financial Wealth distribution by gift giving.



Note: First box plot indicates those who do not give gifts and the second are gift givers. Estimates based on Share data wave 1 for all countries. Ppfinwea represents financial wealth.

**Table 1. Percentage of gifts which are above the taxation threshold.**

<b>Country</b>	<b>Taxable Gift Givers</b>	<b>%</b>	<b>Exempt from Tax</b>	<b>Total N</b>
Austria	0	0.0%	1,756	1,756
Germany	0	0.0%	3,811	3,811
Sweden	0	0.0%	4,694	4,694
Netherlands	132	3.0%	4,261	4,393
Spain	0	0.0%	3,351	3,351
Italy	0	0.0%	3,712	3,712
France	3	0.1%	4,339	4,342
Denmark	101	2.7%	3,577	3,678
Switzerland	0	0.0%	2,050	2,050
Belgium	0	0.0%	4,274	4,274
Poland	18	0.6%	3,232	3,250
Total	254	0.6%	39,057	39,311

Note: Five countries have either no gift tax or children are fully exempt from it (Belgium, Spain, Sweden, Austria and Switzerland - except Zurich-). Italy and Germany have very high exemption base, 400,000 and 1,000,000 Euros respectively, where we have no observation in the data reporting to have given that large amount of a gift.

**Table 2: Summary Statistics of Dependent Variables by Gift**

	Gift		No Gift		Difference	Sig.
	Mean	St Err	Mean	St Err		
<b>Social Contact</b>	5.656	0.006	5.871	0.003	-0.216	***
<b>Bernheim</b>	0.565	0.002	0.547	0.001	-0.018	***
<i>N</i>	321,942		39,438			

**Table 3. Gifts are distributed unequally between children within a family, by country.**

Country	Gift Amount >0			Gift Amount			Gift Giving			Number of obs	
	Mean	Median	N (Children)	Mean	Between	Within	Mean	Between	Within	Children	HH
Austria	3375.00	1000	388	745.73	3905.71	3816.34	0.24	0.38	0.22	1,756	688
Germany	3299.51	1000	824	713.41	2918.94	1808.04	0.23	0.38	0.21	3,811	1,535
Sweden	2832.25	1085.78	1384	835.07	3684.60	1908.85	0.47	0.42	0.22	4,694	1,806
Netherlands	4185.48	1500	796	758.40	4307.76	3923.87	0.21	0.37	0.37	4,393	1,728
Spain	3413.28	1800	143	145.66	1039.19	638.14	0.06	0.20	0.15	3,351	1,266
Italy	5273.05	1000	599	850.90	7143.27	5916.66	0.18	0.35	0.18	3,712	1,504
France	6663.55	1850	654	1003.68	6692.75	2757.28	0.19	0.35	0.20	4,342	1,660
Denmark	3826.70	1611.95	856	890.61	2971.22	1989.82	0.25	0.40	0.21	3,678	1,433
Switzerland	10158.96	3259.03	344	1704.72	13263.17	4853.67	0.18	0.34	0.20	2,050	803
Belgium	10300.65	2000	681	1641.26	11000.25	6894.76	0.21	0.37	0.20	4,274	1,640
Poland	2353.71	259.94	294	212.92	7371.74	6452.29	0.10	0.25	0.18	3,250	1,244
<b>Overall</b>	<b>4848.70</b>	<b>1233.81</b>	<b>6963</b>	<b>858.83</b>	<b>6543.46</b>	<b>4184.25</b>	<b>0.20</b>	<b>0.36</b>	<b>0.20</b>	<b>39,311</b>	<b>15,307</b>

Note: Share 2004. Gift amount is expressed in 2004 Euros (the first wave). Gift amount is only available for the first two waves. The distributions of gift giving within family and between families in the other waves are comparable to 2004 (not reported). [There are missing values for the gift amounts among those who report to have given gifts therefore the mean values of gift giving (column 4) does not match with the mean gift giving values times the number of all children.

**Table 4. Model specifications with Social Contact and Gift Giving**

VARIABLES	(1) OLS	(2) OLS	(3) OLS	(4) IV	(5) IV	(6) CF
Gift	0.295*** (0.0106)	0.0978*** (0.0101)	0.178*** (0.0107)	7.754** (3.013)	8.301*** (1.980)	0.732*** (0.067)
Constant	6.825*** (0.0784)	7.333** (3.088)	4.528 (3.238)	5.724 (88.81)	3.377 (10.841)	5.749 (0.0359)
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Household FE			YES		YES	
Individual FE		YES		YES		
Observations	206,596	206,596	206,596	206,596	206,596	206,596
Number of children		103,098		103,098		
Number of households	48,744	48,744	48,744	48,744	48,744	48,744
First stage F-stat				7.18	21.44	
R-squared	0.087	0.032				

Note: Columns report the specifications in the following order: 1) OLS 2) OLS fixed effects at the individual level. 3) OLS fixed effects at the household level 4) IV with individual fixed. 5) IV with household fixed effects 6) Control function with clustered standard errors at the household level. In all specifications we control for age and gender of the parent and the child, flexibly. Standard errors in parentheses are clustered at the household level in all specifications (except columns 3 and 5 which use household fixed effect specifications). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



**Table 5. Heterogeneity by presence of grandchildren.**

VARIABLES	with Grandchildren		with Grandchildren but no childcare		No Grandchildren	
	IV	CF	IV	CF	IV	CF
Gift	13.70** (5.583)	0.759*** (0.093)	12.96*** (4.885)	0.626 *** (0.105)	41.88 (160.3)	1.012*** (0.092)
Constant	-10.40 (12.98)	5.933*** (0.041)	-8.676 (11.75)	5.903*** (0.042)	-5.497 (63.68)	5.570 (0.076)
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Household FE	YES		YES		YES	
Observations	151,574	151,574	143,766	143,766	55,022	55,022
# of Households	40,570	40,570	39,833	39,833	25,131	25,131

