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Abstract

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This thesis studies inter vivos transfers in twenty European countries during the years 2004 to 2017. Inter vivos transfers are transfers made during the lifetime of the donor and the donee. They participate in the intergenerational transmission of inequality and they are an expression of familial values of solidarity and support. Based on a longitudinal survey that is nationally representative of individuals aged 50 years and above (Survey of Health, Ageing and Retirement in Europe (SHARE)), I describe the incidence of inter vivos transfers across countries. In chapter 1, I argue against the relevance of the "three worlds of welfare state capitalism" framework. The highest country rate of transfers is eight times higher than the lowest country rate of transfers, while, within countries, the ratio of the 75^{th} to the 25^{th} percentile reaches $6/1$ for income and $3/1$ for wealth. In chapter 2, I assess the importance of donee and donor characteristics with the help of mixed-effects logistic and negative binomial regressions. Gender stands out as an important factor. I find a slight daughter advantage in the probability of receiving a transfer. It is, however, largely mediated by the fact that daughters are more likely to provide social support to parents and that social support is generally correlated with inter

vivos transfers. In chapter 3, I survey two existing theories of inter vivos transfers – altruism and exchange – and I add the reciprocity principle from Maussian gift-exchange framework as an explanation. Using random-effects logistic regression and sequence analysis, I show that the evidence favors altruism over exchange and reciprocity. While the majority of potential donor-donee dyads never engage in transfer, among those who do, unilateral transfers, either from parent to adult child or vice versa, are the majority.

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Introduction

The question of wealth and its intergenerational transmission has gained salience in recent years, not least because of the remarkable accumulation at the top of the income and wealth ladders in both developing and developed countries. Two hundred years ago, it was the stuff of popular novels. "Who will Mr Darcy marry and how much does he really make in a year?," asks Jane Austen. She was not alone in her preoccupation with status, income, social mobility, and how gender refracts them. Daniel Shaviro (2020) shows how novelists from Austen to Edith Wharton chronicled and dissected processes that today are the domain of dry treatises by academics. He makes out three ways in which individuals climbed the social (or income) ladder in those times: inheritance, marriage, and (industrial) swindle. Without wanting to dispute the continued relevance of these channels today, I modestly undertake to study a fourth in this thesis: inter vivos transfers.

Inter vivos transfers are transfers made during the lifetime of both parties, the donor and the donee. In contrasts with bequests, they are more intentional in that the donor may decide on their timing depending on personal considerations or events in the life of the donee. They can also intervene at almost any point of the donor's and donee's lives, while the timing of bequests during the beneficiaries' lifetime depends strongly on the life expectancy of the donor cohort and their average age at child birth. We lack the data to assess through which channel, inter vivos transfers or bequests, more wealth is transmitted between generations, but

we can study how inter vivos transfers are distributed between social classes, between genders, and across countries.

Despite the newfound interest in income and wealth inequality, inter vivos transfers have not yet received a complete treatment. Income inequality and its consequences, from social mobility to health to racial inequality, have been intensely studied by economists and sociologists in recent decades (to cite but three eminent examples: Piketty and Saez, 2003; Chetty et al., 2016; Milanović, 2016). Wealth inequality and its effects, too, have been studied in numerous dissertations, articles, and even popular non-fiction (see especially: Pfeffer, 2010; Piketty, 2014). Yet, there is often a gap between the antecedent – income or wealth inequality – and the resultant – health disparities, segregated schools, etc. – where a transmission mechanism is assumed or theorized but not empirically described. Inter vivos transfers are one such mechanism of the intergenerational transmission of inequality.

But the importance of inter vivos transfers goes beyond completing a chain of which we already hold the beginning and the end. My findings show that the vast majority of inter vivos transfers happen between parents and their children. Studying these transfers – when do they happen, who initiates them, who benefits –, helps us understand the role of the family in perpetuating advantage and inequality. Theories ranging from utilitarian to symbolic have been proposed to explain these transfers that resemble but are fundamentally different from market-based exchange. In chapter 1, I examine cross-national differences in transfer behavior to test the proposition that inter vivos transfers are a reaction to the strength of the welfare state. In chapter 2, I focus on characteristics of transfer recipients, in particular their gender, and how they reflect the gendered nature of the welfare

state. In chapter 3, I survey three theories – altruism, exchange, and reciprocity – explaining inter vivos transfers and I evaluate how well they describe behaviors in different countries.

Throughout this thesis, I use data from the SHARE. The advantage of SHARE is threefold: it is longitudinal; it covers the recent period (2004-2017); and it covers a wide variety of European countries, including Southern and Eastern European countries seldom studied (see table B.1, p. 183)(Ferragina, 2020; Wood and Gough, 2006; Fenger, 2007). SHARE's longitudinal nature enables the study of sequencing of gifts and counter-gifts exchanged between parents and children (ch. 3). Its recency gives me leverage to adjudicate between prior research finding a son advantage in parental investment and more recent results that point to increasing equality, if not a daughter advantage (ch. 2). The country coverage of SHARE makes it a good basis for comparisons of welfare state theories and their applicability beyond their initial narrow range of Western European countries (ch. 1).

Chapter 1 examines cross-national differences in inter vivos transfers across twenty European countries, covering a wide geographic and socio-political range, from Sweden to Italy, from Portugal to Estonia. It establishes several descriptive results. First, transfers from parents to adult children are the most common form of transfer. Transfers from non-parents to other people or from parents to other recipients than a child are very rare in all countries. Second, there are important cross-country differences in levels of inter vivos transfers. Giving inter vivos transfers is eight times more common in the country with the highest incidence per year (Denmark, $\approx 40\%$ of respondents aged 50 years and older) than in the country with the lowest incidence (Spain, $\approx 5\%$). Third, the frequency of transfers across years is relatively stable. The robustness of this finding is, however,

diminished by the fact that we lack data for the period around the financial crisis of 2008 because of a change of questionnaire in 2008 and the temporary suspension of participation of certain countries. Fourth, the within-country differences between different income and wealth percentiles are almost as important as differences between countries. As mentioned above, the ratio of the highest-frequency country to the lowest-frequency country is $8/1$. The ratio of the 75^{th} over the 25^{th} income percentile has its maximum at $6/1$. Interestingly, the range for the wealth interquartile range is lower. Finally, there seems to be no correlation between the frequency of inter vivos transfers and types of welfare states, at least as posited by the three worlds of welfare capitalism school.

In order to evaluate to what degree the existing country differences are due to socio-demographic differences between countries, I estimate the parameters of linear models of incidence of inter vivos transfers and of count of inter vivos transfers at the individual level. Including a host of socio-demographic covariates in these models does not change the relative distribution of countries or welfare state types. This suggests that differences are not primarily due to factors such age distribution, education levels, or family structure. Including household income results in a general levelling of differences. Post-soviet Eastern European countries come to resemble their Central and Western European neighbors more closely. Finally, the inclusion of household wealth has a perceptible but small effect, smaller than that of income. This goes against theories of inter vivos transfers being primarily dependent on having financial, as opposed to illiquid, wealth.

Chapter 2 delves deeper into the role of individuals' characteristics. Having established that the vast majority of transfers happen from parents to adult children,

I ask what makes a child a more likely recipient than another child. Previous literature has established that parents invest in their children unequally (Kornrich, 2016; Kornrich and Furstenberg, 2013; Henretta et al., 2012; Raley and Bianchi, 2006). The child's gender and the sibship's gender composition were identified as important predictors, next to sibship size (Powell and Steelman, 1990). For inter vivos transfers in particular, a handful of studies suggests that there exists a son preference or, at least, a preference of sons over daughters in sibships where there are both. However, the majority of these studies focuses on the United States and the period before 2000. More recent research and findings on gender differences in education, employment, and wages suggest a movement towards greater equality (Loxton, 2019; Nordblom and Ohlsson, 2010). I test the existence of a gender difference in inter vivos transfer receipt by estimating the parameters of a linear model of transfer receipt. Given that the expected effect is small or possibly even null, I estimate the parameters of a hierarchical model within each country in order to more faithfully model the structure of the data. I conclude to the absence of a son preference in all countries. On the contrary, in certain countries, a daughter preference seems to prevail. However, the daughter preference, i.e. the positive effect of being a daughter rather than a son on the predicted probability of receiving a transfer, disappears as soon as I control for the provision of personal help from children to parents. In other words, daughters are more likely to provide social support to parents and are "rewarded" with inter vivos transfers. Controlling for this behavior systematically reduces the daughter premium across countries, even reverting the effect into its opposite for certain countries. I find no systematic pattern in the cross-country variation of daughter and son effects. Yet, future research

into the role of female labor force participation, family policies, and gender roles may find a fertile ground here.

Chapter 3 reviews three theories of non-market-based exchange – altruism, exchange (social and economic), and reciprocity – and attempts to evaluate how well they describe actual behavior. Altruism was born from economists' attempts to explain within-family, non-market-based transfers (Becker, 1981a,b; Barro, 1974; Cox, 1987; Bernheim, Shleifer, and Summers, 1985). Elaborate theories of combined utility functions across parents and children gave birth to precise numeric predictions. The data, however, did not oblige (Cox, 1987; Cox and Rank, 1992; Norton and Van Houtven, 2006; Van Houtven and Norton, 2008). Altruism theory could not explain the transfer amounts and lost prominence. Exchange theories, in two variations, took its place. Economic exchange theory posited a utilitarian exchange between parents and children: money for attention or support. Its signal prediction was that, since parents compensate children for their opportunity costs, higher-income children should receive higher inter vivos transfers for the same amount of attention or support (Cox and Rank, 1992; Norton and Van Houtven, 2006; Hochguertel and Ohlsson, 2009). Again, empirical support was at best mixed. Social exchange theory arrived at similar predictions, admittedly from a very different conceptual starting point. Reciprocity theory – which is what I call Marcel Mauss' theory of gift exchange as presented in *The Gift* –, on the other hand, focuses not so much on amounts as on the obligation to reciprocate and the respect of a certain interval before doing so, the interval serving to separate two transfers from each other and transforming each into a *sui generis* act of generosity (Mauss, 1923; Bourdieu, 1980, 1994). Using sequence analysis, I show that the vast majority of parent-child dyads never experience a transfer in either

direction (Abbott and Forrest, 1986; Abbott and Tsay, 2000; Fasang, 2010; Studer, 2012). The next most frequent configuration is unilateral parental transfer toward a child. I find that approximately ten percent of parent-child dyads are engaged in something resembling exchange or reciprocity. The chapter concludes, therefore, to a renewed attention given to altruism and to its conceptual enlargement beyond dollar-for-dollar elasticities to other indicators of child need.

CHAPTER 1

Crossnational patterns of inter vivos transfers and household wealth

1.1. Introduction

Intergenerational financial transfers are an important mode of the intergenerational transmission of advantage (Spilerman and Francois-Charles Wolff, 2012; McKernan et al., 2014; Semyonov and Lewin-Epstein, 2001; Gale and Scholz, 1994; Marco Albertini and Radl, 2012; L. J. Kotlikoff and Summers, 1981; Modigliani, 1988; Altonji, Hayashi, and L. Kotlikoff, 1997; Arrondel, Garbinti, and Masson, 2014). Such transfers can happen between living individuals–inter vivos–or at death.[1] Inter vivos transfers are deserving of particular attention because of their preferential tax treatment and because the longer people live, the more inter vivos transfers tend to replace bequests (E. N. Wolff and Gittleman, 2011; Johnson and Eller, 1998; Rudick, 1950).[2] The objective of this chapter is to confront mainstream comparative frameworks with a wider range of countries, to evaluate the extent to which inter vivos transfers depend on household wealth and income, and to update previous empirical results by using more recent data.

[1] The literature on transfers sometimes mistakenly speaks of transfers "mortis causa" when referring to transfers at death. Strictly speaking, a transfer mortis causa or donatio mortis causa is a death-bed gift, i.e. a gift made in contemplation of impending death while the donor is still alive and conditional on said death.

[2] The precise proportion of total annual wealth transfers that falls under either category remains an open question.

Few studies approach inter vivos transfers from an explicitly comparative perspective. Welfare state regime theories posit that individuals derive their livelihood (or standards of living) from the market, the state, or their family (for an overview of contributions and debates, see: Arts and Gelissen, 2002). Previous authors concluded that different social policy environments should result in corresponding intergenerational transfer patterns. The SHARE, first fielded in 2004, sparked an effort to compare differences in transfer patterns across European countries (M. Albertini, M. Kohli, and Vogel, 2007; Zissimopoulos and Smith, 2011). The authors found that transfers were frequent but modest in the Scandinavian countries and rare but high in Mediterranean countries, with Continental countries in between.[3] There is no consensus as to whether this or other differences are idiosyncratic, due to differences in social policies, or due to different status maintenance strategies. Pfeffer (2010) used two long-running panel studies, the Panel Study of Income Dynamics (PSID) and the German Socio-Economic Panel (GSOEP), to evaluate the effect of wealth on filial educational and occupational attainment in the United States and Germany, respectively. While he did not specifically look at intergenerational transfers, he found that parental household wealth had an impact that was distinct and of similar magnitude to parental income and occupation, though parental education remained the most important factor.[4] If transfers are as dependent on household wealth as on income or more so, studying wealth more closely may help us find some of the missing answers to the comparative puzzle.

[3] SHARE does not include the United Kingdom; English Longitudinal Study of Ageing (ELSA) is the equivalent study for England.

[4] Other countries in which wealth has been linked to economic, social, and health outcomes include Israel, Mexico, Chile, and Brazil (Torche and Spilerman, 2006, 2009; Torche and Costa-Ribeiro, 2012; Semyonov, Lewin-Epstein, and Maskileyson, 2013; Hochman and Skopek, 2013).

This chapter tests the hypotheses that welfare state regime types explain different levels of inter vivos transfers, that household wealth mediates within-country differences in transfers, and that household wealth accounts (at least partially) for cross-country differences as well.

Using crossnationally comparable household survey data, I calculate country-level average probabilities for a transfer to an adult child, adjusting for demographic and socio-economic traits. These data allow me to update previous empirical results by using more recent waves of the Survey of Health, Ageing and Retirement in Europe and to confront the existing comparative frameworks with a wider range of countries, which includes, for the first time, Central and Eastern European countries. I also estimate transfer probabilities by income and wealth percentiles. Respondents in the top deciles of income and wealth are between 2 and 4 times more likely to provide financial support to an adult child than respondents in the bottom decile or quartile. The findings further demonstrate that within-country variation is as large as cross-country variation and that the theory-based country groupings are not empirically borne out, in contradiction with canonical welfare state regime theory.

This chapter proceeds as follows. The next section discusses the existing research on inter vivos transfers. Section 3 presents the data. Section 4 describes the analytical strategy. Section 5 discusses the results. Section 6 concludes.

1.2. Previous literature on intergenerational financial transfers

1.2.1. A cross-disciplinary perspective

Sociology and its disciplinary neighbors offer a variety of frameworks to analyze inter vivos transfers, albeit few comparative ones. Sociologists have analyzed intergenerational inter vivos transfers mostly with regard to their impact on social mobility (Berry, 2008; Marco Albertini and Radl, 2012; Arrondel, Garbinti, and Masson, 2014). They have found that most financial transfers flow to younger generations (i.e. less than 50 years old) and, of those, most are intended to help with the costs of homeownership, before education and living expenses (Semyonov and Lewin-Epstein, 2001; Spilerman, 2004; Spilerman and Francois-Charles Wolff, 2012). While some authors see a clear correspondence between levels of welfare state generosity and levels of familial support—as measured by inter vivos transfers—, others underline incongruent cases and disagreements on how to categorize different countries (Attias-Donfut, Ogg, and François-Charles Wolff, 2005; M. Albertini, M. Kohli, and Vogel, 2007; Marco Albertini and Radl, 2012; Marco Albertini and Martin Kohli, 2013). Most of these studies focus on European countries and Israel, and use nationally representative surveys from the last three decades. An earlier stream of sociological research, based on cohort studies in the United States from the early 1980s, investigated parental financial support during college and found a striking imbalance in favor of sons over daughters (across families and including single children)(Powell and Steelman, 1989, 1995). [5]

At the same time, economists used data from the earliest waves of the Health and Retirement Study (HRS) to test formal models of inter vivos transfers that were

[5]Henretta et al. (2012) found no gender differences, based on the 2001 HRS.

based on the idea of consumption smoothing across a combined parental-filial utility function (Cox, 1987; Cox and Rank, 1992; Altonji, Hayashi, and L. Kotlikoff, 1997). The predictions of the consumption smoothing model were not borne out by the data. The results are, however, still useful because they provide an estimate of the degree to which inter vivos transfers are conditioned by the recipient's income and because they demonstrate based on almost ideal data that insurance against income fluctuation is not a sufficient motive for these transfers. Inter vivos transfers have thus been linked to a variety of outcomes, mostly related to questions of intergenerational transmission of advantage. Fewer studies have focused on the determinants of inter vivos transfers.

