

Of Love and Other Motives: The Within-Family Distribution of Gifts and Inheritances

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Colophon

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Abstract

We study the motives behind parental wealth transfers in the form of gifts and inheritances, using administrative data on the entire Dutch population (2007–2021). Combining tax records with detailed family characteristics, we analyze the within-family allocation of wealth and test for exchange, altruistic, and warm-glow motives. We find no evidence that transfers replace informal care. While some linkages are evident, we see no consistent patterns. Inheritances appear to be largely divided equally among siblings, in line with the warm-glow motive. This motive predicts that parents choose to give equal amounts to each of their children regardless of the actions and the economic situation of the individual child. Gifts, however, clearly reflect an altruistic motive, as parents appear to direct resources to less advantaged children.

Keywords: Intergenerational Wealth Transfers, Gifts, Inheritances, Altruism, Warm Glow, Exchange Motive.

JEL Codes: D14, D15, D31, D64.

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Samenvatting

Dit onderzoek analyseert de motieven achter vermogensoverdrachten van ouders aan kinderen in de vorm van schenkingen en erfenissen. We maken gebruik van unieke administratieve data van het CBS voor de volledige Nederlandse bevolking over de periode 2007-2021. We combineren informatie omtrent erf- en schenkbelastingen met demografische en sociaal-economische gegevens van zowel ouders als kinderen. Met deze gegevens onderzoeken we het belang van de drie volgende motieven: het ruilmotief, het altruïstische motief en het zogenaamde 'warm-glow'-motief.

De resultaten laten zien hoe schenkingen een duidelijke altruïstische component vertonen: ouders schenken relatief meer aan kinderen met minder vermogen dan hun broers of zussen. Dit wijst op herverdeling van vermogens binnen families. Er is geen bewijs voor een ruilmotief. Erfenissen worden doorgaans vrijwel gelijk verdeeld onder broers en zussen, hetgeen duidt op sterke sociale normen en/of een warm-glow-motief.

Voor het beleid zijn deze bevindingen relevant omdat private vermogensoverdrachten publieke regelingen kunnen aanvullen, maar niet structureel vervangen. De resultaten suggereren dat informele zorg wordt niet financieel gecompenseerd binnen families, wat het belang onderstreept van publieke zorgregelingen. Tegelijkertijd impliceert de altruïstische aard van schenkingen dat fiscale prikkels rond giften van invloed kunnen zijn op de timing en verdeling van vermogens. Bij een gedegen pensioen- en vermogensplanning is het belangrijk om rekening te houden met het feit dat een nalatenschap doorgaans gelijkmatig wordt verdeeld over de kinderen.

1. Introduction

Wealth transfers between parents and children in the form of gifts and inheritances play an important role in the well-being of families and in the functioning of society as a whole. By reallocating resources across households and generations, private transfers interact closely with social benefit programs, which themselves reallocate resources through public transfers. As argued by, for example, Boileau and Sturrock, 2023 and Suari-Andreu et al., 2024, private transfers can either offset or complement existing public transfers. For instance, transfers from parents to children may partially offset programs such as public pensions that redistribute assets from younger to older generations. They can also complement public long-term care schemes when given in exchange for informal care. Likewise, when directed at economically disadvantaged family members, they may complement existing unemployment or disability programs. Understanding the motives underlying these transfers is therefore essential for assessing their broader implications for social policy, as well as for gift and inheritance tax design.

The economic literature identifies three main motives for intergenerational giving (Kopczuk, 2007; Suari-Andreu et al., 2019). First, there is the exchange motive, meaning that transfers are given in return for services such as informal care (e.g. D. Bernheim et al., 1985; Perozek, 1998). Second, there is the altruistic motive, where the amount of the transfer depends on the marginal utility of wealth of the receiver, and where parents allocate more resources to children who are financially worse off (Becker, 1974; Laitner, 2002). Finally, a warm-glow motive reflects the pure joy of giving, regardless of the recipient's economic circumstances or actions (Hurd, 1989; De Nardi and Yang, 2014). Empirically, warm-glow giving often observationally reflects strong social norms that promote equal treatment of children, as it implies that parents divide resources equally across siblings.

Distinguishing between these motives is not only of theoretical interest but also of practical importance, since each motive has different implications for the design of redistributive programs. Understanding wealth transfer motives is particularly relevant for the pension industry. On the receiving end, an inheritance is typically received close to or during retirement, meaning that it can meaningfully shape retirement preparedness. If an inheritance is distributed according to altruistic motives, it may partly offset inequality in pension wealth. If it instead follows a warm-glow logic and is divided equally regardless of need, its equalizing effect is more limited, and individuals with lower pension entitlements can rely less on private transfers to compensate for this. On the giving end, understanding why retirees would transfer wealth during their own retirement is equally important for optimizing the pension pay-out phase. If retirees donate out of altruism or in exchange for care, this has direct consequences for the amount of pension wealth that they are likely to retain and draw down over time. When designing pay-out products, pension funds and annuity providers need to account for the fact that retirees may deliberately preserve wealth

for transfer purposes rather than fully consuming their accumulated savings. Together, these considerations imply that the motives behind intergenerational transfers are relevant for how pension systems are designed and how effectively they serve their redistributive purpose.

Understanding why individuals engage in intergenerational transfers is also important for the design of gift and inheritance taxation. If children receive transfers in exchange for providing informal care to their parents, there is a case for offering tax relief to such children. If instead parental transfers are aimed at poorer children, taxation may reduce the capacity of parents to privately compensate such children. This would lead to a trade-off between raising tax revenue and preserving the equalizing function of gifts and inheritances. If warm-glow giving is instead the primary motive, behavior is then more likely to be relatively inelastic with respect to taxation, since parents give for intrinsic reasons rather than in response to the recipient's economic circumstances or actions. Understanding the relative importance of the motives is therefore essential for assessing whether the tax system complements or counteracts the redistributive function of private wealth transfers.

The empirical literature studies intergenerational transfers, by relating gifts and inheritances to observable characteristics of parents and children such as income, wealth, and the provision of informal care, using both survey data and administrative data (Kopczuk, 2007; Laitner, 2002; Perozek, 1998). More recent work exploits within-family variation to analyze how parents allocate inheritances across siblings; this allows researchers to control for unobserved family-level heterogeneity. These studies establish that inheritances are often divided equally among children (Erixson & Ohlsson, 2019; Hamaaki et al., 2019). At the same time, recent evidence suggests that, in the United States, unequal inheritances are more common than previously acknowledged, reflecting high testamentary freedom. Using data from the Health and Retirement Study, Francesconi et al., 2023 show that more than one-third of American parents with wills plan to divide their estates unequally, with unequal allocations occurring especially in families with stepchildren or weak parent-child relationships. To account for the persistence of equal division despite heterogeneity in family circumstances, B. D. Bernheim and Severinov, 2003 propose a signaling framework where the division of inheritances conveys information about parental preferences, highlighting the role of norms and reputational considerations in shaping inheritance behavior.

In this study, we evaluate the relative importance of the exchange, altruistic and warm-glow motives for intergenerational giving by examining the within-family allocation of gifts and inheritances. Our analysis draws on unique administrative data that cover the entire Dutch population between 2007 and 2021. These data, provided by Statistics Netherlands (CBS), combine tax records on wealth transfers and inheritances with information on household wealth holdings, demographic characteristics, and residence location. Crucially, they allow us to link children to their parents and siblings, making it possible to analyze both cross-sectional and longitudinal patterns of giving.

The Netherlands is an interesting case for study for two main reasons. First, during the

period that we cover in this study, we see a total of €156.50 billion, before taxes, being transferred from parents to children. Of this amount, €54.95 billion consists of inter-vivos gifts and €101.55 billion of inheritances. This comes to €10.43 billion on average per year, which represents 1.46% of average GDP over the same period. This is quite a significant amount, which underscores the relevance of understanding how these transfers are distributed within families and the motives behind them. Second, the Netherlands has a progressive gift and inheritance tax scheme, which ensures that, of the mentioned €156.50 billion €14.16 is destined to pay taxes. The schedule is relevant because it can influence the timing and the amount transferred from parents to children. In addition, its design can benefit from a better understanding of the motives behind the within-family distribution of gifts and inheritances.

To interpret our estimates in terms of motives given, we examine how transfers vary with observable child and parent characteristics. We do so while controlling for time and family-level unobserved effects. If transfers are systematically related to indicators of informal care provision, such as gender or geographic proximity to parents, that would be indicative of an exchange motive for giving. If parents direct larger transfers to children who are financially worse off, consistent with redistribution toward those with higher marginal utility of wealth, then that would indicate an altruistic motive. Finally, evidence for the warm-glow motive would be consistent with little or no systematic variation in transfers across children, implying that parents divide resources equally or give independently of the recipients' economic situation or actions. Empirically, however, this prediction overlaps with that of social norms favoring equal division among siblings, making the two difficult to disentangle. Of course, these motives are not mutually exclusive, and observed patterns can reflect a combination of motives rather than a single, clear-cut explanation.

This study contributes to the literature in three main ways. First, we jointly examine inter-vivos gifts as well as inheritances within families, rather than focusing on only one of the two in isolation. This is important, since differences in how the two are distributed may matter for identifying the underlying motives. Second, we exploit a longer time horizon and a richer set of family characteristics than prior studies. Third, we are, to our knowledge, the first to directly test altruistic motives using highly accurate information on parental and child wealth combined with data on intergenerational transfers. Together, these features allow us to provide novel evidence on the determinants of private wealth transfers and their interaction with public redistribution.

Our results suggest only weak evidence of an exchange motive: while physical proximity to widowed or separated parents is sometimes associated with higher transfers, the overall patterns are not robust. Gifts, on the other hand, display a clear altruistic component, with parents directing more resources toward children with relatively less wealth. Inheritances, however, are typically divided equally among siblings and are largely independent of individual or family characteristics. This pattern points to the role of strong social norms in

line with a warm-glow motive.

The paper proceeds as follows. Section 2 describes the data and outlines the empirical strategy. Section 3 presents the results. Section 4 concludes.

2. Institutional Context

As mentioned in the introduction, the Netherlands has a comprehensive gift and inheritance tax scheme, one that is characterized by a progressive structure and various tax exemptions. Sturrock et al., 2025 show, using Dutch data, how the characteristics of the tax scheme lead to individuals using inter-vivos gifts to reduce the tax burden on the inheritance. This can be described as a tax motive for giving assets, which is not incompatible with the motives for giving mentioned in the introduction. That is because individuals who maximize the size of their estate by avoiding taxes are likely to do so out of an exchange, altruistic, and/or warm-glow motive. Even though the tax motive is not the focus of this study, our results have implications for the gift and inheritance tax scheme. Therefore, it is relevant to address the structure of the tax scheme as well as other important rules that govern the transfer of assets from parents to children.