Note: The specification is the same as Table 4, columns 5 and 6 respectively. Standard errors in parentheses are clustered at the household level in all specifications. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table 6. Social contact and gift giving for very healthy parents**

VARIABLES	(1)	(2)
	Social contacts_healthy IV	Social contacts_healthy CF
gift	5.876** (2.891)	0.850*** (0.075)
Constant	2.639 (6,317)	5.957*** (0.043)
Observations	145,183	145,183
Number of households	33,608	33,608
Country FE	YES	YES
Year FE	YES	YES

Note: The sample only includes parents with no IADL limitations. The specification is the same as Table 4, columns 5 and 6 respectively. Standard errors in parentheses are clustered at the household level in all specifications. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 7. Effects of changes in inheritance taxes on inheritance expectations - Belgium is the control country**

VARIABLES	Inheritance expectations			
	(1)	(2)	(3)	(4)
Germany	0.144*** (0.007)	0.125*** (0.008)	0.157*** (0.0102)	0.143*** (0.011)

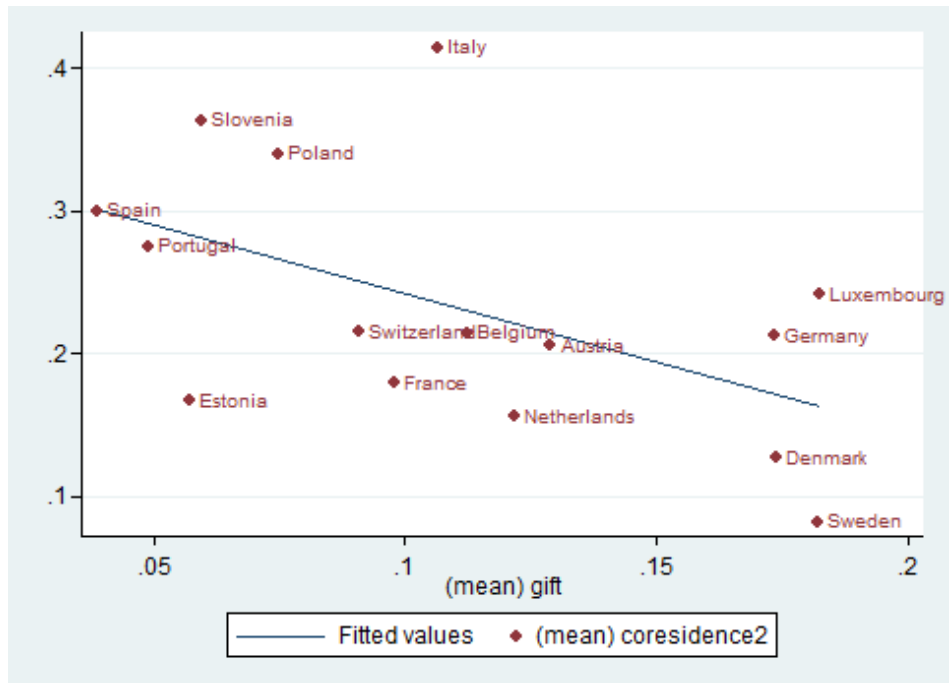
Year 2015	0.039*** (0.009)	0.033*** (0.009)	0.024** (0.012)	0.012 (0.012)
Germany#Year 2015	-0.013 (0.010)	-0.000 (0.011)	-0.001 (0.014)	0.012 (0.014)
Constant	0.698*** (0.006)	1.191*** (0.040)	0.665*** (0.008)	1.205*** (0.077)
Controls	No	Yes	No	Yes
Sample	Full	Full	>205K	>205K
Observations	28,773	23,344	15,612	13,647
R-squared	0.030	0.097	0.035	0.108

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Note: Columns (2) and (4) control for age, marital status, education, gender, household income and wealth. The data is Household Finance and Consumption Survey (HFCS), 2010 and 2015 surveys. The sample in columns (3) and (4) only includes households with wealth above €205,000.

## Appendix

Figure A1. Co-residence and gift giving



Note: SHARE data waves 1-6.



**Table A1: Step-Children, Adopted Children and Biological Children**

VARIABLES	(1) Step-child	(2) Adopted	(3) Biological (IV)	(3) Biological (CF)
Gift	-42.73 (146.6)	0.220 (1.251)	8.838*** (2.499)	0.696*** (0.067)
Constant	10.09* (5.152)	5.590*** (0.730)	6.226*** (0.433)	5.734*** (0.036)
F-stat	0.008	7.128	12.96	
Observations	6,769	840	198,990	198,990
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Note: The specification is the same as Table 4, columns 5 (IV). Standard errors in parentheses are clustered at the household level in all specifications. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . First stage results show that instrument is not significant for the sample of step-children as expected since step-parents should not react inheritance tax changes.

**Table A2. Sensitivity to inclusion of co-residence in the same household or building**

VARIABLES	(1) Social contacts	(2) Social contacts – Same building	(3) Social contacts	(4) Social contacts – Same building	(5) Social contacts CF	(6) Same building CF
Gift	4.337*** (0.817)	7.721*** (1.850)	4.252*** (1.108)	7.503** (2.935)	0.827*** (0.065)	0.784*** (0.067)
Constant	9.057*** (2.760)	7.226 (16,903)	12.79*** (2.532)	7.21 (0.00)	6.308*** (0.032)	5.76*** (0.035)
Observations	230,559	210,619	230,559	230,559	230,559	230,559
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Household FE	YES	YES				
Individual FE			YES	YES		
# of children			112,126	112,126		
# of household	51,507	49,142				