While previous research has demonstrated that inter vivos transfers are implicated in many processes of social reproduction, less is know about what enables or constrains inter vivos transfers. Many studies still focus on income as the source of inter vivos transfers, but the increasing availability of data on household assets has allowed researchers to investigate wealth as well. However, when the link between transfers and social mobility is analyzed, household (or parental) wealth is most often included as a control but not an explanatory variable (M. Albertini, M. Kohli, and Vogel, 2007; Zissimopoulos and Smith, 2011; Marco Albertini and Radl, 2012) and, conversely, when the effect of household wealth on various outcomes — from health to homeownership — is estimated, inter vivos transfers are discussed as potential pathways but are not explicitly investigated (Pfeffer, 2010; Semyonov, Lewin-Epstein, and Maskileyson, 2013; Hällsten and Pfeffer, 2017). This chapter focuses on the first step in this process, *viz.* inter vivos transfers, in different welfare state contexts.

As mentioned above, sociologists have examined the frequency, amounts, and intended uses of transfers but rarely their antecedents. There are several reasons to think that the level and composition of wealth has an impact on transfers. High levels of wealth reduce the need to save for retirement or emergencies, thereby freeing up income for other purposes. High levels of wealth may also create pressure to be seen as generous to one's offspring or to help them attain or maintain a status comparable to one's own. The composition of one's wealth is important too, if only because different forms of capital are more or less fungible. If most of one's wealth is tied up in one's residence, it may be of little use in an emergency, such as illness or unemployment, but it can be mortgaged to finance more long-term projects, such as education or homeownership. Another important dimension is one's wealth rank, and possibly its recent evolution, at least with regard to status theories. Wealth rank and wealth composition are likely dependent on institutional context, which I turn to next.

1.2.2. A cross-national perspective

Intergenerational inter vivos transfers vary considerably in frequency and magnitude across countries (for recent overviews on the United States and Europe, see: Berry, 2008; M. Albertini, M. Kohli, and Vogel, 2007). If we suppose that up to three generations coexist at a given moment, then there are some transfer directions that are more likely than others. For instance, it seems very unlikely that either the parent or child generation will provide support towards education or childcare to the grandparent generation. [6] In fact, all transfers are not empirically

[6] I use a three-generation terminology: "grandparents," "pivot (generation|couple)," and "children" (Arrondel and Masson, 2001; Solon, 2014; Mare, 2014; Hällsten, 2014). These terms do not denote age or dependency, but simply the genealogical (or life-cycle) position.

equally likely. M. Albertini, M. Kohli, and Vogel (2007) analyze intergenerational financial transfers in a dozen European countries in 2004 and find that there is a North-South gradient of transfer frequency and amounts (see also: Marco Albertini and Martin Kohli, 2013). In Scandinavian countries, parents (pivots) send their children frequent transfers of small amounts, while parental financial support in Mediterranean countries is rare but elevated. At the same time, the authors find that in-kind transfers (help with personal care or household tasks) are more common in Southern countries and consist mostly of support provided by pivots to their parents. Countries that would be classified as "conservative" welfare states are somewhere between the two. However, M. Albertini, M. Kohli, and Vogel (2007) don't investigate variations by household assets or by sibship composition. This chapter aims to fill this gap with regard to household assets. Sibship composition is discussed in the next chapter.

Existing scholarship agrees that individuals rely on three pillars to guarantee their livelihood: the market, the state, or their family (Esping-Andersen, 1990; Sainsbury, 1994; O'Connor, Orloff, and Shaver, 1999). [7] Esping-Andersen (1990) proposed a typology of "welfare state regimes" that analyzes the interactions between the three. [8] His is a historical instituionalist explanation of inequality that focuses on how states decide the level and form of redistributive policies. [9] Despite many criticisms and vigorous debate, it remains the dominant paradigm. It also

[7] Note that the family is not necessarily the only non-state, non-market actor that is likely to contribute to an individual's livelihood. Religious charities, unions, and other organizations—often amalgamated under the label "civil society"—could potentially fulfil this role.

[8] For a summary of the original model and an overview of subsequent criticisms and extensions, see, for example, Arts and Gelissen (2002) and Fenger (2007).

[9] The major competing framework, Hall and Soskice's *varieties of capitalism* centers on the behavior of firms and seeks to explain the disposition of capitalist production in different countries. Because I focus on households and how they, and the individuals within them, react to issues of distribution (which I assume they do post-tax post-transfer), I focus on the former.

implies very different aggregate levels of inter vivos transfers for different regime types. Therefore, I will briefly sketch the framework before discussing important criticisms and extensions.

1.2.3. Three worlds of welfare capitalism

Esping-Andersen (1990) distinguishes three welfare state regimes—social-democratic, corporatist, and liberal— based on their degree of decommodification, stratification, and subsidiarity. [10]

Decommodification refers to "the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation" (ibid., p. 37). [11] Put differently, the definition entails that "citizens can freely, and without potential loss of job, income, or general welfare, opt out of work when they themselves consider it necessary" (ibid., p. 23).

Stratification encompasses more than just the level of redistribution; it also describes the distinctive consequences of social policies on social cohesion and identity. For instance, means-testing often creates social stigma and occupational pensions create voter blocks with distinct interests. The implications of the form of social policies go beyond simple aggregate measures of equality or mobility.

Finally, Esping-Andersen distinguishes welfare state regimes according to whether they follow a *subsidiarity* principle or not. Subsidiarity, in this context, means that the state considers the family the basic social unit and designs its policies in a way that make the family their primary target, implementor, and relay. One example are elder-care subsidies in Germany, i.e. cash benefits intended to alleviate the

[10] For the purpose of this discussion, I ignore his later amendments to include further types. I discuss the issue of extending the framework to incorporate more countries at lengths below.
[11] Esping-Andersen (1990) explicitly underscores that it does not refer to the abolition of labor as a commodity.

costs of personal care and institutionalized living. They are conditional not only on the beneficiary's resources but also on the pooled resources of immediate kin, incl. surviving sibs and children.

The following three ideal-types of welfare state regimes result from the above:

"Conservative": (sometimes "corporatist") countries have an extensive welfare state but deliver many benefits "through" the family (or the parenting couple), via family benefits or taxes (including for adult children), and social policy follows a strong normative family model (usually, the male breadwinner model).[12] The Catholic Church has historically had a great impact, especially regarding family policy (non-working wives excluded from social insurance, family benefits encourage motherhood, child-care services underdeveloped). Social rights are conditional on class and status. The guiding principle is the maintenance of status differentials. Private insurance and fringe benefits are marginal. There is little redistribution. In consequence, a person may (have to) rely on their family because benefits are not delivered directly to the individual. In consequence, I expect *high levels of inter vivos transfers* in conservative countries. This group includes Austria, Germany, Luxembourg, the Netherlands, and Switzerland.

"Liberal": countries have a minimal welfare state, with different combinations of means-testing, stigmatization, and eligibility requirements. In consequence, I expect there to be *high familial financial support* in liberal countries, in times of need or as an alternative to the credit market. This group is typically comprised of the United States and other English-speaking

[12] I leave open the question of whether social policy causes a reliance on family or whether preexisting, strong family ties and support cause social policy to rely on them.

industrial countries (mostly the United Kingdom and its former colonies). Of the countries in our sample, Ireland is a liberal country, although its welfare state is rarely analyzed in the literature.

"Social-democratic": countries have an extensive welfare state and have the stated goal to enable and support every individual's material autonomy and welfare (at least at a given minimum level), independent of family background, labor market situation, and other factors. This universalism and extensive decommodification of social rights extends to the middle class in order to prevent the emergence of a privatized "second tier" of (health, unemployment, old age) insurance by creating a public "universal" second tier. In consequence, social rights and benefits must be adequate to the expectations of the middle class. The guiding principle is "an equality of the highest standards, not an equality of minimal needs" (Esping-Andersen, 1990, p. 27). In consequence, there should be *little need* for familial financial support in social-democratic countries. This group includes mostly Scandinavian countries, i.e. Denmark and Sweden in our sample.

Table 1.1 summarizes the original typology. To simplify, social-democratic welfare state regimes provide the most generous income support and also the most generous support during training or education. Conservative and liberal regimes are less generous, roughly in that order. In consequence, I expect that, in aggregate, inter vivos transfers will be most frequent or most voluminous in countries with liberal welfare state regimes, and least frequent or voluminous in social-democratic welfare state regimes.

H1: The frequency and volume of inter vivos transfers follows a decreasing pattern from liberal to social-democratic welfare state regimes: liberal > conservative > social-democratic.

This expectation rests on the assumption that inter vivos transfers are mostly intended to compensate for income loss or instability or to augment the beneficiary's human capital. Since liberal states have the least income support and replacement through social policy, we expect parents to help make up the gap. Conservative states have a higher level of income support and replacement and social-democratic ones the most.

Table 1.1. Welfare state regimes according to Esping-Andersen (1990)

Type	Ideal	Dominant institution	Countries
Conservative (or corporatist)	Solidarity	Family	Finland *Germany* Italy Japan Switzerland
Liberal	Liberty	Market	Australia Canada Ireland New Zealand United Kingdom *United States*
Social-democratic	Equality	State	Austria Belgium Denmark *Norway* *Sweden*

Note: Countries in italics are paradigmatic cases according to Esping-Andersen.

In the next two sections, I discuss two major streams of criticism with clear implications for comparative work on intrafamilial transfers: feminist critics who

argue that Esping-Andersen ignores the role of the family in ensuring social reproduction (Orloff, 1993; Sainsbury, 1994; O'Connor, Orloff, and Shaver, 1999; Orloff, 2009) and comparative scholars who point out that Mediterranean countries and other groups do not fit within the framework (Ferrera, 1996; Naldini, 2003; Poggio, 2008).

1.2.4. Integrating family and care responsibilities into the framework

The most fundamental substantive criticisms of Esping-Andersen's model have been formulated by, first, feminist authors who underline that it centers the economic and political experience of the male breadwinner and thereby ignores the majority of the population and, second, by international scholars who point to different countries outside but also within Europe that do not conform to the proposed typology. I will address these criticisms in the remainder of this section. [13]

Feminist authors have pointed out that, despite the inclusion of the subsidiarity principle, the empirical indicators that make up the different indices on which countries are sorted turn out to be largely related to labor market attachment, e.g. the level and conditions of unemployment, sickness, and old age insurance, weighted by their coverage (Esping-Andersen, 1990, p. 49). Similarly, the historical explanations that Esping-Andersen provides are based on changes in the power balance between employers and employees. A more inclusive framework would pay more attention to social rights and benefits attached to social reproduction, most importantly child care, and to cultural and political changes attached to the

[13] In addition, there are at least two serious methodological concerns with Esping-Andersen's typology that point to general challenges inherent in comparative welfare state frameworks. I discuss the methodological concerns in appendix **??**.

situation of carer, mother, and spouse (O'Connor, 1993; Orloff, 1993; Sainsbury, 1994; Orloff, 1996; O'Connor, Orloff, and Shaver, 1999).

In addition to this principled criticism, there are clear empirical problems with applying the welfare state regime typology as is to issues of care or social reproduction. For example, family policies, such as public child care facilities, child care allowances or tax credits, or parental leave, differ substantively across the countries categorized as conservative (France, Germany, Italy). While France provides extensive preschool public child care facilities and universal child allowances[14], neither is true for the other two. Italy especially relies heavily on the family to provide child and elder care (Ferrera, 1996). To illustrate the point further, Meyers and Gornick (2001) find, in an analysis of poverty among families with children aged 6 or younger and of maternal employment in thirteen countries, that, in terms of reducing pre-tax and -transfer family poverty, France and Belgium rate closer to Sweden and Denmark than to "conservative" neighbors. They also find that Norway is much less successful in reducing child poverty than its Nordic neighbors. This shows how Esping-Andersen, despite claiming to analyze the ability of "individuals and households" to maintain a certain standard of living, focuses in fact on a particular social position, that of a wage earner without care responsibilities. In consequence, the original welfare state regime framework has difficulties accommodating situations on the margins of the labor market or that include major care responsibilities.

What consequences does this have for our expections regarding inter vivos transfers? Above, I stated that, at the aggregate level, I expect inter vivos transfers to be inversely correlated to the state's commitment to compensate for income loss

[14]Child allowances may be capped conditional on household income at the initiative of President Emmanuel Macron and Prime Minister Edouard Philippe.

(and to finance training or education). It may be the case, however, that the state's commitment to keep children or families with children out of poverty is the more pertinent metric. One may imagine two simple logics. First, both social policies and private behavior are motivated by the same norms regarding social support and, therefore, covary (in level or comprehensiveness). Second, on the contrary, private transfers try to accomplish what the state can't or won't, i.e. both vary inversely. In other words, are inter vivos transfers substitutable—they compensate for the state's unwillingness or incapacity to provide—or cumulative—they mirror state action in the private realm—with state benefits? As a first approximation, I will assume that parents conform to a general norm of supportiveness, i.e. of aiding their children indiscriminately of their children's characteristics or behavior to the extent of the parents' abilities. This implies that inter vivos transfers are negatively correlated to a state's commitment to support and, if needed, replace the income of its citizens in times of hardship.

> **H2**: The frequency and volume of inter vivos transfers is negatively correlated with the state's efforts to reduce poverty among families with children.

There is, of course, a possibility that parents adapt their support depending on whether they approve of their child's situation or choice, e.g. regarding employment, marriage, parenting, or other issues. I discuss patterns of support conditional on "deservingness" and especially of normative gender roles in chapter 2.

In sum, this subsection argues that while Esping-Andersen's welfare state regime typology carries certain implications for expected aggregate levels of inter vivos transfers, its exclusive focus on full-time wage earner situations creates the need

to supplement it with better measures of a state's capacity to insure against economic and social risks those households or individuals that are non-normative, viz. predominantly carers.

Another limitation of the typology results from its limited sample of countries on which it has been built. The next subsection focuses on attempts to accommodate a greater range of countries and welfare state regime types.

1.2.5. Three or more worlds of welfare capitalism? Incorporating Southern and Eastern European countries

"The Three Worlds of Welfare Capitalism" included mostly Western democracies, but also Australia, Japan, and New Zealand (for the full list, see table 1.1, p. 35). Notably absent were African, Asian, Central and Eastern European (CEE), and Middle and South American countries (for an overview of work on these regions, see Wood and Gough, 2006). Given that welfare state regimes are asserted to result from the interaction between specific historical economic trajectories and political coalitions, countries with different economic and political pasts should develop different welfare state regimes.

Table 1.2 lists different attempts at a typology together with the names that they give to individual ideal-types. The table illustrates well how closely the different typologies resemble each other. Table 1.3 compares how different typologies attributed class membership differently (or not) to different countries. It is remarkable that despite the different analytical approaches—for example, focusing on institutions, on qualitative analyses of social policies, or on electoral coalitions—, most typologies overlap to a substantial degree in the number of types, the distribution of countries, and the characterization of the different types.

I focus here on Mediterranean and CEE countries.[15] Both of these regions display specific gender dynamics that make them interesting to a study of intrafamilial transfers. Proponents of a distinct Mediterranean welfare state regime – which I will call henceforth"familialist" – commonly point out that the subsidiarity principle, i.e. the family is the primary social unit for social policy purposes, is stronger there than even in other conservative countries (Ferrera, 1996; Naldini, 2003). Most post-Communist countries, on the other hand, displayed higher female labor market attachment, lower occupational gender segregation, more extensive (pre-school) child care facilities, and a more open ideological commitment to gender equality than their Western counterparts before 1990 (among many others: Rosenfeld, Trappe, and Gornick, 2004; Heyns, 2005). After 1990, their economic fortunes and institutional choices diverged, but one wonders whether there was a persistent effect on gender attitudes. Since this dissertation analyzes families' adaptation to different economic and policy environments, both Mediterranean and Central and Eastern European (CEE) countries add more nuance to the category of family-centered regimes. In this subsection, I briefly present the arguments proffered in support of distinct "familialist" and "post-Communist" regimes.

[15] I ignore other world regions for several reasons. First, Wood and Gough (2006) make it clear that an extensive welfare state requires a certain level of GDP per capita. The universe of possible cases is therefore smaller than the number of existing countries. Second, my focus is not on the completeness or accuracy of the typology per se, but how it can inform my analysis of intrafamilial behavior. Last, and not least, the availability of data constrains my choices.