Appendix A shows the structure of the gift and inheritance tax scheme and the corresponding exemptions. It also shows how the level of taxes due changes depending on the relationship between the giver and the receiver. A reform in 2010 slightly raised exemption levels and made the scheme less progressive. Since then, parents may transfer up to €5,000 tax-free per child per year (€4,500 before 2010). In addition to these yearly exemptions, there is a one-time, purpose-specific exemption for children (to finance a home purchase or education), which increased from €23,000 before 2010 to €50,000. This one-time exemption was increased temporarily to €100,000 for the period from October 2013 to December 2014. It was raised again permanently to €100,000 in 2017. Regarding inheritances, the higher exemption applies to partners, while children enjoy a €19,000 exemption.

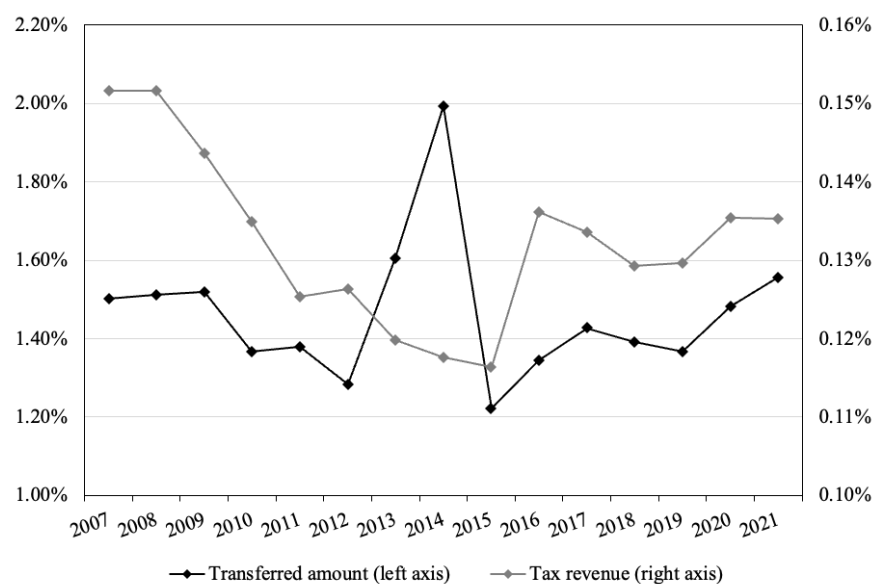
Besides the rules presented in Appendix A, there are at least three other institutional rules that are worth mentioning. First, gifts made within six months before death are counted as part of the inheritance for tax purposes. Second, unlike in the U.S., parental gifts in the Netherlands do not reduce a child's eligibility for college aid, thus removing a potential disincentive to transfer. Third, succession law restricts parents from fully disinherit their children. Each child is legally entitled to a legitimate portion equal to half of what it would receive under equal division among siblings. The rule guarantees children a minimum share and reduces the extent to which parents can divide inheritances unequally. Nevertheless, parents still have a substantial margin to decide how to distribute inheritances according to their personal motives and preferences.

3. Data and Descriptive Statistics

To study the within-family distribution of gifts and inheritances, we use administrative microdata provided by Statistics Netherlands (CBS), covering the entire Dutch population between 2007 and 2021. We combine tax records on gifts and inheritances with information on household assets, demographic characteristics, and information on the municipality of residence.¹ In addition, the information provided by CBS allows us to link children to their parents and siblings. For our analysis of inheritance receipt, we select families with at least one child who received an inheritance from a parent between 2007 and 2021. This selection leads to 589,693 inheritances, corresponding to a total of 1,582,735 children. The inheritances we observe correspond to 27.55

As mentioned in the introduction, if we add up all gifts and inheritances from parents to children, we see that they amount to a total of €156.50 billion: €54.95 billion in gifts and €101.55 billion in inheritances. Figure 1 shows the yearly total sum of gifts and inheritances as a percentage of GDP. For all years the percentage is above 1.20%, and it peaks at 2% in 2014. As mentioned in Section 2, that is the year in which the one-time tax exemption for gifts from parents to children was raised to €100,000. As shown in Figures B.1 and B.2 in Appendix B, in that year the GDP share of gifts reached a high of nearly 1.20%, while the GDP share of inheritances reached a low of just under 0.85%. In line with the results by Sturrock et al., 2025 and Suari-Andreu and van Lent, 2025, this indicates that individuals respond to tax incentives and that gifts are likely used as a way to avoid inheritance tax and to maximize

Figure 1: Aggregate Gifts and Inheritances (% of GDP)



Notes: Total yearly gifts and inheritances transferred from parents to children, as provided by CBS, are given as a percentage of GDP, also provided by CBS.

1 The household wealth variable that we employ in this study refers to net household wealth.

the size of the estate. Figure 1 also shows that tax revenues from gifts and inheritances decrease after the 2010 reform. Afterwards they fell to just under 0.12% of GDP in 2014 and 2015 before rising again somewhat.

Regarding the structure of the data, when studying inheritances, we observe the recipients and their siblings only for the year in which the giving parent dies. We relate the children to the parent who dies and leaves an inheritance. As mentioned in Section 2, parents are by law not allowed to disinherit their children. Therefore, any zeros we observe for inheritance receipt correspond to children who have agreed not to receive their legitimate portion. When studying gifts, we follow families over time and relate all siblings to both parents (provided that they are alive). Therefore, in this case the data have a longitudinal structure. Because we rely on tax records, the transfers we observe are as formally reported to the tax authorities. Even when benefiting from an exemption, individuals are required to report the transfer to the tax authorities. These are linked to the financial institutions and thus can easily inquire about larger transfers of cash and/or goods. This system feature ensures the accuracy of the data. Nevertheless, Statistics Netherlands recognizes that gifts below the €5,000 yearly exemption amount are likely to go undetected by the tax authorities due to their small size.

Out of all inheritances that we observe, 71.73% are distributed in exactly equal amounts among siblings. For gifts, we see that 23.43% of the families in our selection distribute them equally over the period we study. Tables 1 to 3 show the share of observations in our two selections (as mentioned above, these are 1,582,735 individuals for the inheritance analysis and 12,107,456 individual-year observations for the gift analysis) that receive inheritances and gifts. Table 1 shows that over 90% of all individuals in our selection receive an inheritance and that the difference between females and males is very small. This clearly indicates that there is only a small fraction of individuals who refuse a parental inheritance (or agree not to receive it) while their siblings do not. Table 1 also shows that for both females and males just above 8% of individual-year observations receive a parental gift.²

Table 2 shows receipt of gifts and inheritances by wealth quartile of the recipients at $t - 1$. Wealth quartiles refer to the household net wealth distribution of the entire Dutch population. We see that in both cases receipt increases with wealth. The relative increase is significantly larger for gifts compared to inheritances. Table 3 shows receipt of gifts and inheritances by distance to the parental household. Our location dummies capture whether children live in the same municipality, district, neighborhood, or house as their parents.³ We see that individuals are more likely to receive an inheritance when they live closer to their parents, while we see the opposite for gifts. In both cases the differences are not large, even though, again, the relative difference is much larger for gifts.

² Gifts are less usual since, as mentioned above, in this case our data have a longitudinal structure and thus for most individual-year observations there is no gift receipt.

³ District and neighbourhood are here translations of the Dutch words *wijk* and *buurt*.

Table 1: Receipt by Gender of the Child

	Inheritance receipt	Gift receipt
Female	93.02%	8.35%
Male	92.57%	8.12%

Table 2: Receipt by Wealth Quartile of the Child

	Inheritance receipt	Gift receipt
1st quartile	93.74%	6.90%
2nd quartile	93.11%	7.03%
3rd quartile	94.29%	8.05%
4th quartile	94.26%	10.57%

Table 3: Receipt by Distance to Parental Household

	Inheritance receipt	Gift receipt
Different municipality	93.49%	9.08%
Same municipality	94.86%	7.98%
Same district	94.95%	7.70%
Same neighborhood	94.90%	7.25%
Living with parents	95.64%	5.94%

Table 4: Amounts by Gender of the Child (Thousands of €)

	Mean	p5	p25	p50	p75	p90	p95	p99
<i>Inheritance amount</i>								
Female	65	5	19	33	64	122	179	471
Male	66	5	19	33	64	123	182	484
<i>Gift amount</i>								
Female	55	10	23	39	79	107	116	190
Male	56	10	22	38	78	107	116	202

Table 5: Amounts by Wealth Quartile (Thousands of €)

	Mean	p5	p25	p50	p75	p90	p95	p99
<i>Inheritance amount</i>								
1st quartile	52	3	15	28	53	100	147	372
2nd quartile	49	4	17	30	54	99	142	306
3rd quartile	51	5	19	32	57	103	145	311
4th quartile	80	5	21	38	75	143	223	645
<i>Gift amount</i>								
1st quartile	51	10	22	30	64	100	112	183
2nd quartile	44	10	22	26	50	100	105	150
3rd quartile	48	10	22	30	58	100	110	157
4th quartile	63	10	24	46	91	113	120	225

Table 6: Amounts by Distance to Parental Household (Thousands of €)

	Mean	p5	p25	p50	p75	p90	p95	p99
<i>Inheritance amount</i>								
Different municipality	66	5	20	34	66	125	184	473
Same municipality	63	4	18	32	61	117	175	470
Same district	66	4	18	32	61	119	179	499
Same neighborhood	67	4	17	32	63	124	190	545
Living with parents	53	2	11	22	46	97	156	513
<i>Gift amount</i>								
Different municipality	56	10	23	40	81	107	116	191
Same municipality	56	10	23	38	77	105	116	212
Same district	57	10	23	39	78	105	116	216
Same neighborhood	57	10	23	40	80	105	116	219
Living with parents	55	10	23	40	80	105	115	211

Tables 4 to 6 show the same information as Tables 1 to 3 but for amounts received conditionally on receipt. These are amounts received at the individual level. Table 1 shows distributions that are right-skewed as expected. Remarkably, inheritances and gifts are similar in size. Inheritances are larger on average, but that is because of the longer right tail of the distribution, since gifts are slightly higher at the median. Gifts are still higher at the 75th percentile, but inheritances get much larger than gifts above the 90th percentile. Note that the distribution of gifts may be biased upwards since, as mentioned above, a significant number of gifts under the €5,000 exemption may not be reported. Table 5 shows that both gifted and inherited amounts increase very significantly with the wealth position of the recipient at $t - 1$. The relation is not monotonic, since in some parts of the distribution the amounts received are smaller in the second and third quartile compared to the first quartile.⁴ However, the relationship appears to be monotonic from the second quartile onwards, with large increases when moving from the third to the fourth quartile. Finally, Table 6 shows that, especially when considering the average and the median, the amounts received do not vary significantly by distance to the parental household.

In our analysis we control for additional variables such as age, marital status, and number of children of both the givers and the receivers of transfers. Tables C.1 and C.2 in Appendix C provide summary statistics for all the variables that we employ in this study. In Table C.1 we see for instance that recipients of inheritances are usually between 50 and 64 years old while their parents are in most cases already older than 80. We also see that rich parents are overrepresented (71% belong to the fourth quartile of the net wealth distribution), while heirs are spread more representatively across net wealth quartiles. We observe similar patterns in Table C.2, even though in that case both parents and children tend to be younger.