Table 1.2. Names of ideal-types in different typologies

Type	I	II	III	IV	V
Esping-Andersen	Conservative	Liberal	Social-democratic		
Saint-Arnaud & Bernard	Conservative	Liberal	Social-democratic	Latin	
Leibfried	Bismarck	Anglo-Saxon	Scandinavian	Latin Rim	
Castles & Mitchell	Conservative	Liberal	Non-Right Hegemony		Radical
Siaroff	Advanced Christian-democratic	Protestant-Liberal	Protestant Social-democratic	Late Female Mobilization	
Ferrera	Bismarckian	Liberal	Scandinavian	Southern	
Bonoli	Continental	British	Northern	Southern	
Korpi & Palme	Corporatist	Basic Security	Encompassing		Targeted

Table 1.3. Comparison of countries' class membership in different typologies

Type	Esping-Andersen	Saint-Arnaud & Bernard	Leibfried	Castles & Mitchell	Siaroff	Ferrera	Bonoli	Korpi & Palme
I		Austria	Austria		Austria	Austria		Austria
		Belgium			Belgium	Belgium	Belgium	Belgium
	Finland							
		France			France	France	France	France
	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
	Italy			Italy				Italy
	Japan							Japan
					Luxembourg	Luxembourg	Luxembourg	
		Netherlands		Netherlands	Netherlands	Netherlands	Netherlands	
	Switzerland					Switzerland		
II	Australia	Australia	Australia		Australia			
	Canada	Canada			Canada			Canada
								Denmark
		Iceland						
	Ireland	Ireland		Ireland		Ireland	Ireland	Ireland
				Japan				
								Netherlands
	New Zealand	New Zealand	New Zealand		New Zealand			New Zealand
								Switzerland
	UK	UK	UK	Switzerland	UK			UK
	US	US	US		US	UK	UK	US
				US				
III	Austria							
	Belgium			Belgium				
	Denmark	Denmark	Denmark	Denmark	Denmark	Denmark	Denmark	
		Finland	Finland		Finland	Finland	Finland	Finland
	Norway	Norway	Norway	Norway	Norway	Norway	Norway	Norway
	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden

Continued on next page

Table 1.3 – *Continued from previous page*

Type	Esping-Andersen	Saint-Arnaud & Bernard	Leibfried	Castles & Mitchell	Siaroff	Ferrera	Bonoli	Korpi & Palme
IV		Greece	Greece France		Greece	Greece	Greece	
		Italy	Italy		Ireland Italy Japan	Italy	Italy	
		Portugal Spain	Portugal Spain		Portugal Spain Switzerland	Portugal Spain	Portugal Spain Switzerland	
V				Australia New Zealand UK				Australia

Previous research has arrived at a consensus that European Mediterranean countries represents a distinct regime type, albeit very close to the conservative type (Ferrera, 1996; Katrougalos, 1996; Esping-Andersen, 1999; Naldini, 2003). While researchers differ in their emphasis on institutional, economic, and demographic factors, a few commonly admitted distinctive features exist:

- a highly segmented welfare state, based on occupational status (similar to conservative regimes), resulting in great differences between labor market insiders and outsiders, between generations, and between regions;
- health care as a social right (closer to social-democratic than conservative regimes);
- greater reliance on or potential for private provision of service, further undermining the universalist potential of the welfare state;
- normative focus on the male breadwinner model and on extended kinship ties (e.g. obligations and benefits extend to grand-parents and siblings);
- potential for clientilism and patronage, because of preference for cash benefits and local management of services.

No such consensus exists on how to characterize Central and Eastern European countries. Esping-Andersen (1999) expected CEE countries to converge towards a conservative model. Based on hierarchical cluster analyses of demographic, policy, and political variables, Fenger (2007) rejects this suggestion. He finds that the CEE countries form a distinct group, even though they bear some resemblance to the conservative type. He distinguishes three groups of countries. The first—"former-USSR" countries (Belarus, Estonia, Latvia, Lithuania, Russia, Ukraine)—display a similar level of overall government spending, but slightly lower spending on various government programs and worse results on different social and public health

indicators. The second group—"post-Communist European" countries (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Slovakia)—spend slightly less overall and on specific programs, which situates them somewhere between the conservative and liberal regime type. Their social and public health indicators, however, are closer to the conservative average than the first group. The final cluster—"developing welfare state" countries (Georgia, Romania, Moldova)—spends even less in all categories, for worse results; a situation that Fenger (2007) attributes to a less fortunate transition period. Interestingly, all three groups have higher average female labor force participation than the conservative regime type, which confirms the expectations of previous research. More detailed studies on specific gender-related questions are focused on qualitative policy analyses or individual country case studies. This dissertation contributes to a still-developing literature on comparative welfare state analyses in post-1990 CEE countries.[16]

These caracterizations of Mediterranean and CEE countries lead to different expectations regarding transfers. Mediterranean countries, if they truly exhibit greater subsidiarity, should display higher aggregate levels of inter vivos transfers since benefits that target young adults or children are delivered through the family and "pass through" it to their final beneficiary in the form of inter vivos transfers. Yet, this expectation must be nuanced with regard to the highly segmented character of their welfare states. There should be greater variation between labor market insiders and outsiders, occupations, and regions, than in other regime types.

> H3: The frequency and volume of inter vivos transfers in familialist countries is higher than in other countries, liberal countries excepted.

[16]This perceived lack of studies is likely at least partially due to language restrictions. I am certain to have missed much that was published in domestic journals or languages.

CEE countries are expected to resemble conservative countries, with weaker state capacity. That would imply a high level of inter vivos transfers. But households in these countries also have had less time to build up wealth and older generations especially may have experienced depressed earnings growth during the 1990s. Due to these factors, the capacity of what I call the "pivot" generation (i.e. those with adult children, but also, often, still living parents) to initiate transfers may be limited, especially if, as I hypothesize, transfers draw from financial wealth. With regard to gender differences and care work, expections for the two country groups diverge again. The greater subsidiarity of Mediterranean countries is said to go hand in hand with greater emphasis on the male breadwinner model. CEE countries have higher female labor force participation rates than most conservative countries, which points to a lasting effect of greater ideological and economic gender equality.

In relation to the original triptych of social-democratic, conservative, and liberal countries, the "familialist" (Mediterranean) and "post-socialist" (Central and Eastern European) appear like variations of the conservative type. This is, however, a useful extension of the typology because it is within the conservative type that I expect the most variation with regard to inter vivos transfers (see section 1.2.4 above). The "familialist" type has similar state capacity but displays greater subsidiarity and a stronger male-breadwinner orientation than the original conservative type. The post-socialist type has less state capacity but gender and care roles are supposedly less normative.

> H4: Post-socialist countries are not a homogeneous group, with some approaching conservative countries and others forming their own group.

The next section presents the data used in the analysis.

1.3. Data

SHARE is a longitudinal cross-national survey of the non-institutionalized population of several European countries aged 50 years and above. SHARE started with 11 European countries in 2004 and covered 20 European countries in its latest iteration in 2017. It contains detailed data on family structure, family relationships, financial transfers, assets, and pension wealth, and is therefore well suited to study inter vivos transfers.

Given that SHARE is only representative of the national populations aged 50 years and older instead of the whole population, this is not a full picture of all transfers between adults. This is less of a limitation than it appears. François-Charles Wolff (2000) showed that the majority of financial transfers within families are downwards transfers between generations and that people aged 50 years and older as a group are net givers of material (and time) transfers, even compared to middle-aged adults a decade younger, based on data for the United States (see also: Kronebusch and Schlesinger, 1994). We do not know, however, whether this generalizes to other countries or periods.

I pool data across all waves (2004 - 2017, excl. wave 3).[17] Table 1.4 shows the number of respondents in the pooled sample. Table 1.5 shows the participating countries grouped by "family regime" type. Table B.1 shows the countries participating in SHARE and the fieldwork years for waves 1 through 7.

Dependent variable: *Occurence of transfer*. I focus on the occurence of self-reported transfers equivalent to ≥ 250 € or ≥ 5000 €.

SHARE asks the financial respondent (for up to three transfers):

[17] Wave 3 is excluded because it used a different (life-history) questionnaire.

Table 1.4. Sample size by country, pooled across waves

Country identifier	%	N
Austria	5.1	5,190
Belgium	8.5	8,608
Croatia	2.2	2,190
Czech Republic	7.3	7,454
Denmark	5.2	5,317
Estonia	7.3	7,380
France	7.1	7,190
Germany	7.4	7,519
Greece	5.6	5,682
Hungary	2.6	2,663
Ireland	0.8	821
Italy	7.2	7,308
Luxembourg	1.8	1,831
Netherlands	5.4	5,542
Poland	2.8	2,802
Portugal	1.7	1,777
Slovenia	4.9	5,033
Spain	7.3	7,402
Sweden	5.9	6,014
Switzerland	3.9	4,013
Total	100.0	101,736

> Now please think about the last twelve months. Not counting any shared housing or shared food, have you (or your)(husband/wife/partner) given any financial or material gift or support to any person inside or outside this household amounting to 250 € or more?

SHARE defines "financial or material gift" as "giving money, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home," excluding loans or donations to charities.

Starting in wave 4, an additional dichotomous transfer question is asked, with a higher threshold ($\geq$EUR5000) and a longer retrospective period ("since the last interview").

Table 1.5. Family regime coverage in SHARE

Regime/ Country	Wave 1 2004/5	Wave 2 2006/7	Wave 3 (omitted)	Wave 4 2011/12	Wave 5 2013	Wave 6 2015	Wave 7 2017
Anglo-Saxon							
Ireland		x					
Conservative							
Austria	x	x		x	x	x	x
Belgium	x	x		x	x	x	x
France	x	x		x	x	x	x
Germany	x	x		x	x	x	x
Netherlands	x	x		x	x		
Switzerland	x	x		x	x	x	x
Eastern European							
Czech Republic		x		x	x	x	x
Estonia				x	x	x	
Hungary				x			
Poland		x		x		x	x
Social-democratic							
Denmark	x	x		x	x	x	x
Sweden	x	x		x	x	x	x
Southern							
Greece	x	x				x	x
Italy	x	x		x	x	x	x
Portugal				x		x	
Spain	x	x		x	x	x	x
Unclassified							
Croatia						x	
Luxembourg					x	x	
Slovenia				x	x	x	

The target of the transfer is identified by presenting the respondent with a list of potential beneficiaries. The list includes parents (incl. in-laws), siblings, children (incl. in-laws), grandchildren and -parents, relatives once removed, and other social relations. If the reported target is a child, SHARE asks which child. I distinguish between transfers to a child (including stepchildren, foster, and adoptive

children) and transfers to other relatives. I also distinguish between transfers originating from respondents with at least one living child and transfers from other individuals.[18]

It is likely that SHARE underestimates the frequency of gifts. First, respondents may only report up to three gifts per period. Second, the minimum amount leads to omission of smaller gifts. Third, the question defines the covered period as the 12 months preceding the interview. SHARE, however, takes place every two years. Therefore, gifts that take place during the 12 months after an interview but more than 12 months before the subsequent interview are not taken into account.

Dependent variable: *Amount of transfer*. During waves 1 and 2, SHARE reports the amounts of financial or material gifts given or received (in constant Euro amounts). If a respondent declines to report an amount, SHARE prompts the respondent to report a bracket. However, this variable is marred by high rates on item non-response. Therefore, I focus instead on the question on the occurence of "large" transfers added in wave 4, i.e. transfers with a much larger threshold than the initial question (≥ 5000€ instead of ≥ 250€).

Covariates. I include the respondent's age, the number of their children, whether they are partnered, their employment status, their education, their total household income, and their household net worth.

The respondent's age is reported in years. I include a quadratic term to account for the fact that people's savings, and therefore their capacity to initiate transfers, diminish towards the end of their life.

The number of children includes stepchildren, foster children, and adoptive children.

[18] Only one person responds to questions about children on behalf of the couple. Questions explicitly include children of both partners, and children with different filiation statuses.

Table 1.6. Descriptive statistics of the analytical sample of respondents (parents)

	Mean	Median	SD	Min	Max	Count
Age	64	63	11	24	103	101,736
# children	2.35	2.00	1.21	1	17	101,736
Partnered	0.74	1.00	0.44	0	1	101,736
R's employment status	%	N				
Retired	50.3	51,189				
Employed	30.7	31,249				
Inactive	19.0	19,298				
R's education (ISCED 1997)	%	N				
Less than primary	5.5	5,615				
Primary	19.0	19,317				
Lower secondary	18.9	19,220				
Upper secondary	32.3	32,837				
Some college/vocational school	4.0	4,051				
College	19.6	19,929				
Post-graduate	0.8	767				
Household income (imputed)	35,737	20,410	62,180	0	9,357,487	101,736
Household net worth (imputed)	259,436	133,105	566,686	0	36,277,227	101,736
Log(income (imputed))	9.73	9.92	1.70	-0.69	16.05	101,736
Log(net worth (imputed))	11.17	11.80	2.62	-2.07	17.41	101,736
Household income (not imputed)	27,179	16,140	38,263	0	871,723	18,345
Household net worth (not imputed)	174,666	77,500	410,216	-0	36,185,044	24,642
Log(income (not imputed))	9.34	9.69	2.13	-0.69	13.68	18,345
Log(net worth (not imputed)	10.03	11.26	3.70	-0.69	17.40	24,642

Note: All monetary variables are reported in constant euros and adjusted for purchasing power parity.

Whether a respondent is partnered is a combination of two questions. The first asks whether the respondent has a spouse or long-term partner. The second asks whether this partner resides in the same household. I include a binary variable that is equal to 1 if both questions are answered affirmatively and equal to 0 otherwise.

Employment status is reported as employed (incl. self-employed), retired, or inactive (incl. for disability).

The respondent's education is reported in terms of the 1997 International Standard Classification of Education (ISCED) typology. I prefer the ISCED classification to education in years because of greater cross-national comparability and because it accomodates the possibility of discontinuities between secondary and post-secondary degrees.

Total household income is the sum of all household members' incomes.[19] It includes wages from employment and self-employment, capital income, public transfers, and public and private pensions. It does not include private production. For the present sample of countries, I expect private household production to be negligible.

Household net worth is the result of assets minus liabilities.[20] Assets include real estate (owner-occupied and other), stocks, bonds, savings and retirement accounts, mutual funds, businesses, whole life policies, and cars. They do not include durable goods or luxury items, such as jewelry. Liabilities include mortgages, debts on cars or other vehicles, overdue bills, overdue credit cards, loans, debts to relatives or friends, and student loans.

All monetary variables are reported in constant euros and adjusted for purchasing power parity.

Household income and household net worth are logged in all regressions. Households with negative or zero net worth are set to a small positive value. For households with missing data on income or wealth, I use five sets of imputed data provided by SHARE (Christelis, 2011).

The next section describes aggregate patterns of money and time between generations in several European countries and the United States. Two questions guide

[19] I use the variable `thinc` provided by SHARE.
[20] I use the variable `hnetw` provided by SHARE.

the description. Do the patterns conform to the typology set out above? How well do differences in the income and wealth distributions account for between-country differences?

1.4. Methods

I compare the occurence and the average number of self-reported transfers across countries, for both small ($\geq$ 250 €) and large ($\geq$ 5000 €) transfers. I begin by comparing the crude rates and means across countries and welfare regimes types. I adjust for the variation in survey design in different countries by using the information on primary sampling units, strata, and household weights provided by SHARE. All descriptive estimates were estimated with STATA's suite of `svy` commands, unless otherwise stated.

I then adjust for a range of socio-demographic variables as well as household income and assets. The socio-demographic variables include the age of the respondent, the education of the respondent, and whether the respondent lived with a partner at the time of the interview. For the occurence of transfers, I regress a binary variable indicating the occurence of any transfer at all on these covariates in a logistic regression. I then predict the occurence of transfers for each country, holding the other covariates at their mean. The full model can be written as follows:

$$y = \ln\left(\frac{P(y|x)}{1-P(y|x)}\right) = \beta_0 + \beta_{age}x_{age} + \beta_{age\ squared}x_{age\ squared} + \beta_{partnered}x_{partnered} + \beta_{education}x_{education} + \beta_{household\ income}x_{household\ income} + \beta_{household\ net\ worth}x_{household\ net\ worth}$$

For the average number of transfers, I regress the cumulative number of transfers across all waves on the same set of covariates in a negative binomial regression. I then predict the average number of transfers for each country, again holding the other covariates at their mean.

$$\log(\mu) = \beta_0 + \beta_{age}x_{age} + \beta_{age\ squared}x_{age\ squared} + \beta_{partnered}x_{partnered} + \beta_{education}x_{education} + \beta_{household\ income}x_{household\ income} + \beta_{household\ net\ worth}x_{household\ net\ worth} + \epsilon$$

I also present transfer percentages for income and wealth quintiles. Quintiles are calculated within countries. Observations are pooled across waves and cross-sectional weights are applied, such that each cross-section is representative of the population of individuals aged 50 years or older of that country for the respective year.

Weights. I use individual cross-sectional frequency weights for all regressions.[21] These weights inflate the population to the expected national population of individuals aged 50 years and above. I do not use information on primary sampling units and strata. Since survey designs differ across countries, it is not possible with Stata's `svy` commands to estimate regression parameters across all countries by taking individual survey design differences into account. An alternative approach would be to estimate regression parameters on a per-country basis while taking into account survey design. This, however, would not allow us to compare results across countries while controlling for demographic and economic differences.[22]

Since I pool observations across years, standard errors are clustered at the individual level.

1.5. Results

I will begin by showing in the first subsection that transfer levels are generally stable over time within countries. Then, another subsection will show that the transfer levels are not congruent with the EA+ model, i.e. the family of typologies derived from the original Esping-Andersen model.

1.5.1. Giving patterns are largely stable within countries over time

Figure 1.1 presents the share of all households reporting having given a financial gift equivalent to 250 € at least once during the preceding 12 months and the share

[21] Weights are provided by Share.

[22] Technically, one could calculate an "average" individual across countries and predict individual country-level outcomes based on country-level parameter estimates and holding covariates at cross-country averages.

of households with children (irrespective of where the child lives) having done so. Wave 1 of the survey took place during 2004.

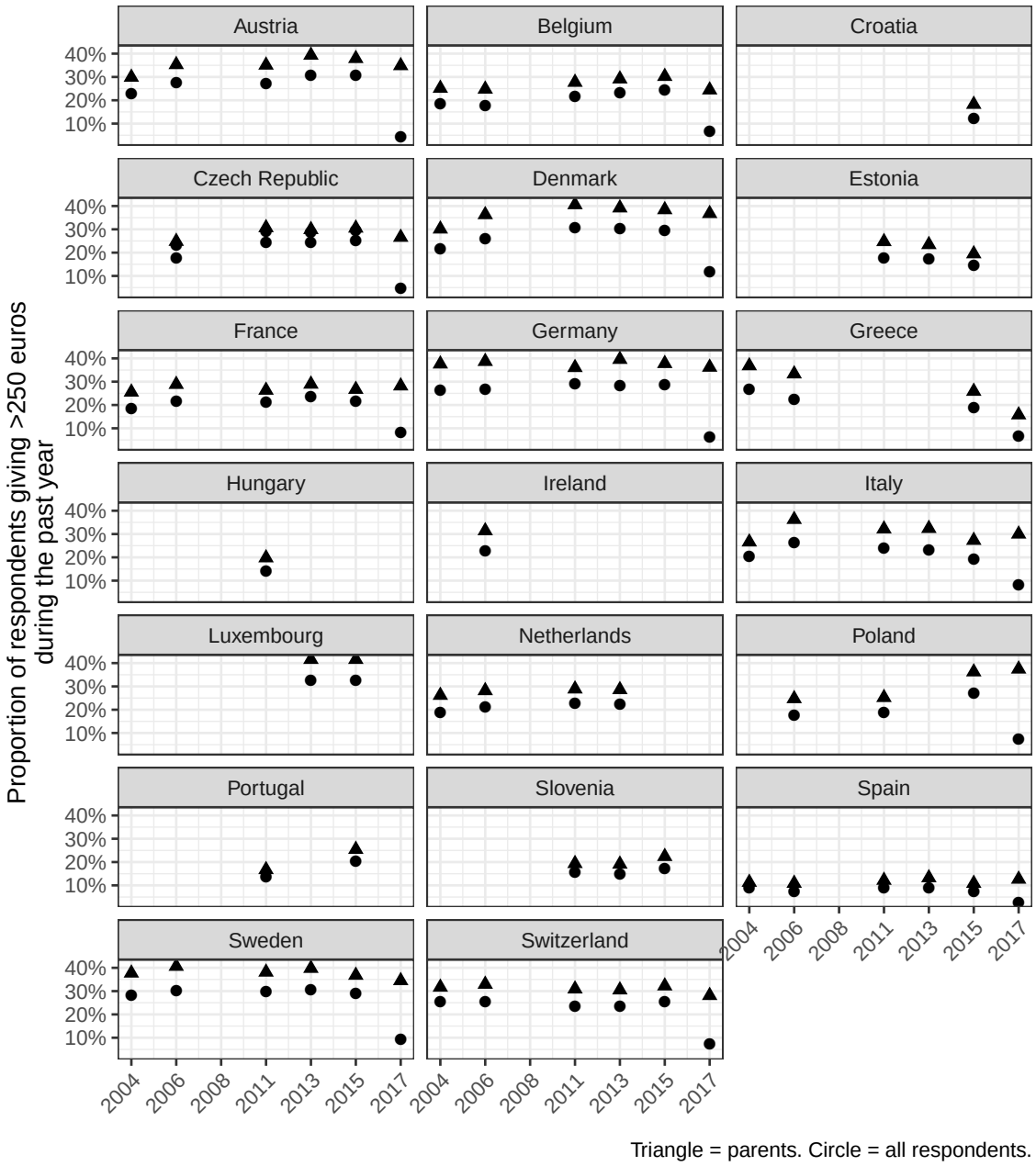

Figure 1.1. Transfers in 20 European countries

1.5.1.1. Trends over time. Figure 1.1 shows that the rates of giving are mostly stable across years within countries, especially if we look at countries with more than

two time points. This stability applies to estimates across samples (parents and the general population) and outcomes (gifts to children and to other family). While the point estimates differ from year to year, the confidence intervals within countries overlap from year to year. One systematic effect is that wave 4 estimates are lower across the board. It is possible that this is due to effects of the Great Recession of 2008. If so, it is remarkable that it resulted in a *decrease* in intergenerational support instead of an *increase*. It is possible, however, that this is a survey effect because the questionnaire of wave 4 is structured differently than previous and later waves.

The share of households reporting at least one outgoing transfer varies between 5% and 40% across countries and years. A handful of country-year observations are just below or above these bounds (Luxembourg wave 5 and wave 6, Spain wave 2 and wave 6). Few countries show variation in their transfer levels that exceeds 10 percentage points across the whole period. The one exception is Denmark. In Denmark, transfer levels increase from 25% in wave 1 to 40% in wave 4 and then stay at that level. In all other countries for which we have more than one observation, the variation stays within a 10% band around a country-specific median.

Spain and Sweden are the two countries in this sample with, respectively, the lowest and highest transfer levels. In Spain, the share of households reporting at least one outgoing financial transfers is consistently around 10%. In Sweden, this share varies between 35% and 40% over the whole period. Denmark and Germany have levels similar to Sweden, especially toward the end of the period. No other country in this sample approaches Spain's low levels. The next lowest observations are Croatia (wave 6), Hungary (wave 4), Portugal (wave 4), and Slovenia (wave 5), all of them between 15% and 20%.

There is only one country with an arguably monotonic trend over the whole period: Greece. In Greece, transfer levels fall from 35% in wave 1 to 15% in wave 7. It is tempting to attribute the case of Greece to the financial crisis of 2008 and, more importantly, the government-debt crises and austerity policies between 2010 and 2015. But, since Greece did not participate in waves 4 and 5 (before entering the sample again in wave 6), it is impossible to determine precisely when and how much transfers declined.

In the next section, I will look more closely at the differences between parents and non-parents and the differences between children as beneficiaries and other beneficiaries.

1.5.1.2. Differences between parents and total population. Figure 1.2 shows the share of respondents declaring at least one transfer during the prior 12 months, depending on whether the respondent (or their partner) has at least one living child and on whether the transfer goes to a child or not.[23] [24]

Two results stand out. First, the share of parents declaring a transfer is always higher than the share of the entire respondent sample declaring a transfer. This suggests that the propensity to give (to family) is higher among parents than among the general population.[25] This may partially be an effect of a greater number of potential beneficiaries. But since the rates of transfers going to "other family" of parents and the general population are statistically indistinguishable, it seems implausible that transfers to children substitute for or crowd out transfers to other family.

[23] For non-parents, outgoing transfers cannot go to a child, but may go to other relatives or even non-kin. I exclude non-relatives here.
[24] Figure A.1 (p. 179) provides results by year.
[25] Parents are included in the overall population.

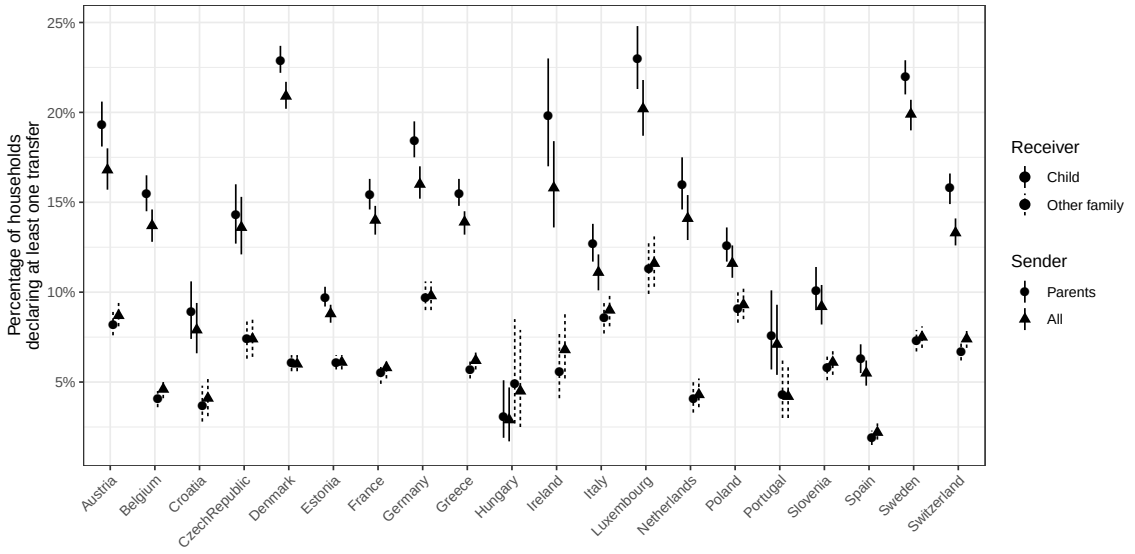

Figure 1.2. Financial transfers by sender and receiver relationship

Second, rates of transfers to other family are also consistently low within and across countries. Only rarely do they rise above 10% and often, they are in the low single digits. Based on these results, I will later focus mostly on transfers from couples with at least one living child.

1.5.1.3. Differences between children and other receivers. Figure 1.3 shows how often parents send transfers to a child vs. to any other relative. All estimates are pooled across all waves that each country appears in. Transfers towards children are more frequent than transfers to other relations across all countries except Hungary. [26] Transfers toward any relatives other than children rarely concern more than 3% of respondents and never more than 5%, except for the high bound of the Ireland estimate. Transfers toward children concern between 5% and 25% of respondents, again with the exception of Hungary. Wherever the absolute difference between transfers to children and to other family is smaller, it is because rates of transfers to children are lower compared to other countries. In consequence,

[26] Hungary only appears in SHARE during wave 4 (2008-9).

I will assume for the remainder of this chapter that transfers to children are the main form of transfers.

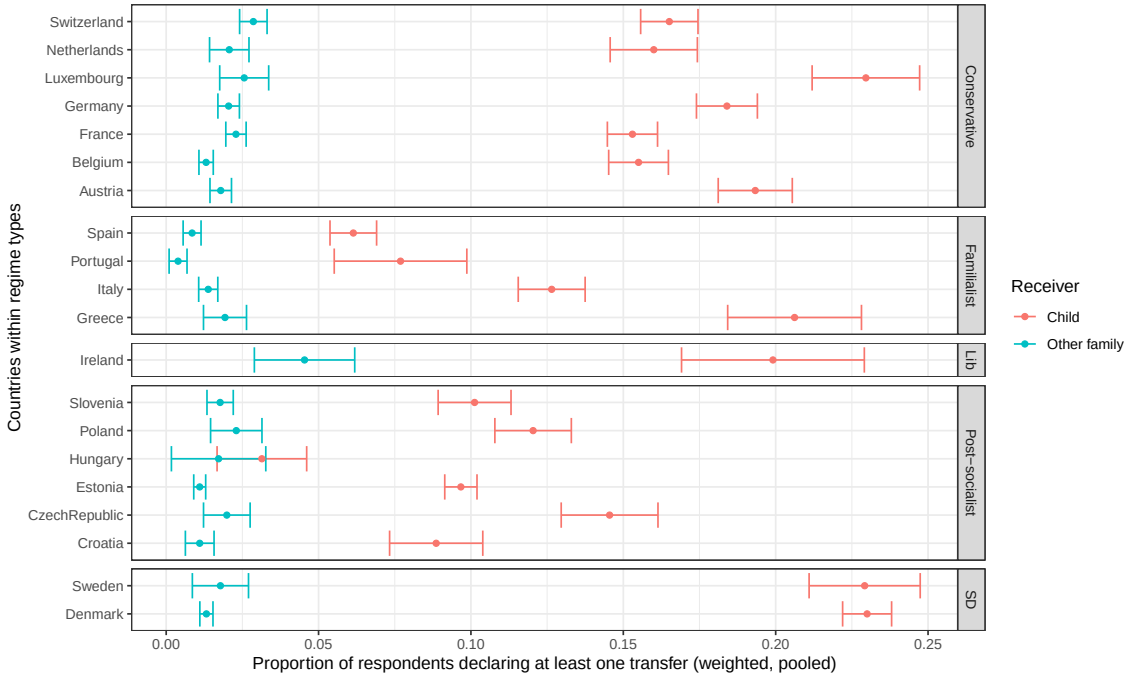

Figure 1.3. Share of parents declaring at least one transfer to a child or other relative

1.5.2. Giving patterns are not consistent with EA+ models

One important question that I seek to answer is whether transfer levels correspond to some broad institutional or contextual differences across countries. In a previous section, I described the dominant family of typologies of welfare states, derived from Esping-Andersen's work (1990). I will refer to these models as "EA+" from here on. To recapitulate, there are three core types – liberal, social-democratic, and conservative – and two supplementary types – familialist and post-socialist. Table 1.7 recapitulates the expected level of family support for each type.

Table 1.7. Expected transfer levels according to EA+

Type	Expected Level	Countries in sample
Liberal	High	Ireland
Social-democratic	Low	Denmark, Sweden
Conservative	Medium (high)	Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland
Familialist	High	Greece, Italy, Portugal, Spain
Post-socialist	(*no prediction*)	Czech Republic, Croatia, Estonia, Hungary, Poland, Slovenia

Figure 1.4 (p. 64) shows the results when we pool observations across survey waves and use cross-sectional weights such that individual cross-sections are representative of individuals aged 50 years and above for a given survey year.

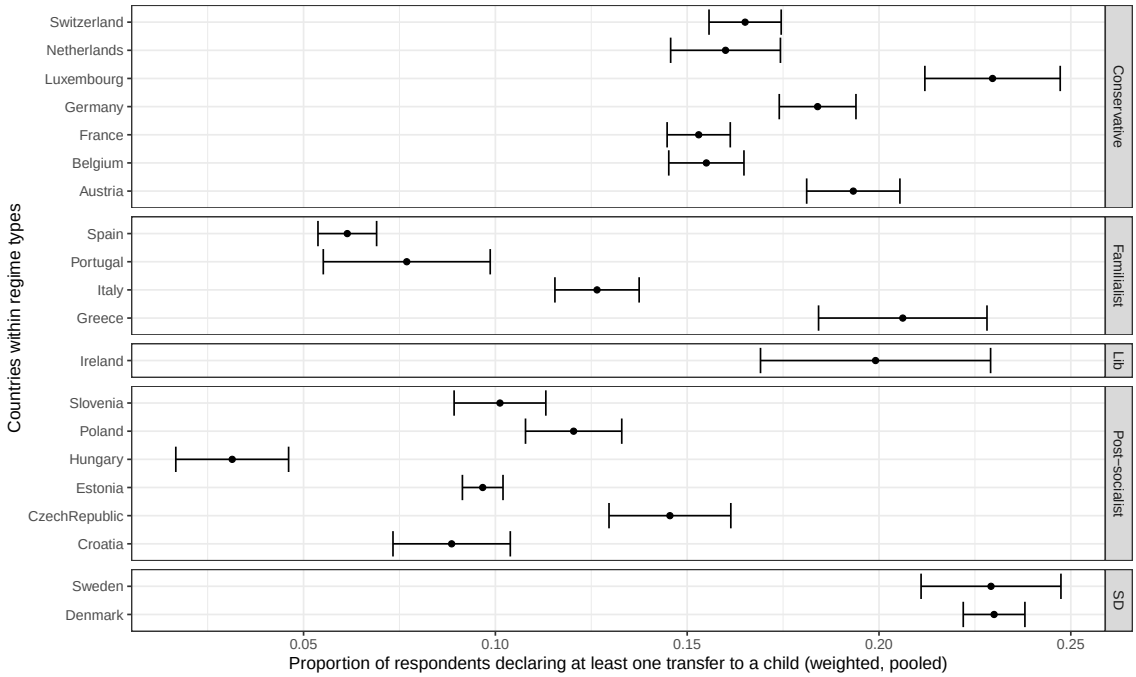

Figure 1.4. At least one transfer toward a child (pooled, weighted)

There is a lack of clear clustering or distinction between different country groups. Most country-year observations are located in the 20%-40% range. The one clear outlier is Spain, a familialistic country. Its low rate of transfers contrasts with our

expectation of high family support in familialistic countries. The other familialistic countries vary quite a bit, but seem to be situated towards to (lower) middle of the distribution. The two social-democratic countries in our sample, on the other hand, occupy consistently high or even the top ranks, again contrary to our expectations. Their levels are quite close, except for the first two waves. The continental countries rank similarly high, especially Luxembourg, but with greater variation between them. Finally, the post-socialist countries again show a lot of variation between countries and across years. They often figure towards the lower half of the rank distribution.