Importantly, in Table C.2 we see that the wealth and location variables that refer to the givers of parental transfers differentiate between cases in which both parents live together and cases in which they are separated or one of the two has died. The table itself shows that, in 11.97% of cases where the parents are separated, in 8.89% of cases the mother has died, and in 11.64% of cases where the father has died. For these cases, we provide the distance to and wealth of parents for the mother and the father individually. When both parents are alive and live together, the information refers to the parental household. We carry this distinction to the empirical analysis, where we run separate regressions for individuals whose parents live together and individuals who have separated or widowed parents.

4 That is likely the case because we look at net wealth, meaning that the first quartile will also capture households with assets and debts simultaneously.

4. Empirical Strategy

To estimate the effect of individual and family level characteristics on the probability of receiving a gift or inheritance and of the amount received, we set up the following equations:

$$Inherit_{if} = \beta_0 + \beta_1' \mathbf{X}_{if} + \beta_2' \mathbf{Z}_f + \delta_f + \epsilon_{if}, \quad (1)$$

$$Gift_{ift} = \gamma_0 + \gamma_1' \mathbf{X}_{ift} + \gamma_2' \mathbf{W}_{ft} + \mu_f + \tau_t + v_{ift}. \quad (2)$$

We estimate Equation 1 at child level (as recipient of the inheritance), with i indexing children and f indexing families. This specification exploits variation across siblings and between families to study how inheritances are distributed. Equation 2 is also estimated at child level (recipient of the gift), but in a panel setting. In that case i indexes children, f families, and t years. In this case, the specification allows us to exploit cross-sectional, longitudinal, and within-family variation in the receipt of gifts. For both equations we provide estimates with and without family fixed effects. When estimating Equation 2 we control in all cases for time effects by including a set of year dummy variables.

The vector \mathbf{X} includes individual-level variables, *i.e.* measured at the level of the children who receive gifts and/or inheritances from their parents. These are gender, age, presence of a partner, presence and number of children, birth order within the family, distance to the parental household, and wealth rank at $t - 1$. The vector \mathbf{Z} includes family-level variables for the inheritance analysis. These are gender, age, partner status, and wealth rank at $t - 1$ of the parent who leaves the inheritance, as well as the number of siblings, a set of dummy variables for the year of death, and an indicator for whether the parent died in a nursing home. The vector \mathbf{W} includes family level variables for the gift analysis. These are age of both parents, number of siblings, and wealth rank of the parents at $t - 1$.

Note that the vectors \mathbf{Z} and \mathbf{W} are similar but not exactly the same. That is because the variables in \mathbf{Z} refer to one parent (the one who dies and leaves an inheritance), while the variables in \mathbf{W} refer to both parents (since both can issue gifts to their children). As mentioned in Section 3, for the analysis of gifts we run separate estimations for cases in which parents live together and cases in which they are separated or where one of the two has died. In the latter analysis, the specification also includes dummy variables indicating whether the mother and/or the father has died. We estimate Equations 1 and 2, both using the extensive and intensive margin of gifts and inheritances. For the extensive margin we use linear probability models, while for the intensive margin we use linear estimation with a logarithmic dependent variable.

The inclusion of the gender, distance, and wealth variables allows us to relate the theoretical motives to observable patterns in the data. The literature suggests that indicators such as gender (*e.g.*, Carmichael and Charles, 2003; Schmitz and Westphal, 2017) and geographic proximity to parents (*e.g.*, Bonsang, 2009; Fu, 2019) help test for the

exchange motive, since daughters and children who live nearby are more likely to provide informal care. In Tables D.1 to D.4 in Appendix D we show, using representative Dutch longitudinal survey data, that these correlations also hold in the Netherlands. In addition, wealth rank of the children allows us to test for the presence of an altruistic motive. That is because, if we observe parents giving more to relatively poorer children, that would be in line with the compensatory redistribution predicted by the altruistic motive. Finally, if gifts and inheritances show little systematic variation with the characteristics that we control for and are instead divided equally among siblings, this would be consistent with a warm-glow motive for giving.

We extend our baseline analysis in two main ways. First, for inheritances we re-estimate Equation 1 by marital status of the giver at the time of death. That is because, as indicated by the literature (e.g., Hurd and Smith, 2002; Lockwood, 2012; Suari-Andreu et al., 2024), individuals in a couple have a strong bequest motive towards the partner. Second, we re-estimate Equation 1 separately for sudden and non-sudden deaths. For that purpose we use a definition of sudden deaths from the medical literature that has been applied earlier in the economic literature (e.g., Andersen and Nielsen, 2016; Suari-Andreu et al., 2024).⁵ The motivation for this analysis is that sudden deaths are more likely to result in accidental inheritances, which are therefore expected to be distributed equally among heirs. Non-sudden deaths, on the contrary, provide greater scope for planning and may lead to inheritance allocations that more clearly reflect underlying motives for giving.

We apply a similar distinction when analyzing inter vivos gifts. In this case, we restrict the sample to families in which a parent dies and examine the distribution of gifts during the five years preceding a sudden or non-sudden death. A non-sudden death, thus more anticipated, may increase the scope for giving while alive, potentially reflecting exchange motives.

5 We apply the sudden deaths definition using data on cause of death provided by CBS. For more details on this definition and how we apply it, see Suari-Andreu et al., 2024.

5. Results

We begin by presenting results on inheritances before turning to gifts. For each, we examine both the extensive margin (the probability of receipt) and the intensive margin (the amounts received). Appendix E contains the results that we obtain when using unconditional amounts as the dependent variable. In all cases we present results with and without family-fixed effects included in the specification. We interpret the findings in light of the three giving motives mentioned above, *i.e.* exchange, altruism, and warm glow.

5.1 Inheritances

Table 7 shows the results that we obtain when using a dummy variable for inheritance receipt as dependent variable. As mentioned in Section 3, for our analysis we select all individuals who received an inheritance between 2007 and 2021 and their siblings. Within this group, 71.73% of inheritances are equally distributed across siblings. In addition, 92.76% of individuals in our selection receive an inheritance. This means that nearly 10% of children receive nothing while a sibling does receive a positive amount. For interpretability, we present coefficient estimates as percentages of the likelihood of receiving an inheritance.

Table 7 shows only a very small effect of gender, regardless of whether we include fixed effects in the specification or not. Other characteristics at the child level (recipient of the inheritance), such as age, presence of a partner and children, and birth order, also have negligible effects. For all these variables, we estimate (using family fixed effects) coefficients not larger than 1.50% of the baseline probability of receiving an inheritance. The number of siblings has a negative effect that is relatively large compared to other coefficient estimates but is still small: an extra sibling leads to nearly a 3% decrease in the probability of receiving an inheritance. Parental characteristics (referring to the giver of the transfer), for which we can only obtain estimates without family fixed effects, also appear weakly related to the allocation of inheritances. The age of the deceased parent has the largest estimated effect, but differences across age groups above 50 are small relative to the reference category (35 to 50 years old).

Similarly, wealth quartile indicators show positive but only minor effects. The coefficient estimates become even smaller when we include family fixed effects. These results provide no support for an altruistic motive which would predict that relatively poorer children are more likely to receive an inheritance. They are also too small to clearly conclude that inheritance receipt increases with wealth. We do find a significantly stronger effect for parental wealth, which again can only be estimated without family fixed effects as it is the same for all siblings in a family. We also estimate only small coefficients for the location dummies that we include.⁶ Given the small effects of gender and distance to the parental

⁶ The location dummies included in such a way that the effect of each geographical unit can be interpreted independently of the other geographical units and should be directly compared to children who do not live in the same municipality as their parents. This holds for all results for these variables presented in this study.

Table 7: Individual/Family Characteristics and Inheritance Receipt

		(1)	(2)
Female		0.22*** (0.05)	0.19*** (0.05)
Age	35-49	2.49*** (0.13)	1.50*** (0.20)
	50-64	1.35*** (0.16)	0.89*** (0.24)
	65+	-0.24 (0.22)	0.14 (0.31)
Partner		0.78*** (0.06)	1.14*** (0.07)
Children		-0.17* (0.10)	0.33*** (0.10)
N. children		0.30*** (0.04)	-0.13*** (0.03)
Birth order		-0.07** (0.03)	0.07*** (0.03)
N. siblings		-2.81*** (0.04)	
Female parent		-0.78*** (0.08)	
Age of parent	50-64	-4.37*** (0.26)	
	65-79	-4.29*** (0.29)	
	80+	-4.64*** (0.31)	
Partner of parent		1.70*** (0.08)	
Parent in nursing home		-0.35** (0.14)	
Family effects		No	Yes

Table 7: Individual/Family Characteristics and Inheritance Receipt
(Continued)

	(1)	(2)
Wealth of children		
2nd quartile	0.72*** (0.10)	0.65*** (0.11)
3rd quartile	2.11*** (0.09)	1.76*** (0.09)
4th quartile	2.77*** (0.09)	2.04*** (0.10)
Wealth of parent		
2nd quartile	-0.24 (0.52)	
3rd quartile	9.57*** (0.47)	
4th quartile	14.62*** (0.47)	
Location of parent		
Same municipality	1.08*** (0.07)	2.42*** (0.08)
Same district	1.20*** (0.09)	2.72*** (0.09)
Same neighborhood	0.23*** (0.08)	3.03*** (0.10)
Living with parents	0.11 (0.18)	0.42 (0.26)
Family effects	No	Yes

Notes: The dependent variable is a dummy variable that takes value one if an individual receives an inheritance. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are expressed as a percentage of the average of the dependent variable, that is 0.9276. All regressions include year dummies. All estimates are based on 1,582,735 individual observations corresponding to 589,693 inheritances. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

household, these results provide no evidence in support of the exchange motive for giving. That is despite evidence in the literature that daughters and children living closer to the parental household are more likely to provide informal care.

Results for conditional inherited amounts are shown in Table 8. As mentioned in Section 4, we use a logarithmic dependent variable. We provide all coefficients after multiplying them by one hundred. They can therefore be interpreted as percentage effects directly. Again, we estimate coefficients that are generally small, particularly after controlling for family fixed effects. We estimate sizeable negative effects on the amount inherited for several child-level characteristics. However, they all become very small once we include family fixed effects. We find strong effects for parental/family-level characteristics such as the number of siblings, age of the parent, the presence of a partner of the parent,⁷ the parent being in a nursing home at the time of death, and the wealth rank of the parent. However, the effect of these variables cannot be estimated when we control for family fixed effects. Interestingly, we estimate a strong positive effect for the wealth of the children (indicating that richer children receive larger inheritances), but this effect becomes negligible once we include family fixed effects in the specification. Similarly, the estimated effects for proximity to the parental household go from significantly negative in Column (1) to very small in Column (2).⁸

As mentioned in Section 4, the literature indicates that when the deceased parent has a partner who outlives such parent, most of the estate is typically left to the surviving partner, which limits the inheritance amount to be distributed among the children. On the other hand, when the parent is single at the time of death, then the children are much more likely to inherit. We see this clearly in Table 8, which shows a strong negative effect of the presence of a partner of the parent who dies on the amount inherited. To test whether this distinction matters, we repeat the estimation separately for inheritances from single and coupled decedents.⁹ The results show coefficient estimates that are very similar to the baseline and not significantly different between singles and couples. Therefore, the baseline findings apply regardless of whether the deceased parent had a partner or was single.

Similarly, we find no significant differences when comparing inheritances that result from sudden and non-sudden deaths.¹⁰ As we explain in Section ?? we apply a definition from the literature to distinguish between sudden and non-sudden deaths. The expectation here is that non-sudden deaths are more likely to be anticipated. Therefore, individuals who suffer a

7 The effect we find for the presence of a partner of the parent who dies is very strong and negative, indicating a reduction of 50% in the amount inherited. This result is in line with the existing literature, which indicates that individuals often have a strong bequest motive towards their spouse. Therefore, they will leave a smaller inheritance to the children in case they are outlived by a spouse. In addition, there is also a tax advantage to leaving assets to a spouse.

8 Table E.1 in Appendix E shows the results we obtain when using unconditional inherited amounts as the dependent variable. For this estimation we use Poisson regression, which allows using a dependent variable with zero amounts while the coefficient estimates can still be interpreted as percentage effects. The results are not substantially different from those in Tables 7 and 8. Table E.1 shows somewhat stronger effects for proximity to the parental household. These results are still small and not robust enough to draw strong conclusions.

9 Results are provided in Tables E.2 and E.3 in Appendix E.

10 Results are provided in Tables E.4 and E.5 in Appendix E.

Table 8: Individual/Family Characteristics and Conditional Inheritance Amount

		(1)	(2)
Female		-0.06 (0.18)	0.03 (0.06)
Age	35-49	-1.74*** (0.66)	-0.12 (0.30)
	50-64	-6.05*** (0.75)	-0.32 (0.35)
	65+	-15.21*** (0.95)	-1.38*** (0.41)
Partner		-9.17*** (0.25)	0.31*** (0.08)
Children		-7.36*** (0.38)	-0.15 (0.12)
N. children		0.74*** (0.14)	-0.50*** (0.04)
Birth order		-2.34*** (0.09)	-0.10*** (0.03)
N. siblings		-17.46*** (0.14)	
Female parent		-4.52*** (0.31)	
Age of parent	50-64	28.92*** (1.94)	
	65-79	46.59*** (2.01)	
	80+	45.23*** (2.05)	
Partner of parent		-51.50*** (0.36)	
Nursing home of parent		-28.79*** (0.55)	
Family effects		No	Yes

Table 8: Individual/Family Characteristics and Conditional Inheritance Amount
(Continued)

	(1)	(2)
Wealth of children		
2nd quartile	2.00*** (0.39)	0.50*** (0.11)
3rd quartile	7.71*** (0.34)	1.03*** (0.10)
4th quartile	23.28*** (0.36)	1.32*** (0.11)
Wealth of parent		
2nd quartile	-28.10*** (2.90)	
3rd quartile	58.64*** (2.71)	
4th quartile	146.15*** (2.71)	
Location of parent		
Same municipality	-7.10*** (0.29)	0.48*** (0.09)
Same district	-8.88*** (0.36)	0.55*** (0.11)
Same neighborhood	-11.50*** (0.35)	2.71*** (0.13)
Living with parents	-17.50*** (0.86)	2.28*** (0.29)
Family effects	No	Yes

Notes: The dependent variable is the natural logarithm of the inherited amount. Only observations with an inherited amount above zero are included in the regressions. All coefficients are multiplied by one hundred. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. All estimates are based on 1,411,269 individual observations corresponding to 589,693 inheritances. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

non-sudden death have more time to decide and distribute their inheritances according to their wishes. This result indicates that the limited role of individual and parental characteristics in explaining the distribution of inheritances is not simply because they may be accidental and unplanned. Rather, it likely reflects a broader social norm of equal division.

Overall, our analysis of inheritance receipt does not show clear evidence for either altruism or exchanges, reflecting a pattern of equal division that implies that individual and parental characteristics play only a limited role. This pattern is partly the result of the Dutch legal system. As we explain in Section 2, Dutch law does not allow parents to fully disinherit their children. The latter are legally entitled to the so-called legitimate portion, which is equal to 50% of their share under equal division among siblings. Nevertheless, this rule still leaves parents some flexibility to distribute inheritance amounts unequally. Still, the strong tendency toward equal division indicates that the warm-glow motive, *i.e.* giving independently of children's needs and actions, is likely more relevant than the exchange and altruistic motives when it comes to inheritances. At societal level, this warm-glow giving is likely to reflect the presence of a social norm for the equal division of inheritances.

5.2 Gifts

We next turn to the analysis of inter-vivos gifts by examining the results of estimating Equation 2. In this case, the data have a panel structure, which allows us to control for unobserved time effects by including year dummies in all our estimations. As we mention in Section 3, we estimate separate regressions for individuals whose parents live together and individuals who have separated or widowed parents. Tables 9 and 10 present the results that we obtain for the probability of receiving a gift. As in the analysis of inheritances, we report effects as percentages of the likelihood of receiving a transfer within our data. That is 8.48% for children of parents who live together and 7.18% for children of parents who are separated or divorced.

Tables 9 and 10 show again that gender has only a very small effect on the probability of receiving a gift. The age of the child, on the other hand, has a strong negative effect, which becomes even stronger when controlling for family fixed effects. The presence of a partner and children show small positive effects that become somewhat larger when using only variation within families. Interestingly, birth order has only a minor effect that switches sign once we include family effects.¹¹ Notsurprisingly, a higher number of siblings reduces the likelihood of receipt, since the more children there are, the lower the chance that any of them will receive a gift. This variable is constant across families, so its effect cannot be estimated once family fixed effects are included.

Parental demographic characteristics appear to play a more pronounced role in explaining whether children receive gifts or not. The age of both parents has a very strong

11 The effect remains very small even when we include a full set of dummy variables for each specific position in the birth order rank.

Table 9: Individual/Family Characteristics and Gift Receipt
 - Parents Living Together -

		(1)	(2)
Female		0.46 (0.33)	-0.87*** (0.23)
Age	35-49	-12.12*** (0.57)	-17.67*** (0.56)
	50-64	-18.12*** (0.95)	-28.87*** (0.89)
	65+	-33.00*** (2.00)	-60.27*** (2.14)
Partner		4.20*** (0.42)	14.82*** (0.34)
Children		3.58*** (0.60)	10.37*** (0.47)
N. of children		-2.64*** (0.26)	-5.09*** (0.19)
Birth order		1.60*** (0.13)	-1.59*** (0.13)
N. of siblings		-11.85*** (0.23)	
Age of mother	50-64	32.79*** (0.83)	37.61*** (0.93)
	65-70	29.35*** (1.09)	20.65*** (1.29)
	80+	51.17*** (1.49)	23.75*** (1.84)
Age of father	50-64	12.56*** (1.01)	22.03*** (1.11)
	65-70	32.66*** (1.21)	41.93*** (1.40)
	80+	38.52*** (1.55)	35.05*** (1.87)
Family effects		No	Yes

Table 9: Individual/Family Characteristics and Gift Receipt
- Parents Living Together - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-5.45*** (0.44)	-3.38*** (0.44)
3rd quartile	5.94*** (0.44)	-11.84*** (0.43)
4th quartile	50.90*** (0.73)	-26.35*** (0.52)
Wealth of parents		
2nd quartile	-27.43*** (1.57)	-12.48*** (1.79)
3rd quartile	-15.39*** (1.36)	9.82*** (1.65)
4th quartile	34.91*** (1.34)	37.99*** (1.71)
Location of parents		
Same municipality	-2.52*** (0.67)	0.15 (0.50)
Same district	-1.05 (0.89)	0.25 (0.59)
Same neighborhood	2.35*** (0.73)	3.48*** (0.54)
Living with parents	-8.80*** (0.61)	-17.31*** (0.58)
Family effects		
	No	Yes

Notes: The dependent variable is a dummy variable that takes value one if an individual receives at least one gift in a given year. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are expressed as a percentage of the average of the dependent variable, that is 0.0848. All regressions include year dummies. All estimates are based on 8,436,205 individual observations corresponding to 303,873 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table 10: Individual/Family Characteristics and Gift Receipt
- Separated or Widowed Parents -

		(1)	(2)
Female		1.43*** (0.49)	-0.40 (0.36)
Age	35-49	-16.72*** (1.19)	-11.44*** (1.31)
	50-64	-20.73*** (1.45)	-19.17*** (1.66)
	65+	-29.65*** (1.90)	-34.82*** (2.04)
Partner		6.06*** (0.62)	12.73*** (0.55)
Children		4.26*** (0.91)	7.47*** (0.71)
N. of children		-1.55*** (0.35)	-2.90*** (0.27)
Birth order		-0.08 (0.17)	-0.86*** (0.17)
N. of siblings			
Age of mother	50-64	36.28*** (2.03)	59.18*** (2.52)
	65-70	60.89*** (2.39)	73.99*** (3.21)
	80+	96.44*** (2.56)	85.13*** (3.80)
Age of father	50-64	15.68*** (2.67)	31.24*** (3.28)
	65-70	45.76*** (2.96)	70.06*** (3.87)
	80+	83.46*** (3.25)	98.78*** (4.61)
Deceased mother		-4.72 (3.28)	-55.11*** (4.92)
Deceased father		-1.62 (3.55)	-14.59*** (5.31)
Family effects		No	Yes

Table 10: Individual/Family Characteristics and Gift Receipt
- Separated or Widowed Parents - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-1.65* (0.88)	-2.22** (0.90)
3rd quartile	1.99** (0.81)	-9.53*** (0.83)
4th quartile	20.96*** (1.00)	-21.72*** (0.88)
Wealth of mother		
2nd quartile	-55.31*** (1.79)	-36.50*** (2.12)
3rd quartile	-30.54*** (1.69)	3.82* (2.18)
4th quartile	23.59*** (1.70)	56.42*** (2.31)
Wealth of father		
2nd quartile	-59.31*** (2.09)	-39.33*** (2.46)
3rd quartile	-41.23*** (1.86)	-12.78*** (2.37)
4th quartile	2.78 (1.82)	23.67*** (2.63)
Family effects	No	Yes

Table 10: Individual/Family Characteristics and Gift Receipt
- Separated or Widowed Parents - (Continued)

	(1)	(2)
Location of mother		
Same municipality	0.43 (1.87)	1.54 (1.76)
Same district	-0.93 (2.39)	-3.55 (2.33)
Same neighborhood	1.32 (2.52)	-1.69 (4.01)
Living with mother	-9.72*** (1.60)	-26.09*** (1.68)
Location of father		
Same municipality	7.59*** (1.90)	0.96 (1.85)
Same district	7.76*** (2.26)	1.53 (2.53)
Same neighborhood	12.17*** (2.66)	3.01 (2.45)
Living with father	11.41*** (1.88)	-0.29 (2.05)
Family effects	No	Yes

Notes: The dependent variable is a dummy variable that takes value one if an individual receives at least one gift in a given year. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are expressed as a percentage of the average of the dependent variable, that is 0.0718. All regressions include year dummies. All estimates based on 3,671,251 individual observations corresponding to 171,985 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

positive effect, meaning that older parents are significantly more likely to give assets to their children. In addition, Table 10 shows that, when comparing siblings within families, the death of a parent increases the chance of receiving a gift. The effect is much larger for the death of a mother, which is likely due to mothers typically surviving longer than fathers, and due to the fact that parental gifts cannot be given once both parents are deceased.