This short description suggests that the typology is inadequate for explaining inter vivos transfers. Of the six expected country clusters, two show some degree of clustering: the social-democratic and the conservative type. Yet the social-democratic countries have much higher levels of transfers than expected. The familialistic, liberal, and post-socialist types hardly qualify as homogeneous clusters. This is not necessarily surprising, at least in the latter two cases. The post-socialist category was a tentative grouping, and no empirical or theoretical reasons have been proposed in the literature why these countries should end up with the same social policy profile. There is only one liberal country in this sample, Ireland, and its unexpected results in this survey do not necessarily diminish the usefulness of the category as it applies to the originally intended exemplars. The great internal differences of the familialistic category though, and its low levels of transfers – comparatively speaking in general and in absolute terms considering Spain –, pose a challenge for the EA+ models.

To summarize, the EA+ categories show little internal consistency and do not conform to basic predications of welfare state theory. However, the discussion

above considers only the occurence of transfers overall, instead of the average or total number of transfers or, more importantly, the amounts transferred. Precise information about transfer amounts was recorded during waves 1 and 2. These questions suffered from high item non-response, however, and have been replaced in later waves with a question similar to the one I used above. It may be that a low incidence of transfers is offset by high transfer amounts. In other words, the EA+ models may still be correct, but with regard to volume (incidence$\times$ amounts) instead of incidence. I will argue that this is not the case in the next section.

1.5.3. Large gifts show similar patterns

The outcome for this section is "did you (or your partner) give a material gift equivalent to 5000 € to someone during the 5 years preceding this interview?" The same explanations regarding eligibility and potential recipients as for small gifts apply.

Figure 1.5 (p. 66) shows the percentages of respondents declaring having given a large transfer during the 5 years preceding the interview pooled across all survey waves during which this question was asked.[27] Most comments regarding EA+ categories and individual countries still apply. Below, I will briefly discuss the substantively most significant results.

First, Denmark and Sweden, on the one hand, and Spain, on the other, still represent the high and low end, respectively, of observed transfer rates, with above 10% and close to 0%. [28] All other countries are distributed between the two.

[27]For measures across waves, see figure A.2 (p. 180). The variation of rates within countries over time seems to be greater than for small transfers. But at least part of the variation comes from the aforementioned issues with wave 4 and changes in point estimates may overstate actual variation, given the width of the confidence intervals.

[28]Portugal no longer displays one of the lowest rates but there are so few cases that the confidence interval covers almost the entire range of estimates of all other countries.

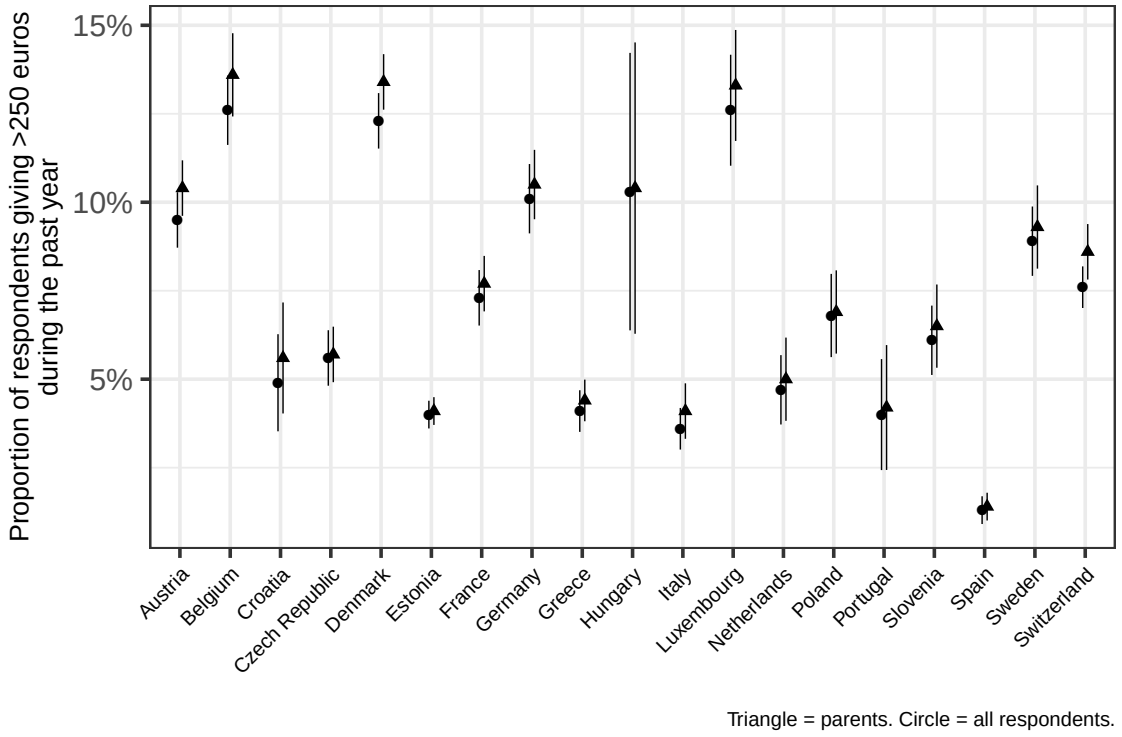

Figure 1.5. Share of households declaring at least one gift ≥ 5000 €

Second, Italy joins Spain at the lower end, while Greece maintains its medium level of transfers and starts to resemble conservative countries more closely. Portugal has too few cases to draw any conclusions.

Third, while the conservative category maintains its intermediate position, individual countries change quite substantially compared to their small transfer position. Belgium is suddenly among the higher cases, while France and Germany look much lower.

Fourth, Croatia no longer resembles Portugal or Spain, but more closely resembles conservative countries or Greece.

Overall, taking "large" transfers as an indicator, I don't find support for the idea that the EA+ typology is more predictive of transfer amounts than transfer

incidence. While I don't discuss transfer amounts directly, the cross-country differences between small (≥ 250 €) and large (≥ 5000 €) transfers do not square with the idea that rare and large transfer are especially characteristic of "Southern" (or Mediterranean) countries.

The results presented in this section contradict previous research based on transfer amounts reported during waves 1 and 2. Those studies found that Northern countries report more frequent and lower-amount transfers while Southern countries reported more rare and higher-amount transfers. The studies speculated that the greater prevalence of coresidence during the transition to adulthood and parental support in achieving residential independence may explain this pattern. Absent more detailed information on children's access to homeownership and its modes of financing, I cannot test this explanation directly.

1.5.4. Transfers by income and wealth quintiles

Figures 1.6 (p. 70) and 1.7 (p. 71) show the share of respondents with at least one child that declare at least one transfer (toward a child) by income and wealth quintiles. Table 1.8 shows the different quantile ratios to illustrate the dispersion of propensities to transfer within countries. All estimates are calculated within countries and within survey waves.

Table 1.8. Dispersion of propensity to financially support a child

		Income			Net worth		
Country	Welfare state regime	p75/p25	p90/p10	p90/p50	p75/p25	p90/p10	p90/p50
Austria	Conservative	2.43	3.94	3.69	2.39	2.61	2.1
Belgium	Conservative	2.06	2.52	1.9	1.79	4.18	1.56
Croatia	Post-socialist	-	1.24	0.69	0.69	1.56	1.42
Czech Republic	Post-socialist	3.32	3.44	2.99	1.65	2.81	1.91
Denmark	Social-democratic	2.24	2.71	2.04	1.99	5.03	1.54
Estonia	Post-socialist	2.2	2.42	1.68	3.07	1.62	1.12
France	Conservative	2.24	7.28	1.57	1.45	1.88	1.13
Germany	Conservative	1.39	2.24	1.38	1.06	10.39	1.27
Greece	Familialist	1.2	0.91	1.72	2.41	1.87	1.21
Hungary	Post-socialist	-	-	-	-	-	-
Ireland	Liberal	2.32	3.98	-	1.65	-	1.82
Israel	Liberal	1.55	4.18	1.56	3.91	2.34	4.66
Italy	Familialist	2.16	3.34	1.87	1.69	1.64	2.21
Luxembourg	Conservative	1.05	5.02	2.1	1.27	14.14	1.04
Netherlands	Conservative	1.54	1.6	2.15	1.44	2.31	1.22
Poland	Post-socialist	5.7	4.71	18.44	0.43	-	1.72
Portugal	Familialist	-	26.75	0.42	1.96	-	15.95
Slovenia	Post-socialist	1.27	1.41	2.19	2.16	4.12	5
Spain	Familialist	2.84	6.03	1.63	1.31	1.71	0.78
Sweden	Social-democratic	2.45	2.17	4.42	0.84	11.19	1.66
Switzerland	Conservative	1.89	1.44	1.81	1.4	3.42	1.3

Interpretation: In Austria, respondents in the 75^{th} percentile are 2.43 times more likely to financially support a child than respondents in the 25^{th} percentile.

Note: Missing values are due to no observed transfers in one of the corresponding percentiles.

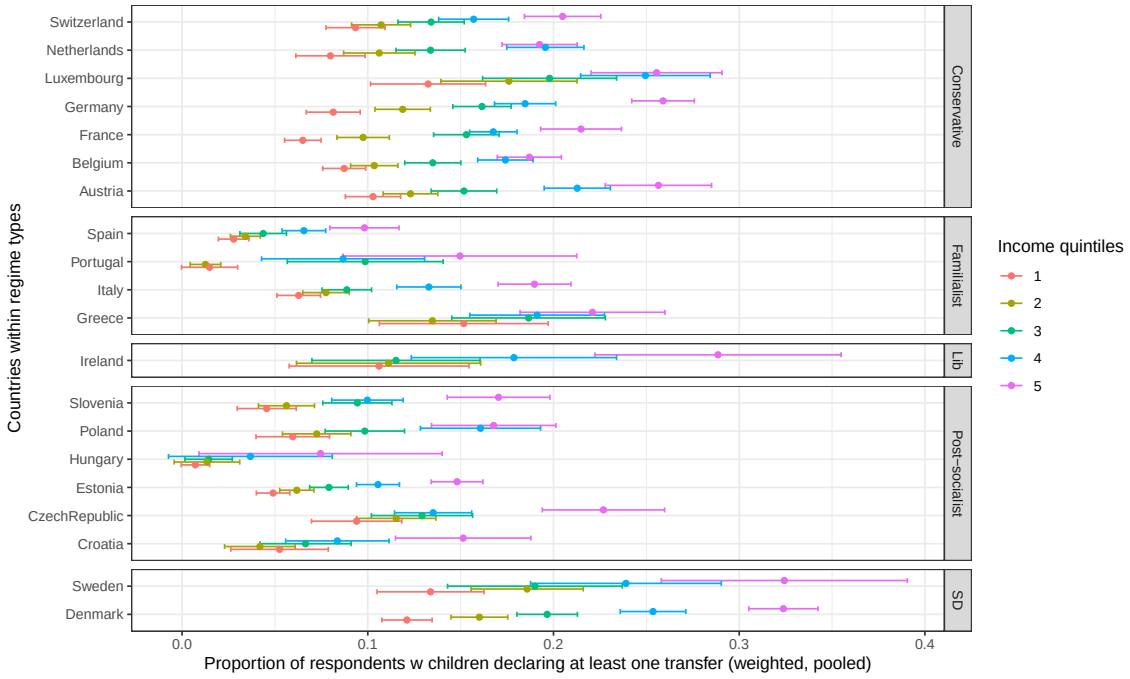

Figure 1.6. Giving by income quintiles (pooled across waves, cross-sectional weights)

For both income and wealth and in all countries, there is a clear gradient from the lowest to the highest income or wealth quintiles. In most cases—Luxembourg being the exception—, the top quintile is set clearly apart from the rest. The spread of the lower four quiintiles is more varied across countries. In certain countries, incl. Hungary, Poland, Portugal, and Spain, the three lower quintiles have similar transfer rates, sometimes statistically indistinguishably similar, and more so for wealth than for income.[29]

Due to the spread, certain country and group differences can be nuanced.

The social-democratic countries in our sample, viz. Denmark and Sweden, have higher rates than other countries at all quintiles. However, the distance is

[29]Hungary only participated in SHARE during wave 4, i.e. just after the 2008 economic crisis. All countries experienced lower transfer rates during that wave and Hungary's very low overall rates and its intense clustering of the lower four quintiles may be (partially) due to exceptional economic circumstances.

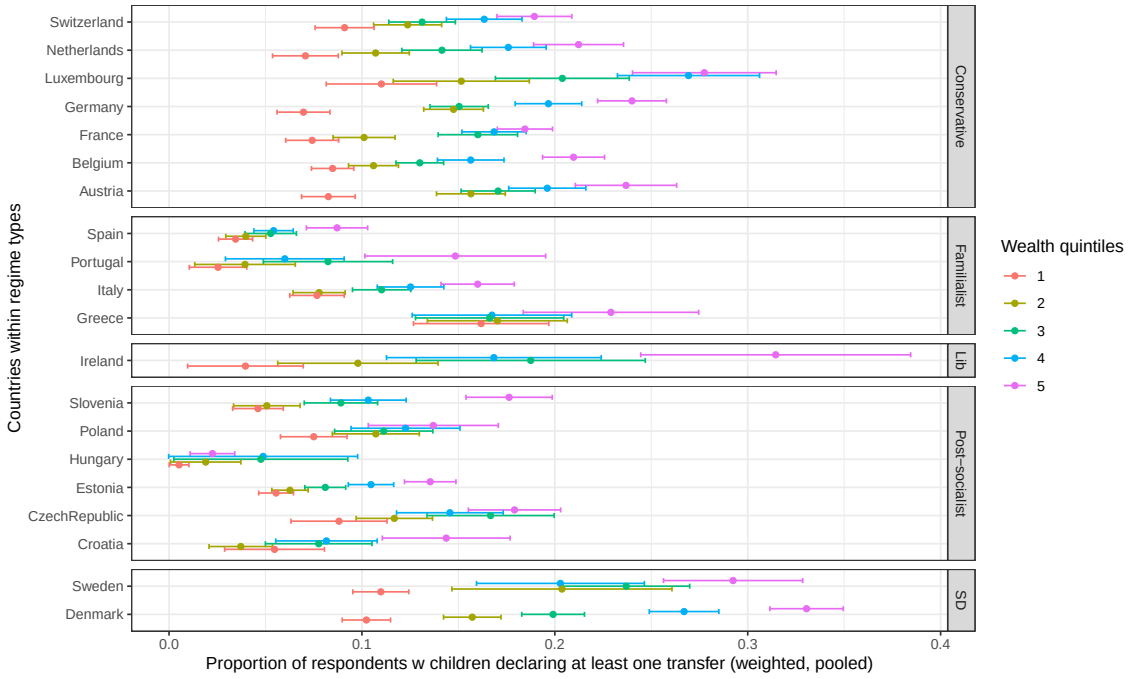

Figure 1.7. Giving by wealth quintiles (pooled across waves, cross-sectional weights)

greatest for the highest quintile (and somewhat for the fourth quintile); their lowest quintile is quite close to those of the conservative group. Interestingly, Denmark is one of two countries (with Ireland) with the highest spread between the lowest and highest quintile.

The conservative countries present a consistent picture, with their lowest quintiles not being among the lowest overall nor their highest being among the highest overall.

The familialist countries are again very heterogeneous. While Spain has an exceptionally low spread (in addition to having very low overall rates), and Portugal somewhat so, Greece and Italy approach the levels and the spread of the conservative countries.

The one liberal country, Ireland, has one of the highest spreads in our sample of countries. Its highest quintiles rival those of Denmark and Sweden with their rates.

Finally, the post-socialist countries, with the exception of Hungary, present medium spreads at a lower overall level of transfer rates. In other words, regarding income and wealth differences, they resemble the conservative countries but shifted down. Hungary looks like an outlier here, which may be because its only available survey wave is from just after the 2008 crisis.

Looking at the quantile ratios in table 1.8, we see that there is some variation across countries but no systematic differences between welfare state regimes.

In the next subsection, I show that these differences are robust to controlling for basic socio-demographic variables.

1.5.5. Adjusted transfer rates

The previous sections reported crude transfer rates, i.e. self-reported country averages that did not account for compositional differences between countries. In order to check whether these results are due to differences in age, employment, or other factors' composition, I regressed a dummy variable indicating whether a respondent had declared at least one gift on a range of socio-demographic covariates. These covariates include age, gender, education, employment status (employed, unemployed, retired), whether the respondent lives with a partner, and the number of children of the respondent. In addition, I added net household income and net household assets in two additional steps. These progressive additions give us an idea of the importance of both covariates.

The parameters of the estimated models are presented in tables 1.9 to 1.12. Figure 1.8 shows the predicted percentages of respondents declaring at least one gift (i.e. based on table 1.9). Three sets of estimates are presented. The first model includes only the socio-demographic covariates, the second adds income, and the third adds assets.