Regarding the wealth indicators, the results in Column (1) in both Tables 9 and 10 show that, when comparing across families, children in higher wealth quartiles at $t - 1$ are more likely to receive gifts. As in Table 2, this reflects the fact that wealthier individuals are more likely to receive parental wealth transfers. However, very interestingly, the sign reverses when including family effects. Within families, poorer children are significantly more likely to receive wealth transfers from their parents. For example, Table 9 (10) shows that, compared to the first quartile, children in the fourth quartile of the wealth distribution are nearly 50.90% (20.96%) more likely to receive a gift without family fixed effects, but 36.35% (-21.72%) less likely once family fixed effects are included. This result is in line with the altruistic motive for giving. In this model, the utility that parents derive from giving is dependent on the utility that the children derive from receiving wealth. Therefore, it predicts that the children with the highest marginal utility of wealth (*i.e.* the poorest children) are more likely to receive parental gifts.

For parental wealth we see a clearer u-shape effect, meaning that having parents in the second or third quartile of the wealth distribution often reduces the chances of receiving gifts compared to having parents in the first quartile. This pattern is less clear when controlling for family fixed effects. In that case we find a clearer positive relation between parental wealth and the chance of receiving a gift. This result is not surprising since it is to be expected that wealthier parents are more likely to give wealth transfers.

Location indicators offer no evidence of an exchange motive. For children of parents who live together, we see only a small effect of living in the same neighborhood and a clear negative effect of living together with them. That is probably because children who live with their parents are more likely to receive transfers in kind rather than in cash or other forms of wealth. For widowed or separated parents, all estimated effects are very small and not statistically significant,¹² except for a strong negative effect of living in the maternal household. These patterns do not support evidence for an exchange motive.

Tables 11 and 12 show the results that we obtain using conditional amounts received as a dependent variable. Results for several of the characteristics we observe are similar to those reported in Tables 9 and 10. For instance, we see again a negative effect of the age of the children and a positive effect of the age of the parents, even though in this case the effects are smaller. Most importantly, we find, yet again, negligible gender effects. In addition, as in the case for gift receipt, we observe a positive effect of the wealth of the children when not controlling for family effects. Tables 11 and 12 show also a reversal of the

¹² Note that parents we consider to be widowed or separated could be remarried.

Table 11: Individual/Family Characteristics and Conditional Gift Amount
 - Parents Living Together -

		(1)	(2)
Female		0.01 (0.29)	-1.03*** (0.13)
Age	35-49	-6.10*** (0.45)	-0.38 (0.39)
	50-64	-8.55*** (0.77)	-1.40** (0.58)
	65+	-15.18*** (1.72)	-7.25*** (2.00)
Partner		-5.11*** (0.34)	0.67*** (0.22)
Children		-1.46*** (0.52)	0.90*** (0.30)
N. of children		0.93*** (0.23)	-0.13 (0.12)
Birth order		0.16 (0.13)	0.21*** (0.08)
N. of siblings		-6.66*** (0.25)	
Age of mother	50-64	-0.47 (1.51)	7.59*** (2.27)
	65-70	0.58 (1.61)	6.83*** (2.44)
	80+	1.27 (1.79)	5.61** (2.73)
Age of father	50-64	1.39 (2.19)	6.13* (3.20)
	65-70	3.72* (2.25)	10.94*** (3.32)
	80+	3.93* (2.37)	9.15*** (3.52)
Family effects		No	Yes

Table 11: Individual/Family Characteristics and Conditional Gift Amount
- Parents Living Together - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	0.23 (0.43)	0.34 (0.36)
3rd quartile	6.73*** (0.41)	-1.27*** (0.32)
4th quartile	31.99*** (0.51)	-3.03*** (0.34)
Wealth of parents		
2nd quartile	-29.24*** (2.27)	3.29 (4.37)
3rd quartile	-36.16*** (1.45)	-0.96 (2.32)
4th quartile	10.21*** (1.34)	3.26* (1.73)
Location of parents		
Same municipality	-3.51*** (0.57)	0.12 (0.32)
Same district	-2.47*** (0.63)	0.50 (0.36)
Same neighborhood	1.28** (0.57)	1.80** (0.34)
Living with parents	12.76*** (0.61)	1.79*** (0.49)
Family effects		
	No	Yes

Notes: The dependent variable is the natural logarithm of the gifted amount. Only observations with an inherited amount above zero are included in the regressions. All coefficients are multiplied by 100. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. They are based on 716,001 individual observations corresponding to 303,873 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table 12: Individual/Family Characteristics and Conditional Gift Amount
- Separated or Widowed Parents -

		(1)	(2)
Female		0.43 (0.45)	-0.32 (0.20)
Age	35-49	-3.44*** (0.85)	1.07 (0.89)
	50-64	-5.72*** (1.19)	-0.25 (1.07)
	65+	-10.68*** (1.79)	-5.93*** (1.50)
Partner		-4.79*** (0.54)	0.12 (0.35)
Children		-0.28 (0.85)	0.81* (0.47)
N. of children		0.85** (0.36)	-0.12 (0.15)
Birth order		0.24 (0.20)	-0.17 (0.12)
N. of siblings		-9.75*** (0.33)	
Age of mother	50-64	4.95* (2.39)	1.33 (5.15)
	65-70	11.91*** (3.07)	7.96 (5.55)
	80+	16.36*** (3.14)	7.95 (5.92)
Age of father	50-64	4.49 (4.28)	16.42** (6.99)
	65-70	6.65 (4.36)	20.03*** (7.36)
	80+	11.08** (4.45)	23.29*** (7.90)
Deceased mother		2.66 (3.91)	5.40 (7.53)
Deceased father		3.80 (4.73)	17.01** (8.20)
Family effects		No	Yes

Table 12: Individual/Family Characteristics and Conditional Gift Amount
- Separated or Widowed Parents - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-0.33 (0.75)	0.28 (0.62)
3rd quartile	4.66*** (0.68)	-0.94* (0.55)
4th quartile	30.87*** (0.78)	-2.44*** (0.56)
Wealth of mother		
2nd quartile	-19.62*** (1.88)	-0.46 (3.21)
3rd quartile	-25.06*** (1.59)	-5.34* (3.20)
4th quartile	14.96*** (1.52)	3.54 (2.98)
Wealth of father		
2nd quartile	-23.94*** (2.08)	-1.71 (4.26)
3rd quartile	-28.59*** (1.69)	-3.02 (3.68)
4th quartile	11.59*** (2.15)	-1.32 (3.15)
Family effects	No	Yes

Table 12: Individual/Family Characteristics and Conditional Gift Amount
- Separated or Widowed Parents - (Continued)

	(1)	(2)
Location of mother		
Same municipality	-1.17 (1.29)	-0.88 (1.05)
Same district	0.80 (1.66)	-0.60 (1.31)
Same neighbourhood	1.43 (1.81)	-1.26 (1.28)
Living with mother	8.92*** (1.43)	-0.37 (1.33)
Location of father		
Same municipality	1.85 (1.38)	-1.19 (1.09)
Same district	3.61** (1.77)	2.22 (1.48)
Same neighborhood	4.17** (1.85)	4.85*** (1.67)
Living with father	11.04*** (1.67)	0.52 (1.66)
Family effects	No	Yes

Notes: The dependent variable is the natural logarithm of the gifted amount. Only observations with an inherited amount above zero are included in the regressions. All coefficients are multiplied by 100. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. They are based on 263,781 individual observations corresponding to 171,985 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

effect once we include family effects. However, in this case the negative effect estimated with within-family variation only is rather small. This indicates that wealthier children receive larger amounts, but that within families, conditional on receipt, all siblings tend to receive rather similar amounts. For the location dummies, we estimate again effects that are very small and in most cases not significantly different from zero.¹³ As we mention in Section 4, we also estimate the gift regressions by sudden and non-sudden deaths. In addition, we re-estimate all baseline analyses using only individuals who are both in the data selection for gifts and for inheritances. All of these analyses lead to results that are very similar to those we already discussed.¹⁴

Overall, the gift results point to a clear altruistic motive: within families, parents direct transfers to children with lower wealth. As in the analysis for inheritances, there is no evidence for an exchange motive, given the very small effects that we estimate for gender and proximity to the parental household. However, given the results for the wealth indicators, contrary to inheritances, we can say that inter-vivos gifts appear to be actively used as a tool for intra-family wealth redistribution.

13 Tables E.6 and E.7 in Appendix E provide the results we obtain using unconditional gifted amounts as a dependent variable.

14 Results of the analysis of gift receipt and amounts by sudden and non-sudden deaths, as well as of the re-estimation using only individuals who receive both gifts and inheritances are available upon request.

6. Conclusions

In this paper, we examine the within-family allocation of inter-vivos gifts and inheritances in the Netherlands, with the aim of identifying the relative importance of exchange, altruistic, and warm-glow motives for giving. Using administrative data covering the full Dutch population between 2007 and 2021, we find distinct patterns for gifts and inheritances.

Inheritances are overwhelmingly divided equally among siblings, with little systematic variation by individual or parental characteristics. This holds even when we distinguish between sudden and non-sudden deaths, where the latter should provide more scope for planning. The absence of systematic differences suggests that the equal division of inheritances is not merely the by-product of accidental inheritances, but rather reflects deliberate choices. While Dutch inheritance law prevents parents from fully disinheriting their children, it still leaves room for substantial discretion. The strong tendency toward equal division therefore points to powerful social norms and is consistent with a warm-glow motive for giving.

Gifts, on the contrary, display a clear altruistic component: within families, parents give more to children who are financially worse off. This indicates that gifts serve as a vehicle for intra-family redistribution and may complement public programs that are directed toward economically disadvantaged households. In addition, we find no evidence of an exchange motive as variables recognized in the literature as proxies for informal care (gender and physical proximity to the parental household) do not appear to have relevant effects on the distribution of gifts and inheritances. This result is consistent with earlier evidence for the Netherlands (Rellstab et al., 2020; Suari-Andreu & van Lent, 2025), and it likely reflects the generous public long-term care system (Bakx et al., 2016), which reduces the need for private compensation. This contrasts with some of the evidence for the US context, where several studies have found giving patterns that are consistent with the exchange motive (Cox & Rank, 1992; McGarry, 2016; Norton et al., 2013).

Our findings carry implications for both redistribution via the public transfers system and via inheritance taxation. As mentioned in the introduction, our analysis is particularly relevant for the pension industry since individuals tend to receive private transfers (especially inheritances) close to their retirement, while givers of gifts and inheritances tend to be older than the mandatory pension age. The altruistic nature of inter-vivos gifts suggests that families actively use them to compensate financially disadvantaged children, which may partially offset inequalities in pension wealth accumulation. In addition, pension funds and annuity providers should consider that retirees are likely to preserve and transfer assets through gifts rather than fully drawing down their savings. Given the relevance of the altruistic motive, the timing of these gifts is likely to relate to having children who are experiencing financial hardship.