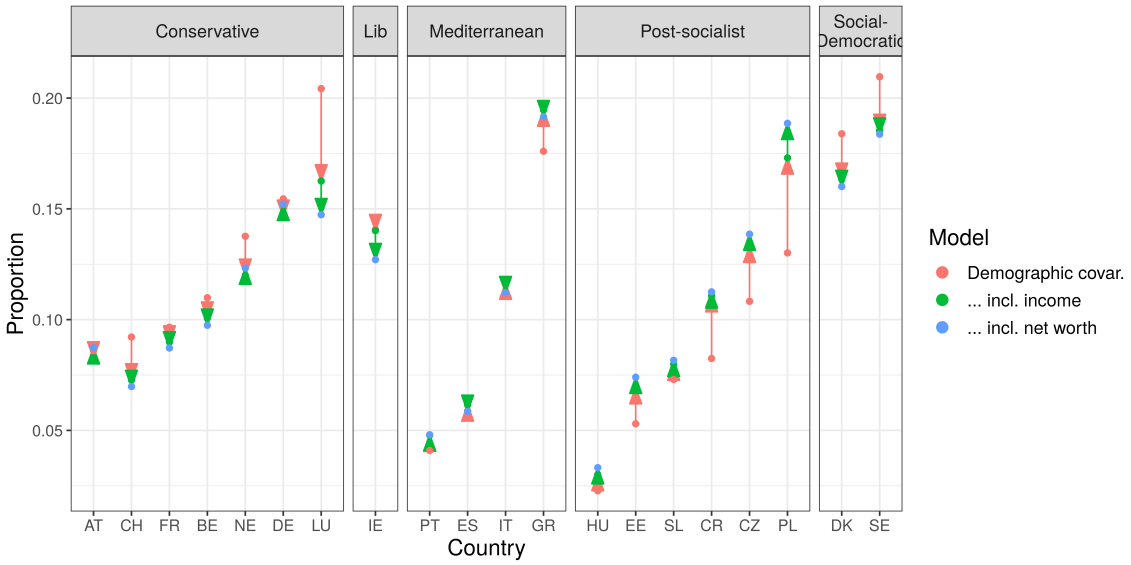

Figure 1.8. Predicted percentage of respondents declaring at least one gift

Overall, results are consistent with the previous section. Household income and wealth do not explain much of the cross-national differences. The within-category variation is still considerable, especially for familialist and liberal countries. The post-socialist countries pose somewhat of an exception because taking income into account makes them resemble the conservative countries more closely. Similarly, taking income into account "normalizes" Luxembourg's exceptional position, making it more like its counterparts (while remaining comparatively high).

Comparing the three estimates across the sample, the inclusion of household income leads to greater adjustments than the inclusion of household net worth. Contrary to the expectation that greater net worth provides for assets from which

Table 1.9. Logistic regression of declaring at least one gift ≥250€

	(1) Model A			(2) Model B			(3) Model C		
anygift									
R's age in years	0.18	***	(0.01)	0.17	***	(0.01)	0.16	***	(0.01)
R's age squared	-0.00	***	(0.00)	-0.00	***	(0.00)	-0.00	***	(0.00)
Number of children	0.02	*	(0.01)	0.02	*	(0.01)	0.03	***	(0.01)
Married/living w partner (= 1)	-0.31	***	(0.02)	-0.39	***	(0.02)	-0.48	***	(0.02)
R's employment status (ref.: employed)									
Retired	-0.31	***	(0.03)	-0.30	***	(0.03)	-0.27	***	(0.03)
Inactive	-0.49	***	(0.03)	-0.43	***	(0.03)	-0.39	***	(0.03)
R's highest degree (ref.: high school)									
Kindergarten	-0.52	***	(0.06)	-0.47	***	(0.06)	-0.39	***	(0.06)
Primary	-0.47	***	(0.03)	-0.43	***	(0.03)	-0.37	***	(0.03)
<HS	-0.26	***	(0.03)	-0.23	***	(0.03)	-0.20	***	(0.03)
Some college	0.13	*	(0.05)	0.12	*	(0.05)	0.10	*	(0.05)
College	0.44	***	(0.03)	0.40	***	(0.03)	0.36	***	(0.03)
Postgrad	0.59	***	(0.09)	0.52	***	(0.09)	0.44	***	(0.09)
Country (ref.: Austria)									
Belgium	0.20	***	(0.06)	0.16	**	(0.06)	0.06		(0.06)
Croatia	-0.18		(0.09)	0.09		(0.09)	0.07		(0.09)
Czech Republic	0.12	*	(0.06)	0.29	***	(0.06)	0.33	***	(0.06)
Denmark	0.70	***	(0.06)	0.64	***	(0.06)	0.56	***	(0.06)
Estonia	-0.73	***	(0.07)	-0.55	***	(0.07)	-0.52	***	(0.07)
France	0.04		(0.06)	0.01		(0.06)	-0.08		(0.06)
Germany	0.61	***	(0.05)	0.60	***	(0.05)	0.59	***	(0.05)
Greece	0.77	***	(0.06)	0.90	***	(0.06)	0.84	***	(0.06)
Hungary	-1.55	***	(0.13)	-1.37	***	(0.13)	-1.29	***	(0.13)
Ireland	0.48	***	(0.10)	0.53	***	(0.10)	0.36	***	(0.10)
Italy	0.30	***	(0.06)	0.36	***	(0.06)	0.27	***	(0.06)
Luxembourg	0.97	***	(0.07)	0.82	***	(0.08)	0.62	***	(0.08)
Netherlands	0.48	***	(0.06)	0.40	***	(0.06)	0.37	***	(0.06)
Poland	0.35	***	(0.07)	0.58	***	(0.08)	0.68	***	(0.08)
Portugal	-0.88	***	(0.14)	-0.75	***	(0.14)	-0.80	***	(0.14)
Slovenia	-0.33	***	(0.07)	-0.24	***	(0.07)	-0.27	***	(0.07)
Spain	-0.44	***	(0.07)	-0.39	***	(0.07)	-0.51	***	(0.07)
Sweden	0.88	***	(0.06)	0.81	***	(0.06)	0.75	***	(0.06)
Switzerland	-0.03		(0.07)	-0.16	*	(0.07)	-0.27	***	(0.07)
Financial variables									
Log(Household income)				0.14	***	(0.01)	0.12	***	(0.01)
Log(Household net worth)							0.10	***	(0.01)
Constant	-6.88	***	(0.39)	-8.22	***	(0.41)	-8.66	***	(0.41)
Observations	101736			101736			101736		
AIC	72915.55			72634.37			72254.72		
BIC	73220.51			72948.87			72578.75		

$^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

one can draw in times of need (one's own or someone else's), this mechanism does not seem to play a great role.

These results hold when I regress the *number* of reported transfers over the same covariates in a negative binomial regression (see figure 1.9), when I regress the *occurence* of at least one *large* transfer over the same covariates (see figure 1.10), and when I regress the *number* of reported *large* transfers over the same covariates (see figure 1.11).[30]

1.6. Discussion

Intergenerational financial transfers vary in frequency and magnitude across countries. The dominant form of within-family transfers are downwards from the "pivot" generation to the "child" generation, i.e. the middle and the youngest generations in a three-generation framework. Basic predictions derived from the "welfare states regimes" framework do not hold in the present data. From the three principles of decommodification, stratification, and subsidiarity, Esping-Andersen (1990) and others building on his work have derived a typology of countries with decreasingly generous public benefits and an increasing importance of the family: from generous and individualist "social-democratic" countries to moderately generous and increasingly family-focused "conservative" countries to stingy and family-centered "familialist" countries and stingy but individualist "liberal" countries.

The hypotheses that transfers would be negatively correlated with welfare state generosity and positively correlated with the importance of family were not borne out. These results call into question earlier research on the variation of inter vivos transfers by welfare state category (M. Albertini, M. Kohli, and Vogel, 2007). This earlier research relied on a sample of ten countries across two time points from the

[30]The number of reported transfers refers to different intervals for small and large gifts. Small gifts are reported for the 12 months preceding the interview. Large gifts are reported for the 5 years preceding the interview.

same survey, while I analyze twenty countries across five time points. The greater number of countries possibly uncovered variation within categories that was not evident in a smaller sample.

The within-category variation for most of the regime types is as important as the across-category variation. This is particularly true for the familialist and liberal types. Respondents in the top quartiles of income and wealth are between 2 to 4 times as likely to provide financial support to an adult child as respondents in the bottom quartiles. Differences between countries are of a similar magnitude.

I also sought to integrate several Central and Eastern European countries into the framework. Previous research disagreed whether they would resemble conservative countries or whether they were heterogeneous enough to deserve their own categories. I find that they span the whole range of transfer levels. In other words, the one hypothesis that finds support in my data is that post-socialist European countries cannot be considered a homogeneous category.

Finally, I analyzed household income and net worth as predictors of transfer behavior. Household income has a significant and large effect within most countries. But, although income has a large effect at the individual level, it does not explain most of the cross-country difference in transfers. Luxembourg is the exception to this rule; its exceptionally high national transfer levels are almost entirely mediated by household income. Household net worth has a significant and small effect.

1.7. Conclusion

The main conclusion of this research is that the welfare state regime typology does not hold for patterns of inter vivos transfers, contrary to previous research. This result is primarily based on the high amount of within-category variation. In

spite of this, there remains a large part of between-country variation that is not explained by basic socio-demographic covariates, including household income and household net worth. The question therefore remains open as to what determines the different levels of inter vivos transfers across countries.

A particularly puzzling aspect of the observed patterns is the high prevalence of inter vivos transfers in Scandinavian countries. Their generous welfare state and their policies targeting youth autonomy suggest that parental financial support is unnecessary for young adults. One possible explanation is that inter vivos transfers in Scandinavian countries do not serve as social insurance or as seed money during important life events but as income supplements that compensate for the compression of disposable income by high income taxation and a high cost of living.

Another noteworthy result is that the prevalence of inter vivos transfers within countries varies widely by income and wealth and, more importantly, that income seems to have a higher importance than household net worth. This points to inter vivos transfers being financed out of current household income and not by drawing down assets. Further research is needed to understand under which circumstances individuals might be incited to draw on their assets. It is also possible that this effect comes from the relative illiquidity of most people's assets. To push this line of questioning further, future scholars should investigate whether there are differences between households with more or less liquid assets. Given that the liquidity of assets increases with their overall amount, it is possible that there exists a non-linear effect of wealth, with little importance at lower levels of net worth and increasing importance at higher levels.

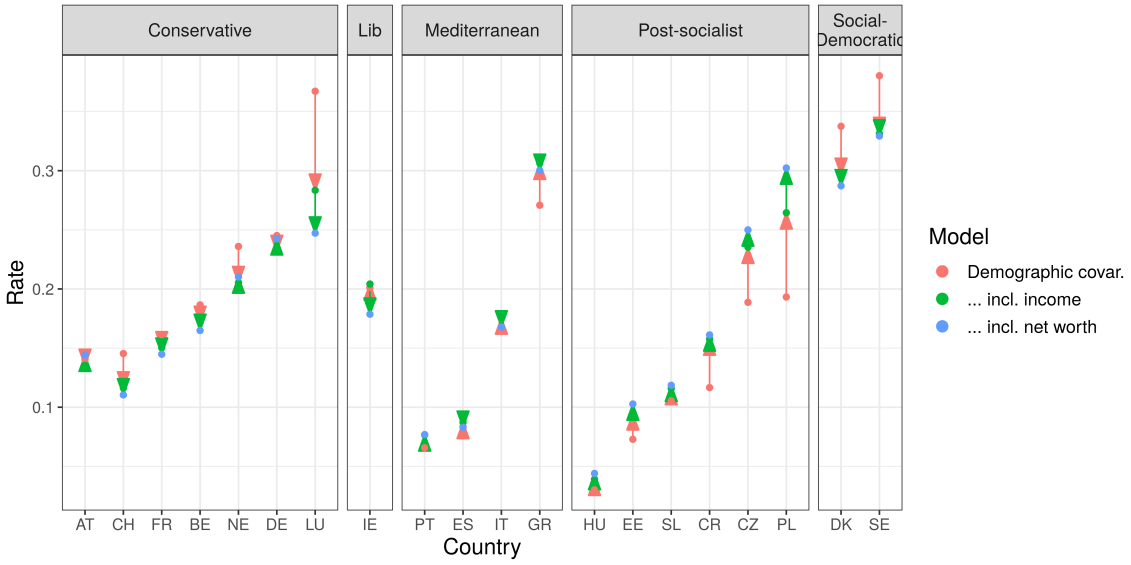

Figure 1.9. Predicted rate of giving over a one-year period

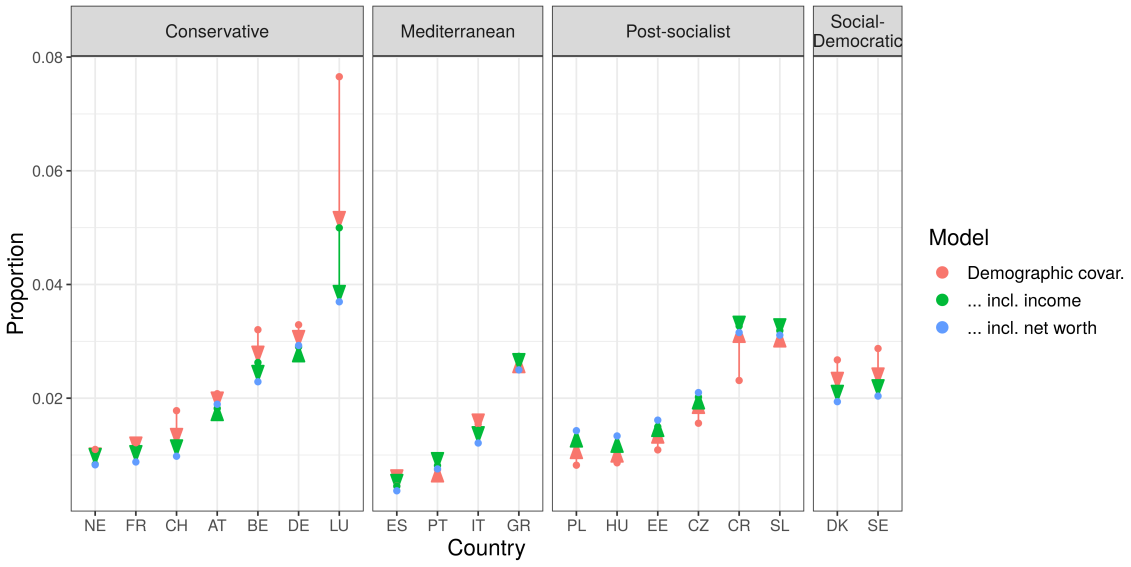

Figure 1.10. Predicted percentage of respondents declaring at least one large gift

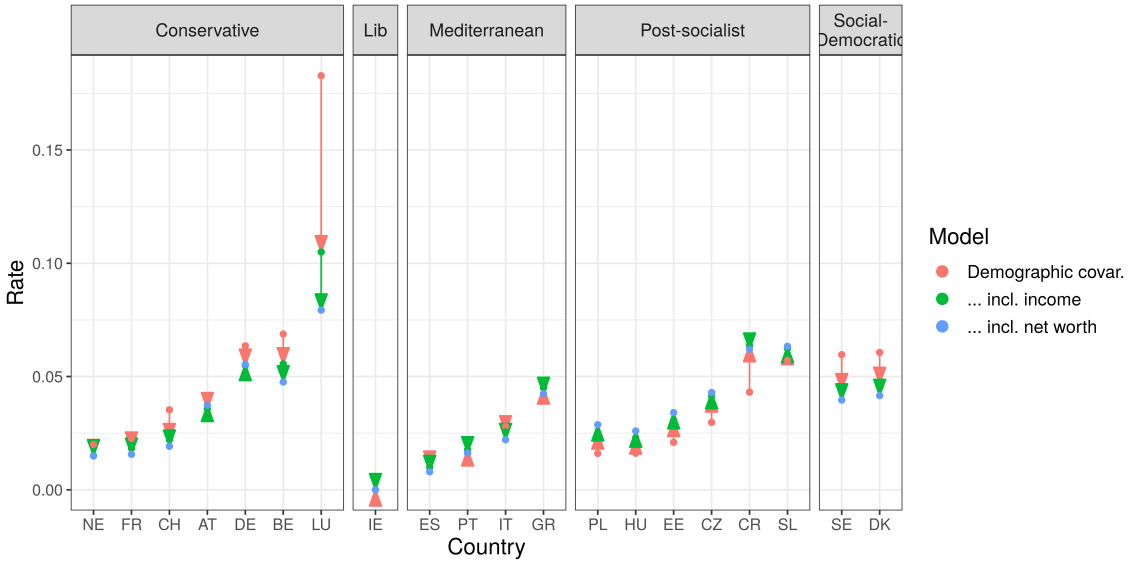

Figure 1.11. Predicted rate of giving large gifts over a five-year period

Table 1.10. Negative binomial regression of number of gifts ≥250€ over the past 5 years

	(1) Model A			(2) Model B			(3) Model C		
How many gifts given to a child									
R's age in years	0.14	***	(0.01)	0.14	***	(0.01)	0.12	***	(0.01)
R's age squared	-0.00	***	(0.00)	-0.00	***	(0.00)	-0.00	***	(0.00)
Number of children	0.12	***	(0.01)	0.12	***	(0.01)	0.12	***	(0.01)
Married/living w partner (= 1)	-0.15	***	(0.02)	-0.23	***	(0.02)	-0.31	***	(0.02)
R's employment status (ref.: employed)									
Retired	-0.27	***	(0.03)	-0.26	***	(0.03)	-0.23	***	(0.03)
Inactive	-0.46	***	(0.03)	-0.41	***	(0.03)	-0.37	***	(0.03)
R's highest degree (ref.: high school)									
Kindergarten	-0.61	***	(0.06)	-0.57	***	(0.06)	-0.47	***	(0.06)
Primary	-0.45	***	(0.03)	-0.42	***	(0.03)	-0.35	***	(0.03)
<HS	-0.24	***	(0.03)	-0.23	***	(0.03)	-0.19	***	(0.03)
Some college	0.10	*	(0.05)	0.09	*	(0.05)	0.07		(0.05)
College	0.39	***	(0.02)	0.35	***	(0.02)	0.31	***	(0.02)
Postgrad	0.57	***	(0.08)	0.50	***	(0.08)	0.42	***	(0.08)
Country (ref.: Austria)									
Belgium	0.27	***	(0.05)	0.23	***	(0.05)	0.13	*	(0.05)
Croatia	-0.20	*	(0.09)	0.04		(0.09)	0.02		(0.09)
Czech Republic	0.17	**	(0.06)	0.32	***	(0.06)	0.36	***	(0.06)
Denmark	0.75	***	(0.05)	0.69	***	(0.05)	0.61	***	(0.05)
Estonia	-0.76	***	(0.07)	-0.60	***	(0.07)	-0.56	***	(0.07)
France	0.08		(0.06)	0.06		(0.06)	-0.04		(0.06)
Germany	0.55	***	(0.05)	0.54	***	(0.05)	0.53	***	(0.05)
Greece	0.70	***	(0.06)	0.81	***	(0.06)	0.75	***	(0.06)
Hungary	-1.57	***	(0.13)	-1.40	***	(0.13)	-1.31	***	(0.14)
Ireland	0.21	*	(0.09)	0.25	**	(0.09)	0.06		(0.09)
Italy	0.28	***	(0.06)	0.33	***	(0.06)	0.24	***	(0.06)
Luxembourg	1.00	***	(0.07)	0.86	***	(0.07)	0.65	***	(0.07)
Netherlands	0.49	***	(0.06)	0.42	***	(0.06)	0.38	***	(0.06)
Poland	0.25	***	(0.07)	0.44	***	(0.07)	0.57	***	(0.07)
Portugal	-0.82	***	(0.14)	-0.70	***	(0.14)	-0.75	***	(0.14)
Slovenia	-0.32	***	(0.07)	-0.24	***	(0.07)	-0.27	***	(0.07)
Spain	-0.49	***	(0.07)	-0.45	***	(0.07)	-0.56	***	(0.07)
Sweden	0.86	***	(0.05)	0.80	***	(0.05)	0.74	***	(0.05)
Switzerland	-0.02		(0.07)	-0.12		(0.07)	-0.23	***	(0.07)
Financial variables									
Log(Household income)				0.12	***	(0.01)	0.10	***	(0.01)
Log(Household net worth)							0.11	***	(0.01)
Constant	-5.91	***	(0.40)	-7.03	***	(0.41)	-7.51	***	(0.41)
lnalpha									
Constant	1.05	***	(0.02)	1.02	***	(0.02)	0.98	***	(0.02)
Observations	97587			97587			97587		
AIC	98692.39			98440.49			98007.75		
BIC	99005.51			98763.10			98339.85		

Table 1.11. Logistic regression of declaring at least one gift ≥5000 €

	(1) Model A			(2) Model B			(3) Model C		
anybiggift									
R's age in years	0.34	***	(0.03)	0.33	***	(0.03)	0.31	***	(0.03)
R's age squared	-0.00	***	(0.00)	-0.00	***	(0.00)	-0.00	***	(0.00)
Number of children	-0.04	*	(0.02)	-0.04	*	(0.02)	-0.03		(0.02)
Married/living w partner (= 1)	-0.18	***	(0.04)	-0.33	***	(0.05)	-0.45	***	(0.05)
R's employment status (ref.: employed)									
Retired	-0.12		(0.07)	-0.08		(0.07)	-0.02		(0.07)
Inactive	-0.26	***	(0.08)	-0.16		(0.08)	-0.11		(0.08)
R's highest degree (ref.: high school)									
Kindergarten	-0.47	***	(0.11)	-0.39	***	(0.11)	-0.25	*	(0.11)
Primary	-0.97	***	(0.08)	-0.91	***	(0.08)	-0.80	***	(0.08)
<HS	-0.40	***	(0.06)	-0.36	***	(0.06)	-0.31	***	(0.06)
Some college	-0.00		(0.10)	-0.01		(0.10)	-0.05		(0.10)
College	0.37	***	(0.05)	0.31	***	(0.05)	0.24	***	(0.05)
Postgrad	0.65	***	(0.16)	0.54	**	(0.17)	0.41	*	(0.16)
Country (ref.: Austria)									
Belgium	0.42	***	(0.09)	0.36	***	(0.09)	0.18		(0.09)
Croatia	-0.02		(0.15)	0.40	**	(0.15)	0.34	*	(0.15)
Czech Republic	-0.43	***	(0.11)	-0.11		(0.12)	-0.06		(0.12)
Denmark	0.12		(0.11)	0.06		(0.11)	-0.08		(0.11)
Estonia	-0.78	***	(0.12)	-0.42	***	(0.13)	-0.38	**	(0.12)
France	-0.62	***	(0.13)	-0.65	***	(0.13)	-0.85	***	(0.13)
Germany	0.39	***	(0.09)	0.40	***	(0.09)	0.38	***	(0.09)
Greece	0.13		(0.11)	0.31	**	(0.11)	0.20		(0.11)
Hungary	-0.98	***	(0.19)	-0.64	***	(0.19)	-0.51	**	(0.19)
Italy	-0.33	**	(0.12)	-0.25	*	(0.12)	-0.45	***	(0.12)
Luxembourg	1.34	***	(0.11)	1.08	***	(0.12)	0.72	***	(0.12)
Netherlands	-0.70	***	(0.14)	-0.82	***	(0.14)	-0.88	***	(0.14)
Poland	-1.12	***	(0.23)	-0.71	**	(0.24)	-0.54	*	(0.24)
Portugal	-1.06	***	(0.28)	-0.87	**	(0.28)	-0.99	***	(0.28)
Slovenia	0.25	*	(0.10)	0.40	***	(0.11)	0.33	**	(0.11)
Spain	-1.58	***	(0.19)	-1.48	***	(0.19)	-1.72	***	(0.19)
Sweden	0.21	*	(0.10)	0.13		(0.10)	-0.01		(0.10)
Switzerland	-0.21		(0.13)	-0.41	**	(0.13)	-0.64	***	(0.13)
Financial variables									
Log(Household income)				0.25	***	(0.03)	0.19	***	(0.03)
Log(Household net worth)							0.20	***	(0.02)
Constant	-15.78	***	(0.97)	-18.19	***	(1.02)	-18.85	***	(1.01)
Observations	100915			100915			100915		
AIC	23853.59			23722.20			23457.05		
BIC	24148.77			24026.91			23771.27		

Table 1.12. Negative binomial regression of number of gifts ≥5000 € over the past 5 years

	(1) Model A			(2) Model B			(3) Model C		
How many gifts given to a child									
R's age in years	0.14	***	(0.01)	0.14	***	(0.01)	0.12	***	(0.01)
R's age squared	-0.00	***	(0.00)	-0.00	***	(0.00)	-0.00	***	(0.00)
Number of children	0.12	***	(0.01)	0.12	***	(0.01)	0.12	***	(0.01)
Married/living w partner (= 1)	-0.15	***	(0.02)	-0.23	***	(0.02)	-0.31	***	(0.02)
R's employment status (ref.: employed)									
Retired	-0.27	***	(0.03)	-0.26	***	(0.03)	-0.23	***	(0.03)
Inactive	-0.46	***	(0.03)	-0.41	***	(0.03)	-0.37	***	(0.03)
R's highest degree (ref.: high school)									
Kindergarten	-0.61	***	(0.06)	-0.57	***	(0.06)	-0.47	***	(0.06)
Primary	-0.45	***	(0.03)	-0.42	***	(0.03)	-0.35	***	(0.03)
<HS	-0.24	***	(0.03)	-0.23	***	(0.03)	-0.19	***	(0.03)
Some college	0.10	*	(0.05)	0.09	*	(0.05)	0.07		(0.05)
College	0.39	***	(0.02)	0.35	***	(0.02)	0.31	***	(0.02)
Postgrad	0.57	***	(0.08)	0.50	***	(0.08)	0.42	***	(0.08)
Country (ref.: Austria)									
Belgium	0.27	***	(0.05)	0.23	***	(0.05)	0.13	*	(0.05)
Croatia	-0.20	*	(0.09)	0.04		(0.09)	0.02		(0.09)
Czech Republic	0.17	**	(0.06)	0.32	***	(0.06)	0.36	***	(0.06)
Denmark	0.75	***	(0.05)	0.69	***	(0.05)	0.61	***	(0.05)
Estonia	-0.76	***	(0.07)	-0.60	***	(0.07)	-0.56	***	(0.07)
France	0.08		(0.06)	0.06		(0.06)	-0.04		(0.06)
Germany	0.55	***	(0.05)	0.54	***	(0.05)	0.53	***	(0.05)
Greece	0.70	***	(0.06)	0.81	***	(0.06)	0.75	***	(0.06)
Hungary	-1.57	***	(0.13)	-1.40	***	(0.13)	-1.31	***	(0.14)
Ireland	0.21	*	(0.09)	0.25	**	(0.09)	0.06		(0.09)
Italy	0.28	***	(0.06)	0.33	***	(0.06)	0.24	***	(0.06)
Luxembourg	1.00	***	(0.07)	0.86	***	(0.07)	0.65	***	(0.07)
Netherlands	0.49	***	(0.06)	0.42	***	(0.06)	0.38	***	(0.06)
Poland	0.25	***	(0.07)	0.44	***	(0.07)	0.57	***	(0.07)
Portugal	-0.82	***	(0.14)	-0.70	***	(0.14)	-0.75	***	(0.14)
Slovenia	-0.32	***	(0.07)	-0.24	***	(0.07)	-0.27	***	(0.07)
Spain	-0.49	***	(0.07)	-0.45	***	(0.07)	-0.56	***	(0.07)
Sweden	0.86	***	(0.05)	0.80	***	(0.05)	0.74	***	(0.05)
Switzerland	-0.02		(0.07)	-0.12		(0.07)	-0.23	***	(0.07)
Financial variables									
Log(Household income)				0.12	***	(0.01)	0.10	***	(0.01)
Log(Household net worth)							0.11	***	(0.01)
Constant	-5.91	***	(0.40)	-7.03	***	(0.41)	-7.51	***	(0.41)
lnalpha									
Constant	1.05	***	(0.02)	1.02	***	(0.02)	0.98	***	(0.02)
Observations	97587			97587			97587		
AIC	98692.39			98440.49			98007.75		
BIC	99005.51			98763.10			98339.85		

CHAPTER 2

Gender differences and sibship influence in transfer receipt

2.1. Introduction

In chapter 1, I examine the cross-country prevalence of inter vivos transfers in order to assess whether there exist intelligible clusters of countries similar on policy or socio-economic grounds, and I investigate different formal models of inter vivos transfers with longitudinal analyses. In this chapter, I focus on within-family variation and its relation to different recipient characteristics. I will show how parental financial support toward their adult children depends on those children's characteristics, particularly their gender.

The importance of sibship structure is a recurring theme in sociological studies of parental investment in children and of inheritance. Scholarship focused on the United States and the second half of the twentieth century taught us that parents do not invest their resources – time, money, attention, in-kind help – equally in all of their children (Schneider, Hastings, and LaBriola, 2018; Kornrich and Furstenberg, 2013; Raley and Bianchi, 2006; Menchik, 1980; Gollac, 2011; Bessière, 2004). The sex of the child, sibship size and composition are important determinants of the type and level of support that a child will receive. Daughters receive less financial help during higher education, less time and attention from their fathers, more routine household responsibilities, and more normative encouragement for cultural and educational ambitiousness than sons, at least in the post-Second World

War United States and, to a lesser degree, some Western European countries (Henretta et al., 2012; Hamilton, 2013; Lee, 2009; Downey, 1995; Powell and Steelman, 1990). Increased sibship size is associated with decreased support for all children and decreased wealth at adulthood (Keister, 2003). Closer spacing of birth is also associated with decreased support, while the effects of birth rank – both cognitive, social, and in terms of financial support – are either negligible or mixed. Coupled with the gendered nature of welfare policies, these results suggest an important effect of child gender and sibship composition in general on inter vivos transfers. It is an open question, however, to which degree this applies also to more recent periods, to European countries beyond the Atlantic Rim, and to inter vivos transfers toward adult children in particular.

Thus, three broad questions motivate this chapter:

- Are there gender differences in inter vivos transfers to adult children in Europe?
- If so, what factors mediate these differences?
- To what degree can these differences be attributed to socio-demographic differences, to differences in women's labor market status across countries, or to policy regimes?

The following section reviews the literature. Sections 3 and 4 present the data and the analytical strategy. Section 5 describes the results and section 6 discusses them. Section 7 concludes.

2.2. Previous literature

2.2.1. Time, attention, and money according to gender, sibship size, birth rank

Parents do not invest equally in children with regards to time, money, and cognitive or cultural enhancement activities (Kornrich and Furstenberg, 2013; Lee, 2009; Raley and Bianchi, 2006; Henretta et al., 2012; Hamilton, 2013; Downey, 1995; Powell and Steelman, 1990).[1] Daughters receive less financial help during higher education, less time and attention from their fathers, shoulder more routine household responsibilities, and receive more normative encouragement for cultural and educational ambitiousness than sons.

There are some indications that the gender imbalance is shifting toward greater equality if not to the advantage of daughters. The slight son preference in fertility that researchers have demonstrated for the United States during the latter half of the 20th century has vanished in more recent data (Dahl and Moretti, 2008; Blau et al., 2020). Similarly, the gap in time spent, educational activities encouraged, and divorce and custody between daughters and sons has narrowed considerably in the United States (Raley and Bianchi, 2006). Expenditures too show decreasing differences between sons and daughters, despite an increase in differences between low-income and high-income families (Schneider, Hastings, and LaBriola, 2018; Kornrich, 2016; Kornrich and Furstenberg, 2013).

2.2.2. The specificity of inter vivos transfers

When we turn to inter vivos transfers, similar gender patterns were found in studies based on data from the 1990s or before. In one study about two universities in

[1]There are certainly other relevant factors, such as migration, but this classification seems to me to encompass the most proximate resources (Antman, 2011).

the United States, researchers found that parents contribute more to the tuition and living expenses of sons than of daughters (Powell and Steelman, 1989). That was especially true when they had both sons and daughters. Studies from Indonesia, Malaysia, Japan, and the Philippines found imbalances in contributions to education and bequests that also favored sons over daughters (Lillard and Willis, 1997; Quisumbing, 1994; Raut and Tran, 2005; Lee, 2009; Snopkowski and Sear, 2015). To the contrary, two studies, from the United States and from Sweden, suggest that the incidence of inter vivos transfers during the most recent period favors daughters, while the intensity is equal across genders (Loxton, 2019; Nordblom and Ohlsson, 2010). A more recent study on families' subsidizing of college costs did not replicate the gender imbalance found in the earlier study (Henretta et al., 2012).

> **H1** Sons favored: Sons are more likely than daughters to receive inter vivos transfers.
>
> **H2** Brother penalty for daughters: Daughters with brothers are less likely to receive transfers than daughters without brothers.

One specificity of inter vivos transfers is that the increased autonomy of the child opens up the possibility of transfers in the opposite direction. This, in turn, creates the possibility of reciprocity and exchange.

2.2.2.1. Exchange and gendered informal care. The exchange theory of inter vivos transfers holds that such transfers are payment for potential reciprocal provision of services (Cox, 1987; Cox and Rank, 1992). In other words, parents financially compensate children for services that the latter have rendered in the past or will render in the future. This temporal ambiguity makes it difficult to disentangle causes from effects. Children may provide services in the expectation of future

transfers. Parents may initiate transfers in the hope of creating an obligation of reciprocity. While the temporal uncertainty concerns the incidence and timing of transfers, a similar ambiguity exists for the amounts of transfers. If children are compensated for their opportunity costs, then higher-earning children should receive higher transfers. If, on the other hand, parents value their children's services independently of the latter's earnings-producing skills (e.g. value their companionship over their spreadsheet expertise), then lower-earning children may receive higher transfers.