At the same time, the equal division of inheritances (consistent with warm-glow giving)

implies limited scope for inheritances to reduce pension wealth inequality, since they are independent of the recipients' financial needs. On the tax side, the absence of an exchange motive suggests limited justification for tax relief that would be tied to informal care provision. This likely reflects the generosity of the Dutch public long-term care system. Finally, since warm-glow giving is likely to be relatively inelastic with respect to taxation, inheritance tax revenues may be more stable than previously assumed.

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Appendices

A Gift and Inheritance Tax Schedule in the Netherlands

Table A.1: Gift and Inheritance Tax Rates (before 01/01/2010)

Brackets (1000 €)	Partners and children	Grandchildren	Siblings and parents	Non-relatives
0-22	5%	8%	26%	41%
22-45	8%	13%	30%	45%
45-90	12%	19%	35%	50%
90-180	15%	24%	39%	54%
180-360	19%	30%	44%	59%
365-900	23%	37%	48%	63%
Above 900	27%	43%	53%	68%

Note: Both before and after the 2010 reform, gifts are not considered part of the inheritance as long as they take place within six months before death.

Exemptions for gifts before 01/01/2010 (1000 €):

- **Children:** 4.5.
- **Children 18 to 35 years of age (one-time):** 23.
- **Others:** 3.

Exemptions for inheritances before 01/01/2010 (1000 €):

- **Partners (married):** 530.
- **Partners (not married):** 100 - 530, depending on length of cohabitation.
- **Children \geq 23 years:** 10, provided that inheritance $<$ 27.
- **Children $<$ 23 years:** 4.5 per year below 23, with a minimum of 10.
- **Handicapped children:** 4.5 per year below 23, with a minimum of 14. 10 if children are older than 23 years.
- **Parents:** 45.
- **Grandchildren:** 10, provided that inheritance $<$ 10.

Table A.2: Gift and Inheritance Tax Rates (after 01/01/2010)

Brackets (1000 €)	Partners and children	Grandchildren	Others
0-118	10%	18%	30%
Above 118	20%	36%	40%

Note: Both before and after the 2010 reform, gifts are not considered part of the inheritance as long as they take place within six months before death.

- **Others: 2.**

Exemptions for gifts after 01/01/2010 (1000 €):

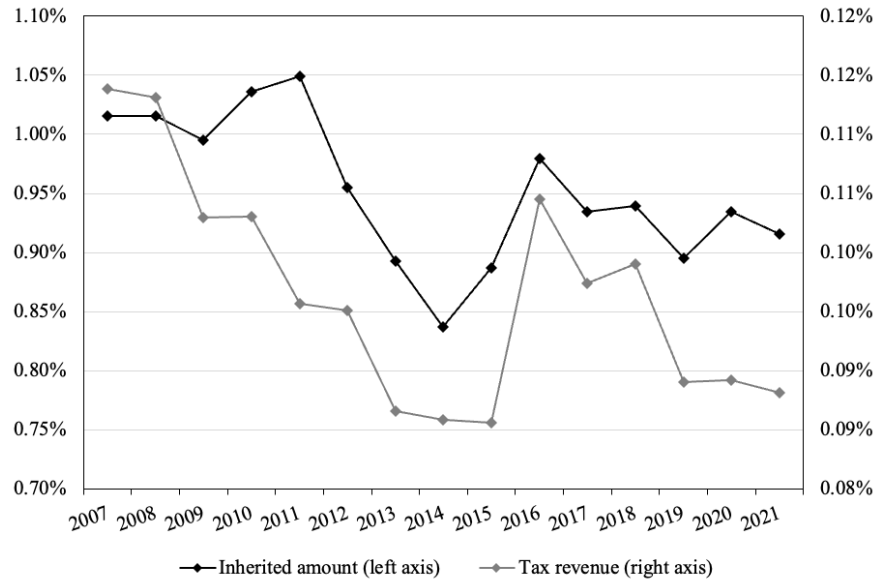
- **Children: 5.**
- **Children from 18 to 35 years (one-time): 24.**
- **Children from 18 to 35 years (one-time, if used for home purchase or studies): 50.**
- **Others: 2.**

Exemptions for inheritances after 01/01/2010 (1000 €):

- **Partners: 600.**
- **Children and grandchildren: 19.**
- **Handicapped children: 57.**
- **Parents: 45.**
- **Others: 2.**

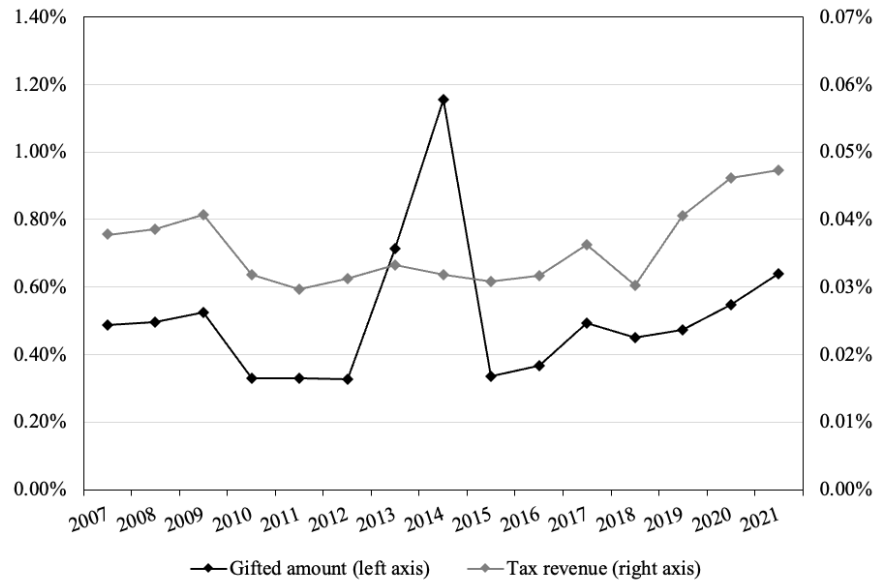
B Aggregate Gifts and Inheritances

Figure B.1: Aggregate Inheritances (% of GDP)



Notes: Total yearly inheritance amount from parents to children, as provided by CBS, are shown as a percentage of GDP, also provided by CBS.

Figure B.2: Aggregate Gifts (% of GDP)



Notes: Total yearly gifted amount from parents to children, as provided by CBS, are shown as a percentage of GDP, also provided by CBS.

C Summary Statistics

Table C.1: Summary Statistics for Inheritances

Female		49.23%
Age		
	18-34	8.96%
	35-49	31.81%
	50-64	51.68%
	65+	7.55%
Partner		73.64%
Children		74.03%
N. of children		1.66
Birth order		1.99
N. of siblings		3.49
Female parent		50.47%
Age of parent		
	35-49	0.99%
	50-64	7.23%
	65-79	27.93%
	80+	63.85%
Partner of parent		39.25%
Nursing home of parent		19.45%
Wealth children		
	1st quartile	14.63%
	2nd quartile	11.42%
	3rd quartile	28.45%
	4th quartile	45.49%
Wealth of parent		
	1st quartile	1.32%
	2nd quartile	5.11%
	3rd quartile	22.27%
	4th quartile	71.31%
Location of parent		
	Different municipality	57.25%
	Same municipality	42.75%
	Same district	25.95%
	Same neighborhood	15.66%
	Living with parent	3.62%

Table C.2: Summary Statistics Gifts

Female		48.14%
Age		
	18-34	34.05%
	35-49	38.34%
	50-64	23.92%
	65+	3.69%
Partner		66.24%
Children		67.19%
N. of children		1.43
Birth order		1.89
N. of siblings		2.92
Separated parents		11.97%
Age of mother		
	35-49	2.96%
	50-64	37.48%
	65-79	38.80%
	80+	20.76%
Age father		
	35-49	1.43%
	50-64	34.36%
	65-79	41.82%
	80+	22.38%
Deceased mother		8.89%
Deceased father		11.64%
Wealth of children		
	1st quartile	27.12%
	2nd quartile	12.60%
	3rd quartile	25.43%
	4th quartile	34.85%
Wealth of parents		
	1st quartile	1.40%
	2nd quartile	1.54%
	3rd quartile	9.86%
	4th quartile	87.20%

Table C.2: Summary Statistics Gifts (Continued)

Wealth of mother		
	1st quartile	8.72%
	2nd quartile	9.30%
	3rd quartile	18.55%
	4th quartile	63.43%
Wealth of father		
	1st quartile	12.56%
	2nd quartile	6.74%
	3rd quartile	17.65%
	4th quartile	63.04%
Location of parents		
	Different municipality	46.99%
	Same municipality	53.01%
	Same district	39.70%
	Same neighborhood	30.13%
	Living with parents	18.65%
Location mother		
	Different municipality	51.45%
	Same municipality	48.55%
	Same district	33.99%
	Same neighborhood	27.06%
	Living with mother	8.95%
Location of father		
	Different municipality	62.86%
	Same municipality	37.14%
	Same district	22.22%
	Same neighborhood	15.64%
	Living with father	6.55%

D Analysis with LISS data

Table D.1: Frequency of Help Provided to Parents by Gender
- Last Three Months -

	Male	Female	Total
None	59.20%	50.56%	54.37%
Once or twice	24.92%	26.73%	25.93%
Several times	15.88%	22.71%	19.70%

Source: Longitudinal Internet studies for the Social Sciences (LISS). Notes: The data provided are answers to the question *Did you provide any help to your father/mother over the past three months in the household, such as preparing food, cleaning, grocery shopping, or doing the laundry?* These answers correspond to the survey waves between 2008 and 2023. We select individuals between 30 and 65 years old with at least one living parent, which results in a total of 33,581 individual-year observations.

Table D.2: Frequency of Help Provided to Parents by Distance
- Last Three Months -

	Distance in kilometers between parents and children						Total
	0-10	10-20	20-30	30-40	40-50	50+	
None	47.66%	60.38%	60.44%	60.86%	58.90%	61.07%	53.48%
Once or twice	28.33%	23.98%	26.21%	25.04%	25.23%	25.44%	26.91%
Several times	24.01%	15.64%	13.34%	14.10%	15.87%	13.49%	19.61%

Source: Longitudinal Internet studies for the Social Sciences (LISS). Notes: The data provided are answers to the question *Did you provide any help to your father/mother over the past three months in the household, such as preparing food, cleaning, grocery shopping, or doing the laundry?* These answers correspond to the survey waves between 2008 and 2023. We select individuals between 30 and 65 years old with at least one living parent, which results in a total of 31,953 individual-year observations. Distance is calculated by LISS based on the postal codes of parents and children.

Table D.3: Frequency of Help Provided to Parents by Gender
- Last Week -

	Male	Female	Total
Yes/no	36.29%	39.56%	38.11%
Hours	1.52	2.09	1.84
Hours (conditional)	4.18	5.28	4.82

Source: Longitudinal Internet studies for the Social Sciences (LISS). Notes: The data provided are answers to the question *How much time did you spend in the last seven days in helping your parents (for instance, assistance with administrative chores, washing, dressing, taking someone to see the doctor, etc.)?* These answers correspond to the survey waves of 2009, 2010, 2012, 2015, 2017, and 2019. We select individuals between 30 and 65 years old with at least one living parent, which results in a total of 11,922 individual-year observations. The variable *Yes/no* refers to a dummy that takes value one if the individual has dedicated more than zero hours to helping their parents in the last week. *Hours* and *Hours (conditional)* refer to the unconditional and conditional average weekly hours, respectively.

Table D.4: Frequency of Help Provided to Parents by Distance
- Last Week -

	Distance in kilometers between parents and children						Total
	0-10	10-20	20-30	30-40	40-50	50+	
Yes/no	47.27%	36.1%	36.25%	32.73%	28.57%	32.82%	40.98%
Hours	2.18	1.94	1.65	1.80	1.28	1.69	1.96
Hours (cond.)	4.61	4.89	4.54	5.49	4.48	5.16	4.47

Source: Longitudinal Internet studies for the Social Sciences (LISS). Notes: The data provided are answers to the question *How much time did you spend in the last seven days in helping your parents (for instance, assistance with administrative chores, washing, dressing, taking someone to see the doctor, etc.)?* These answers correspond to the survey waves of 2009, 2010, 2012, 2015, 2017, and 2019. We select individuals between 30 and 65 years old with at least one living parent, which results in a total of 9,250 individual-year observations. The variable *Yes/no* refers to a dummy that takes value one if the individual has dedicated more than zero hours to helping their parents in the last week. *Hours* and *Hours (conditional)* refer to the unconditional and conditional average weekly hours, respectively. Distance is calculated by LISS based on the postal codes of parents and children.

E Additional Results

Table E.1: Individual/Family Characteristics and Unconditional Inheritance Amount

		(1)	(2)
Female		-0.36 (1.36)	-0.63 (0.55)
Age	35-49	-6.85*** (2.62)	8.20*** (2.53)
	50-64	-15.06*** (2.83)	3.76 (3.50)
	65+	-19.65*** (3.36)	-0.83 (4.26)
Partner		-17.62*** (2.09)	-0.61 (0.78)
Children		0.82 (2.18)	3.85*** (1.30)
N. of children		0.64 (0.86)	-0.45 (0.31)
Birth order		-3.11*** (0.52)	0.15 (0.42)
N. of siblings		-23.01*** (0.63)	
Female parent		-8.95*** (1.53)	
Age of parent	50-64	6.51 (5.09)	
	65-79	12.78** (5.32)	
	80+	4.46 (5.65)	
Partner of parent		-47.29*** (2.43)	
Nursing home of parent		-34.46*** (1.17)	
Family effects		No	Yes

Table E.1: Individual/Family Characteristics and Unconditional Inheritance Amount
(Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-3.09* (1.61)	-0.64 (0.11)
3rd quartile	6.70*** (1.76)	1.71 (1.33)
4th quartile	48.99*** (2.31)	3.70*** (1.28)
Wealth of parent		
2nd quartile	-81.07*** (6.52)	
3rd quartile	-30.56*** (6.42)	
4th quartile	81.40*** (6.48)	
Location of parent		
Same municipality	-9.70*** (1.02)	3.35*** (0.34)
Same district	-3.00 (3.70)	4.77*** (0.93)
Same neighborhood	-10.17*** (3.84)	7.22*** (0.81)
Living with parents	-16.90*** (3.19)	4.23** (1.83)
Family effects	No	Yes

Notes: Coefficient estimates are obtained using Poisson regression. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. All estimates are based on 1,582,735 individual observations corresponding to 589,693 inheritances. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.2: Individual/Family Characteristics and Inheritance Receipt
- Singles vs Couples -

		Singles		Couples	
		(1)	(2)	(3)	(4)
Female		0.17** (0.07)	0.09 (0.07)	0.27*** (0.05)	0.31*** (0.06)
Age	35-49	4.43*** (0.28)	4.23*** (0.45)	0.64*** (0.13)	-0.02 (0.21)
	50-64	3.26*** (0.31)	3.76*** (0.49)	-0.55*** (0.17)	-0.63** (0.27)
	65+	1.86*** (0.35)	3.06*** (0.54)	-4.79*** (0.46)	-2.07*** (0.65)
Partner		1.35*** (0.09)	1.72*** (0.1)	0.14* (0.08)	0.35*** (0.09)
Children		-1.33*** (0.15)	-0.6*** (0.15)	1.27*** (0.13)	1.18*** (0.14)
N. of children		0.27*** (0.06)	-0.14*** (0.05)	0.28*** (0.05)	-0.02 (0.05)
Birth order		-0.01 (0.04)	0.15*** (0.03)	-0.22*** (0.04)	-0.11*** (0.04)
N. of siblings		-3.35*** (0.15)		-1.51*** (0.06)	
Gender of parents		-0.84*** (0.11)		0.03 (0.08)	
Age of parent	50-64	-3.79*** (0.69)		-2.77*** (0.27)	
	65-79	-4.70*** (0.72)		-2.32*** (0.30)	
	80+	-5.57*** (0.73)		-2.07*** (0.32)	
Nursing home of parent		-0.22 (0.15)			
Family effects		No	Yes	No	Yes

Table E.2: Individual/Family Characteristics and Inheritance Receipt
- Singles vs Couples - (Continued)

	Singles		Couples	
	(1)	(2)	(3)	(4)
Wealth of children				
2nd quartile	1.10*** (0.16)	0.89*** (0.17)	0.39*** (0.11)	0.33** (0.13)
3rd quartile	2.70*** (0.14)	2.09*** (0.14)	1.42*** (0.09)	1.24*** (0.12)
4rth quartile	3.40*** (0.15)	2.35*** (0.15)	1.75*** (0.10)	1.42*** (0.12)
Wealth of parent				
2nd quartile	1.20* (0.70)		1.83** (0.75)	
3rd quartile	12.11*** (0.65)		5.76*** (0.62)	
4rth quartile	18.29*** (0.65)		9.35*** (0.61)	
Location of parent				
Same municipality	1.27*** (0.11)	2.86*** (0.11)	0.76*** (0.08)	1.69*** (0.10)
Same district	1.41*** (0.14)	3.27*** (0.14)	1.00*** (0.09)	1.97*** (0.11)
Same neighborhood	-0.54*** (0.13)	3.10*** (0.14)	1.04*** (0.08)	2.82*** (0.12)
With parents	2.65*** (0.47)	0.23 (0.75)	-0.89*** (0.19)	-0.68** (0.27)
Family effects	No	Yes	No	Yes

Notes: The dependent variable is a dummy variable that takes value one if an individual receives an inheritance. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are obtained in the same way as in Table 7 but separating singles and couples. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.3: Individual/Family Characteristics and Inheritance Amount
- Singles vs Couples -

		Singles		Couples	
		(1)	(2)	(3)	(4)
Female		0.26 (0.24)	0.20** (0.09)	-0.64** (0.25)	-0.21*** (0.08)
Age	35-49	-16.58*** (1.26)	1.18* (0.69)	3.03*** (0.76)	-0.75** (0.31)
	50-64	-23.86*** (1.36)	1.03 (0.74)	1.94** (0.91)	-1.14*** (0.38)
	65+	-29.73*** (1.51)	-0.06 (0.79)	7.90*** (1.88)	-1.78*** (0.68)
Partner		-9.33*** (0.33)	0.09 (0.11)	-7.49*** (0.38)	0.67*** (0.11)
Children		-8.63*** (0.50)	-0.34** (0.16)	-3.90*** (0.54)	0.20 (0.16)
N.of children		0.21 (0.18)	-0.55*** (0.06)	1.03*** (0.20)	-0.40*** (0.06)
Birth order		-2.43*** (0.12)	-0.12*** (0.04)	-2.54*** (0.11)	-0.03 (0.04)
N. of siblings		-19.05*** (0.18)		-12.96*** (0.20)	
Gender of parents		-5.15*** (0.42)		3.03*** (0.45)	
Age of parent	50-64	15.69*** (4.34)		32.06*** (2.10)	
	65-79	19.88*** (4.45)		50.95*** (2.19)	
	80+	11.33** (4.48)		57.60*** (2.25)	
Nursing home of parent		-25.60*** (0.56)			
Family effects		No	Yes	No	Yes

Table E.3: Individual/Family Characteristics and Inheritance Amount
- Singles vs Couples - (Continued)

	Singles		Couples	
	(1)	(2)	(3)	(4)
Wealth of children				
2nd quartile	2.35*** (0.56)	0.79*** (0.17)	1.93*** (0.53)	0.15 (0.13)
3rd quartile	5.20*** (0.49)	1.35*** (0.15)	10.72*** (0.47)	0.64*** (0.12)
4th quartile	16.81*** (0.51)	1.72*** (0.16)	32.34*** (0.51)	0.74*** (0.14)
Wealth of parent				
2nd quartile	-18.96*** (3.66)		-41.06*** (5.21)	
3rd quartile	72.19*** (3.50)		45.22*** (4.38)	
4th quartile	155.61*** (3.50)		141.76*** (4.37)	
Location of parent				
Same municipality	-7.34*** (0.40)	0.72*** (0.12)	-6.79*** (0.42)	0.09 (0.11)
Same district	-10.03*** (0.51)	0.67*** (0.15)	-6.78*** (0.49)	0.38*** (0.14)
Same neighborhood	-15.36*** (0.49)	3.52*** (0.18)	-7.45*** (0.49)	1.50*** (0.17)
With parents	-10.19*** (2.14)	-1.40 (0.90)	-8.27*** (0.97)	2.50*** (0.31)
Family effects	No	Yes	No	Yes

Notes: The dependent variable is the natural logarithm of the inherited amount. Only observations with an inherited amount above zero are included in the regressions. All coefficients are multiplied by one hundred. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are obtained in the same way as in Table 8 but separating singles and couples. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.4: Individual/Family Characteristics and Inheritance Receipt
- Sudden vs Non-Sudden Deaths -

		Sudden Death		Non-Sudden Death	
		(1)	(2)	(3)	(4)
Female		0.16 (0.11)	0.22 (0.12)	0.21*** (0.06)	0.16*** (0.06)
Age	35-49	3.42*** (0.37)	3.00*** (0.56)	1.84*** (0.14)	0.83*** (0.22)
	50-64	2.11*** (0.43)	2.23*** (0.63)	0.79*** (0.18)	0.22 (0.27)
	65+	0.38 (0.54)	1.28 (0.75)	-1.00*** (0.27)	-0.36 (0.37)
Partner		0.93*** (0.15)	1.23*** (0.16)	0.75*** (0.08)	1.11*** (0.08)
Children		-1.01*** (0.22)	-0.07 (0.23)	0.16 (0.12)	0.46*** (0.12)
N. of children		0.51*** (0.09)	0.01 (0.07)	0.22*** (0.04)	-0.15*** (0.04)
Birth order		-0.25*** (0.07)	0.06 (0.06)	-0.17*** (0.04)	0.07** (0.03)
N. of siblings		-2.79*** (0.09)		-2.60*** (0.05)	
Female parent		-1.06*** (0.19)		-0.66*** (0.09)	
Age of parent	50-64	-5.12*** (0.70)		-3.82*** (0.31)	
	65-79	-4.89*** (0.77)		-3.59*** (0.34)	
	80+	-5.27*** (0.80)		-3.96*** (0.36)	
Partner of parent		2.11*** (0.19)		1.83*** (0.10)	
Nursing home of parent		-0.23 (0.33)		-0.42** (0.18)	
Family effects		No	Yes	No	Yes

Table E.4: Individual/Family Characteristics and Inheritance Receipt
- Sudden vs Non-Sudden Deaths - (Continued)

	Sudden Death		Non-Sudden Death	
	(1)	(2)	(3)	(4)
Wealth of children				
2nd quartile	0.85*** (0.26)	0.47* (0.26)	0.58*** (0.12)	0.62*** (0.13)
3rd quartile	2.30*** (0.22)	2.07*** (0.23)	1.93*** (0.10)	1.54*** (0.11)
4th quartile	3.06*** (0.23)	2.24*** (0.23)	2.51*** (0.10)	1.86*** (0.11)
Wealth of parent				
2nd quartile	-0.06 (1.27)		-0.92 (0.62)	
3rd quartile	10.14*** (1.17)		9.51*** (0.55)	
4th quartile	16.03*** (1.16)		14.44*** (0.55)	
Location of parent				
Same municipality	1.37*** (0.17)	2.66*** (0.18)	1.09*** (0.08)	2.33*** (0.09)
Same district	1.18*** (0.21)	2.96*** (0.21)	1.29*** (0.10)	2.62*** (0.11)
Same neighborhood	-0.01 (0.20)	2.99*** (0.23)	0.26*** (0.09)	3.02*** (0.11)
Living with parents	-0.07 (0.50)	-1.34* (0.70)	0.36* (0.21)	0.68** (0.30)
Family effects	No	Yes	No	Yes

Notes: The dependent variable is a dummy variable that takes value one if an individual receives an inheritance. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are obtained in the same way as in Table 7 but separating sudden deaths from non-sudden deaths. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.5: Individual/Family Characteristics and Inheritance Amount
- Sudden vs Non-Sudden Deaths -

		Sudden Death		Non-Sudden Death	
		(1)	(2)	(3)	(4)
Female		0.31 (0.40)	0.15 (0.13)	-0.24 (0.21)	-0.03 (0.07)
Age	35-49	-3.09* (1.78)	0.28 (0.66)	-0.35 (0.73)	-0.47 (0.34)
	50-64	-6.72*** (1.95)	0.29 (0.75)	-4.37*** (0.85)	-0.79** (0.40)
	65+	-14.71*** (2.30)	-0.85 (0.88)	-12.82*** (1.15)	-1.84*** (0.49)
Partner		-9.05*** (0.57)	0.31* (0.18)	-8.88*** (0.30)	0.33*** (0.10)
Children		-5.94*** (0.84)	-0.40 (0.25)	-7.40*** (0.45)	0.03 (0.14)
N. of children		0.12 (0.31)	-0.39*** (0.09)	0.98*** (0.17)	-0.55*** (0.05)
Birth order		-2.39*** (0.19)	-0.11* (0.06)	-2.39*** (0.10)	-0.09** (0.04)
N. of siblings		-17.33*** (0.30)		-17.40*** (0.18)	
Gender of parents		-6.28*** (0.72)		-3.43*** (0.37)	
Age of parent	50-64	25.65*** (5.01)		30.39*** (2.23)	
	65-79	44.96*** (5.18)		47.97*** (2.30)	
	80+	42.19*** (5.23)		46.38*** (2.35)	
Partner of parent		-47.88*** (0.83)		-52.78*** (0.43)	
Nursing home of parent		-27.35*** (1.18)		-29.93*** (0.71)	
Family effects		No	Yes	No	Yes

Table E.5: Individual/Family Characteristics and Inheritance Amount
- Sudden vs Non-Sudden Deaths - (Continued)

	Sudden Death		Non-Sudden Death	
	(1)	(2)	(3)	(4)
Wealth of children				
2nd quartile	0.82 (0.93)	0.39 (0.26)	2.16*** (0.46)	0.51*** (0.13)
3rd quartile	6.17*** (0.80)	1.17*** (0.22)	8.19*** (0.40)	0.95*** (0.12)
4th quartile	20.80*** (0.84)	1.42*** (0.25)	24.18*** (0.43)	1.27*** (0.13)
Wealth of parent				
2nd quartile	-29.09*** (6.79)		-30.60*** (3.42)	
3rd quartile	50.37*** (6.44)		58.82*** (3.16)	
4th quartile	138.25*** (6.44)		146.19*** (3.16)	
Location of parent				
Same municipality	-5.72*** (0.67)	0.61*** (0.20)	-6.50*** (0.36)	0.41*** (0.10)
Same district	-9.24*** (0.81)	0.49** (0.22)	-8.42*** (0.43)	0.52*** (0.13)
Same neighborhood	-10.00*** (0.81)	3.13*** (0.27)	-7.42*** (0.42)	2.56*** (0.15)
Living with parents	-27.69*** (2.25)	3.33*** (0.64)	-26.44*** (1.00)	2.10*** (0.34)
Family effects	No	Yes	No	Yes

Notes: The dependent variable is the natural logarithm of the inherited amount. Only observations with an inherited amount above zero are included in the regressions. All coefficients are multiplied by one hundred. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All results are obtained in the same way as in Table 8 but separating sudden deaths from non-sudden deaths. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.6: Individual/Family Characteristics and Unconditional Gift Amount
 - Parents Living Together -

		(1)	(2)
Female		-2.67*** (0.80)	-5.44*** (0.66)
Age	35-49	-15.80*** (1.53)	-14.08*** (1.66)
	50-64	-24.51*** (2.55)	-33.42*** (2.46)
	65+	-47.44*** (4.64)	-72.17*** (3.64)
Partner		-4.86*** (1.26)	15.83*** (0.93)
Children		-1.04 (0.69)	14.57*** (1.20)
N. of children		0.62 (0.69)	-6.06*** (0.57)
Birth order		2.70*** (0.39)	-1.63*** (0.33)
N. of siblings		-19.90*** (0.61)	
Age of mother	50-64	60.06*** (3.22)	80.16*** (3.67)
	65-70	54.54*** (3.53)	55.97*** (4.86)
	80+	71.77*** (4.47)	61.71*** (6.32)
Age of father	50-64	38.75*** (4.16)	57.60*** (4.99)
	65-70	60.15*** (4.50)	82.90*** (6.01)
	80+	66.62*** (5.61)	76.50*** (7.29)
Family effects		No	Yes

Table E.6: Individual/Family Characteristics and Unconditional Gift Amount
- Parents Living Together - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-8.56*** (1.09)	-2.95** (1.14)
3rd quartile	12.28*** (1.73)	-13.57*** (1.60)
4th quartile	80.13*** (1.61)	-37.19*** (1.70)
Wealth of parents		
2nd quartile	-82.72*** (9.34)	-35.37*** (12.01)
3rd quartile	-75.90*** (7.24)	-11.74** (4.92)
4th quartile	42.47*** (2.55)	38.31*** (4.74)
Location of parents		
Same municipality	-5.79*** (1.88)	0.61 (1.74)
Same district	-3.23* (1.86)	1.30 (1.56)
Same neighborhood	4.52*** (1.65)	9.66*** (1.98)
Living with parents	1.80 (1.83)	-24.95*** (1.92)
Family effects	No	Yes

Notes: Coefficient estimates are obtained using Poisson regression. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. All estimates are based on 8,436,205 individual observations corresponding to 303,873 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.

Table E.7: Individual/Family Characteristics and Unconditional Gift Amount
- Separated or Widowed Parents -

		(1)	(2)
Female		4.98 (4.34)	-0.93 (1.10)
Age	35-49	-11.29** (5.27)	-0.11 (3.76)
	50-64	-11.50** (5.64)	-8.73 (5.71)
	65+	-36.89*** (7.36)	-45.54*** (7.99)
Partner		-6.15*** (1.99)	14.35*** (3.36)
Children		-3.51 (3.51)	2.83 (4.76)
N. of children		1.20 (1.06)	-2.39** (1.12)
Birth order		0.25 (1.62)	-1.86 (2.58)
N. of siblings		-21.13*** (1.74)	
Age of mother	50-64	54.86*** (8.46)	81.21*** (6.46)
	65-70	91.90*** (10.34)	116.16*** (10.41)
	80+	116.43*** (9.83)	116.46*** (9.77)
Age of father	50-64	41.99*** (8.58)	66.02*** (13.96)
	65-70	65.51*** (10.06)	99.83*** (15.89)
	80+	85.47*** (9.17)	83.08** (32.69)
Deceased mother		-47.47*** (12.20)	-95.57*** (16.61)
Deceased father		1.78 (10.87)	-10.33 (22.77)
Family effects		No	Yes

Table E.7: Individual/Family Characteristics and Unconditional Gift Amount II
 - Separated or Widowed Parents - (Continued)

	(1)	(2)
Wealth of children		
2nd quartile	-15.54 (10.06)	-10.64 (8.28)
3rd quartile	-3.70 (10.70)	-21.96** (9.45)
4th quartile	43.98*** (10.59)	-41.96*** (12.64)
Wealth of mother		
2nd quartile	-75.14*** (4.82)	-28.25*** (7.45)
3rd quartile	-55.12*** (4.20)	1.42 (7.28)
4th quartile	33.41*** (5.35)	51.19*** (7.84)
Wealth of mother		
2nd quartile	-86.41*** (5.36)	-38.29*** (7.02)
3rd quartile	-72.90*** (4.75)	-10.67 (8.19)
4th quartile	22.90*** (6.05)	30.03*** (9.96)
Family effects	No	Yes

Table E.7: Individual/Family Characteristics and Unconditional Gift Amount II
 - Separated or Widowed Parents - (Continued)

	(1)	(2)
Location of mother		
Same municipality	-17.25** (7.44)	-2.43 (4.23)
Same district	10.68 (14.68)	6.28 (9.04)
Same neighborhood	-10.22 (8.00)	-14.04* (7.63)
Living with mother	3.81 (8.80)	-25.92*** (5.17)
Location of father		
Same municipality	9.40 (6.96)	-11.84** (5.45)
Same district	8.86 (9.24)	5.82 (11.50)
Same neighborhood	19.20 (12.55)	12.03 (12.41)
Living with father	26.68*** (7.86)	8.05 (6.82)
Family effects	No	Yes

Notes: Coefficient estimates are obtained using Poisson regression. The reference category for Age is 18-35. The reference category for Age of mother and Age of father is 35-50. All regressions include year dummies. All estimates are based on 3,671,251 individual observations corresponding to 171,985 families. *Significant at the 10% level, ** significant at the 5% level, * significant at the 1% level.



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