There are, however, clear implications based on the children's gender and based on their geographical distance and the quality of their contact. Although the nature of services that an adult child could render is potentially diverse – companionship, household chores, and informal care –, the literature has focused on the provision of informal care (Norton and Van Houtven, 2006; Bolin, Lindgren, and Lundborg, 2008; Van Houtven and Norton, 2008; Norton, Nicholas, and Huang, 2013). Provision of informal care to elderly parents remains gendered, viz. mainly shouldered by daughters, despite recent increases in female labor force participation (for Europe, see: Bolin, Lindgren, and Lundborg, 2008; Zissimopoulos and Smith, 2011). Care implies physical proximity and direct contact. Therefore, geographical proximity and greater contact (in quantity or quality) should be positively correlated with both the incidence of transfers and with their beneficiary being a daughter. Unfortunately, some causal difficulties remain. Daughters may remain close – geographically and socially – to their parents out of obligation and thereby "earn" monetary transfers. Or they may remain close and engage in informal care out of the expectation of reciprocal transfers. The same applies to children moving away and then back closer to their parents.

It remains an open question whether there is a difference between sons and daughters conditional on geographical proximity and social contact. Would a son who remains as close to his parents as his sister nevertheless engage in less informal care than her? Or is the continued or renewed proximity an expression of a similarly intensely felt obligation to care for their parents?

> **H3** Care (more frequent contact, geographical proximity) is positively correlated with transfers: More "caring" children are more likely to receive transfers than "non-caring" children, care being proxied by geographical distance and personal contact.
>
> **H4** Daughters more likely to care: Daughters are more likely than sons to live in physical proximity and to be in frequent contact with their parents.

2.2.3. The gendered welfare state: male breadwinners, female homemakers

A long tradition of research has underlined the gendered nature of European welfare policies (O'Connor, 1993; Sainsbury, 1994). This tradition argues that European welfare states have adopted the following ideology (Ciccia and Bleijenbergh, 2014, p. 55):

> an ideology of separate gender roles with men working full-time outside the home and women responsible for domestic/reproductive activities. Women depend financially on their husbands' income or on derived entitlements to social benefits based on their status as wives and mothers.

This is opposed to competing models, such as "caregiver parity" where care giving is financially compensated similarly to wage labor, or "universal breadwinner"

where care is outsourced to paid workers outside of the household, or "universal caregiver" where care is normalized for both men and women via various child care and labor market policies (Ciccia and Bleijenbergh, 2014, p. 55). Recent reviews have concluded that there is a strong persistence of male-breadwinner models, little movement towards caregiver parity, an at least declared ambition to move toward a universal-breadwinner model in many countries, and little appetite for universal-caregiver models.

The male-breadwinner model and its persistence are of interest when studying inter vivos transfers because they have different implications for adult male children and adult female children. In heterosexual couples, a male-breadwinner ideology places the responsibility to earn a wage that is sufficient to support the couple or the family on the man. In consequence, adult female children that are heterosexually coupled pass from the parents' (the father's) responsibility to the husband's responsibility. In other words, coupled daughters should have less of a "need" for transfers than uncoupled daughters or coupled sons. Moreover, when a son is coupled and his wage-earning capacity threatened, that poses more of a problem than if the same happened to a coupled daughter. In consequence, a son that is ill or unemployed or faces greater responsibilities because of children should be more likely to receive support than a daughter in similar circumstances. Similarly, enhancing a son's wage-earning capacity via education should be more of a priority than doing so for a daughter.

> **H5** Partner penalty for daughters: (Heterosexually) coupled daughters are less likely to received transfers than (heterosexually) coupled sons or uncoupled daughters.

H6 Income strains favor sons: Situations which place a strain on income (unemployment, illness, childbirth) increase sons' likelihood of receiving transfers but not daughters.

H7 Education/training of sons more subsidized: Sons in education or training are more likely to receive transfers than are daughters.

2.2.4. Hypotheses

From the above, the following hypotheses derive:

H1: Sons are more likely than daughters to receive inter vivos transfers.

H2: Daughters with brothers are less likely to receive transfers than daughters without brothers.

H3: More "caring" children are more likely to receive transfers than "non-caring" children, care being proxied by geographical distance and personal contact.

H4: Daughters are more likely than sons to live in physical proximity and to be in frequent contact with their parents.

H5: (Heterosexually) coupled daughters are less likely to received transfers than (heterosexually) coupled sons or uncoupled daughters.

H6: Situations which place a strain on income (unemployment, illness, childbirth) increase sons' likelihood of receiving transfers but not daughters.

H7: Sons in education or training are more likely to receive transfers than are daughters.

If hypotheses 3 through 5 are valid, we might find *no* gender gap in the data, not because of equal treatment of sons and daughters, but because daughters engage in more exchange and reciprocity with their parents and are "rewarded" with inter

vivos transfers. This might also explain recent findings of a narrowing gender gap in transfers.

> **H8** Equal distance/contact favors sons: Controlling for geographical distance and contact increases the gender gap in favor of sons.

2.3. Data

I use survey data from SHARE, a cross-national longitudinal survey across twenty European countries. The survey was carried out biennially from 2004 to 2018. The target population are residents aged 50 years and older together with their partners or spouses. I pool data across waves since transfer rates are relatively stable across time (see figure 1.1, p. 58, in chapter 1).

2.3.1. Dependent variable

I focus on the incidence of self-reported transfers equivalent to at least ≥ 250€ or ≥ 5000€. I do not analyze amounts since the corresponding questions were dropped after wave 2.

SHARE asks the financial respondent (for up to three transfers):

> Now please think about the last twelve months. Not counting any shared housing or shared food, have you (or your)(husband/wife/partner) given any financial or material gift or support to any person inside or outside this household amounting to 250€ or more?

Starting in wave 4, an additional dichotomous transfer question is asked, with a higher threshold ($\geq$EUR5000) and a longer retrospective period of five years.

SHARE defines "financial or material gift" as "giving money, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home," excluding loans or donations to charities.

The target of the transfer is identified by presenting the respondent with a list of potential beneficiaries. The list includes parents (incl. in-laws), siblings, children (incl. in-laws), grandchildren and grandparents, relatives once removed, and other social relations. If the reported target is a child, SHARE asks which child.[2]

It is likely that SHARE underestimates the frequency of gifts. First, respondents may only report up to three gifts per period. Second, the cutoff amount leads to omission of smaller gifts. Third, the question defines the covered period as the 12 months preceding the interview. SHARE, however, takes place every two years. Therefore, gifts that take place during the 12 months after an interview but more than 12 months before the subsequent interview are not taken into account.

2.3.2. Independent variables

I include the following independent variables: the recipient's gender; the number of their siblings; the presence or absence of a coresiding partner (including both marriages – unless they are described as separated – and long-term relationships); the number of children of the recipient; the distance to the parental household; and the frequency of contact between the respondent and the recipient of the household.

The distance between the respondent's and the recipient's households is indicated in several categories, beginning with "within the same household" and ending with "more than 500km away in a different country." The frequency of

[2]Only one person responds to questions about children on behalf of the couple. Questions explicitly include children of both partners, and children with different filiation statuses.

contact between the respondent and the recipient is similarly indicated. Contact also includes the recipient's spouse or partner. Recipients within the same household were coded as missing on this variable. I recoded them into an extra category in order to use distance and contact simultaneously. I use both variables because they cover slightly different concepts. In practice, models including only one or the other result in virtually identical results.

I also use the following controls: the donor's age and its square; the presence or absence of a coresiding partner (including marriages and long-term relationships); the donor's labor market status in three categories (retired, employed, unemployed or out of the labor force); the natural logarithm of the donor's household's total income; the inverse hyperbolic sine of donor's household's net worth; the highest level of education between the respondent and their spouse or partner according to the ISCED 1997 classification; the recipient's age and its square; the recipient's labor force status in six categories (full-time employed, part-time employed, unemployed, in training or education, permanently disabled, home-maker). Five sets of imputations are used for households with missing information on income or net worth.

2.4. Methods

I calculate crude measures of transfer probability by gender and country using the available information on country-specific survey design.[3]

I also estimate the parameters of two linear mixed effects logistic regressions. Both models include a random intercept for each recipient and survey years are nested within recipients. Standard errors are clustered at the donor level. In the first model, I estimate the parameters for each country separately. I then calculate

[3] I use Stata's `svy` routines (StataCorp, 2017).

the average marginal effect of gender for each country. I begin with a restricted version of the first model (model A in table 2.3) which includes only the dependent variable and child gender. I add socio-demographic covariates and frequency of contact in two further steps (models B and C). In the second model, I pool data across countries and survey years and add fixed effects for countries and survey years. I also include interactions between the gender of the donee and the presence of sibs, the presence of a coresiding partner, and the number of children.[4]

The general model for transfer receipt y_{ij} during year i by recipient j is specified as

$$y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) = \beta_0 + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + \xi_{ij} \tag{1}$$

where β_2 through β_p are covariates and ξ_{ij} is a residual. The residual has two components, one of which is shared between different observations of the same recipient:

$$\xi_{ij} \equiv \zeta_j + \epsilon_{ij}$$

Substituting for ξ_{ij} in equation (1), we obtain:

$$\begin{aligned} y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) &= \beta_0 + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + (\zeta_j + \epsilon_{ij}) \\ &= (\beta_0 + \zeta_j) + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + \epsilon_{ij} \end{aligned}$$

The first model can then be written as follows (r - recipient, d - donor):

[4] All calculations are carried out using Stata 15.1 (ibid.).

$$(2) \qquad y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) = \beta_0 + \beta_{rj}\mathbf{X}_{rj} + \beta_{dj}\mathbf{X}_{dj} + \zeta_j + \epsilon_{ij}$$

where β_{rj} and β_{dj} are vectors of coefficients and $\mathbf{X}_{rj}$ and $\mathbf{X}_{dj}$ are vectors of covariates for the recipient j and the recipient's parental (i.e. the donor's) household, respectively.

The second model adds a fixed effect for country to (2):

$$(3) \quad y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) = \beta_0 + \beta_{rj}\mathbf{X}_{rj} + \beta_{dj}\mathbf{X}_{dj} + \beta_k \text{Country}_j + \zeta_j + \epsilon_{ij}$$

The covariates included in $\mathbf{X}_{rj}$ are: gender, age, the number of children, the presence of sibs (only female, only male, or mixed), the labor market status, the presence of a coresiding partner, and the frequency of contact with the parental household.[5]

The covariates included in $\mathbf{X}_{pj}$ are: age, marital status, education (if the respondent has a partner, highest degree attained between the two; ISCED 1997 classification), their labor market status, their total household income (log-transformed), and their household net worth (inverse hyperbolic sine transformed).[6]

2.5. Results

Across countries, the crude difference in transfer probability between genders varies between 1.33% (Germany 2017) and -5.18% (Switzerland 2017). Table 2.1

[5]Other specifications, not shown, included age squared and distance between the recipient's and the parental household. Neither was significant at conventional levels. The effect of distance largely overlaps with that of contact.

[6]Another specification, not shown, included age squared. It was significant at conventional levels but of minuscule magnitude. Because of a lack of theoretical importance and for the benefit of simplicity, I omitted it.

shows the probability of a son receiving a transfer minus the probability of a daughter receiving a transfer over countries and survey waves.[7] In most country-years, this difference is negative. The mean and median differences are $\approx -1.1\%$. In other words, sons are less likely than daughters to receive a transfer during any given year. Since these are survey results, they are subject to uncertainty due to survey design. Table 2.1 indicates t-values, but to make visual comparison easier, table 2.2 only shows the sign of the differences and their significance at conventional levels. It becomes clear that the dominant direction of differences is in favor of daughters over sons. Hypothesis 1 is thereby invalidated.

Yet, many of the measured differences cannot be statistically distinguished from zero. This effect may be overstated in table 2.2 because not all countries participated in all waves and the empty cells are therefore more numerous for reasons unrelated to statistical significance. In addition, the t-values in table 2.1 suggest that standard errors are very high across country-years and even substantially important differences do not always reach statistical significance, e.g -2.63% in Austria 2017. Figure A.3 (p. 181) illustrates the overall daughter advantage and the wide confidence intervals visually. I will discuss next how certain we can be about the magnitude of the effect and how practically important that magnitude is.

The differences discussed above are differences in means. To contextualize them, figure 2.1 plots the empirical probability of receiving a transfer by gender and by age for every country in the sample. The figure clearly shows that, in many countries, the empirical distributions of transfer probability by gender and age of recipient are not very different. This is confirmed by calculating the one-sided

[7] For a visual representation, see figure A.3. For absolute rates for female, male, and all recipients, see table B.3.

Table 2.1. Difference in average probabilities of transfer receipt (sons - daughters)

	2004	2006	2013	2015	2017	Pooled
Austria	−1.47	−1.48	−1.79*	0.28	−2.63	−1.11
	(−1.01)	(−1.24)	(−2.20)	(0.36)	(−1.28)	(−1.82)
Belgium	0.05	0.00	−1.04	1.11	0.69	0.08
	(0.09)	(0.00)	(−1.49)	(1.46)	(0.73)	(0.19)
Croatia					−1.16	−1.16
					(−1.87)	(−1.87)
Czech Republic		−1.92*	−2.63*	0.36	−0.54	−1.34
		(−1.99)	(−2.23)	(0.24)	(−0.50)	(−1.86)
Denmark	−2.64*	−0.85	−1.68*	−1.52	−3.23*	−1.79***
	(−2.42)	(−0.91)	(−2.27)	(−1.83)	(−2.43)	(−4.16)
Estonia			−0.33	−0.28		−0.30
			(−0.64)	(−0.51)		(−0.82)
France	−0.33	−0.98	−1.34	−1.32	−1.44	−0.92
	(−0.57)	(−1.40)	(−1.92)	(−1.40)	(−1.35)	(−2.30)
Germany	0.39	−0.02	−0.91	−0.74	1.33	−0.25
	(0.42)	(−0.02)	(−1.44)	(−0.96)	(0.81)	(−0.53)
Greece	−0.32	−0.54		−0.46	−1.00	−0.52
	(−0.38)	(−0.62)		(−0.70)	(−1.33)	(−1.29)
Ireland		−2.22*				−2.22*
		(−2.12)				(−2.12)
Italy	−0.87	−1.17	−1.24	−0.01	−1.26	−0.85*
	(−1.30)	(−1.69)	(−1.91)	(−0.01)	(−1.15)	(−2.25)
Luxembourg				−1.95	−3.36*	−2.66**
				(−1.46)	(−2.34)	(−2.71)
Netherlands	−2.46**	−1.23	−1.53			−1.75**
	(−3.19)	(−1.50)	(−1.94)			(−3.22)
Poland		−1.75**	−2.53*	−3.37**		−2.30***
		(−2.60)	(−2.55)	(−2.94)		(−4.16)
Portugal				1.07		1.07
				(1.06)		(1.06)
Slovenia			0.57	−0.08		0.22
			(0.72)	(−0.11)		(0.39)
Spain	−0.17	0.37	0.26	−0.46	−0.63	−0.06
	(−0.40)	(0.91)	(0.47)	(−0.78)	(−0.73)	(−0.21)
Sweden	−2.78**	−3.53**	−2.07	−0.39	−1.78	−2.57***
	(−3.17)	(−3.29)	(−1.95)	(−0.36)	(−1.23)	(−5.08)
Switzerland	−1.04	−2.45*	−2.07*	−1.79	−5.18***	−2.04***
	(−0.79)	(−2.22)	(−2.53)	(−1.80)	(−3.32)	(−4.01)

Note: T-values in parentheses. Stars indicate statistical significance at conventional levels:*0.05, ** 0.01, *** 0.001.

Kolmogorov-Smirnov statistic for two samples.[8] In fact, the Kolmogorov-Smirnov

[8]I calculate the one-sided statistic because the raw difference suggests that the empirical distribution for daughters lies below the empirical distribution for sons, i.e. starting from zero and

Table 2.2. Sign and significance of differences in transfer receipt probability

	2004	2006	2013	2015	2017	Pooled
Austria			-			
Belgium						
Croatia						
Czech Republic		-	-			
Denmark	-			-		- - -
Estonia						
France						-
Germany						
Greece						
Ireland		-				-
Italy						-
Luxembourg					-	- -
Netherlands	- -					- -
Poland		- -	-	- -		- - -
Portugal						
Slovenia						
Spain						
Sweden	- -	- -		-		- - -
Switzerland		-		-		- - -

Note: The sign indicates the direction of the differences (male - female) and the number of signs indicates the significance at conventional levels. Not all countries participated in all waves.

statistic reaches conventional statistical significance (at 5%) in only two countries: the Netherlands and Poland (see figure 2.2).

Visual inspection suggests, however, that the differences are predominant in the lower half of the age distribution. Indeed, if we restrict the recipients' age range to between 20 and 40 years, the Kolmogorov-Smirnov statistic becomes statistically significant at conventional levels (at 5%) for the following four countries: Ireland, Italy, Luxembourg, and Denmark (see figure 2.3).[9] Interestingly, the Netherlands

increasing the transfer probability, for a given transfer threshold, the proportion of sons who experience it is greater than the proportion of daughters, which translates into a higher average transfer probability for daughters.

[9]Note that 5 significant results out of 38 trials (19 full-sample tests $+19$ restricted-sample tests) corresponds to a p-value of ≈ 0.01 for a probability of success equal to 0.05.

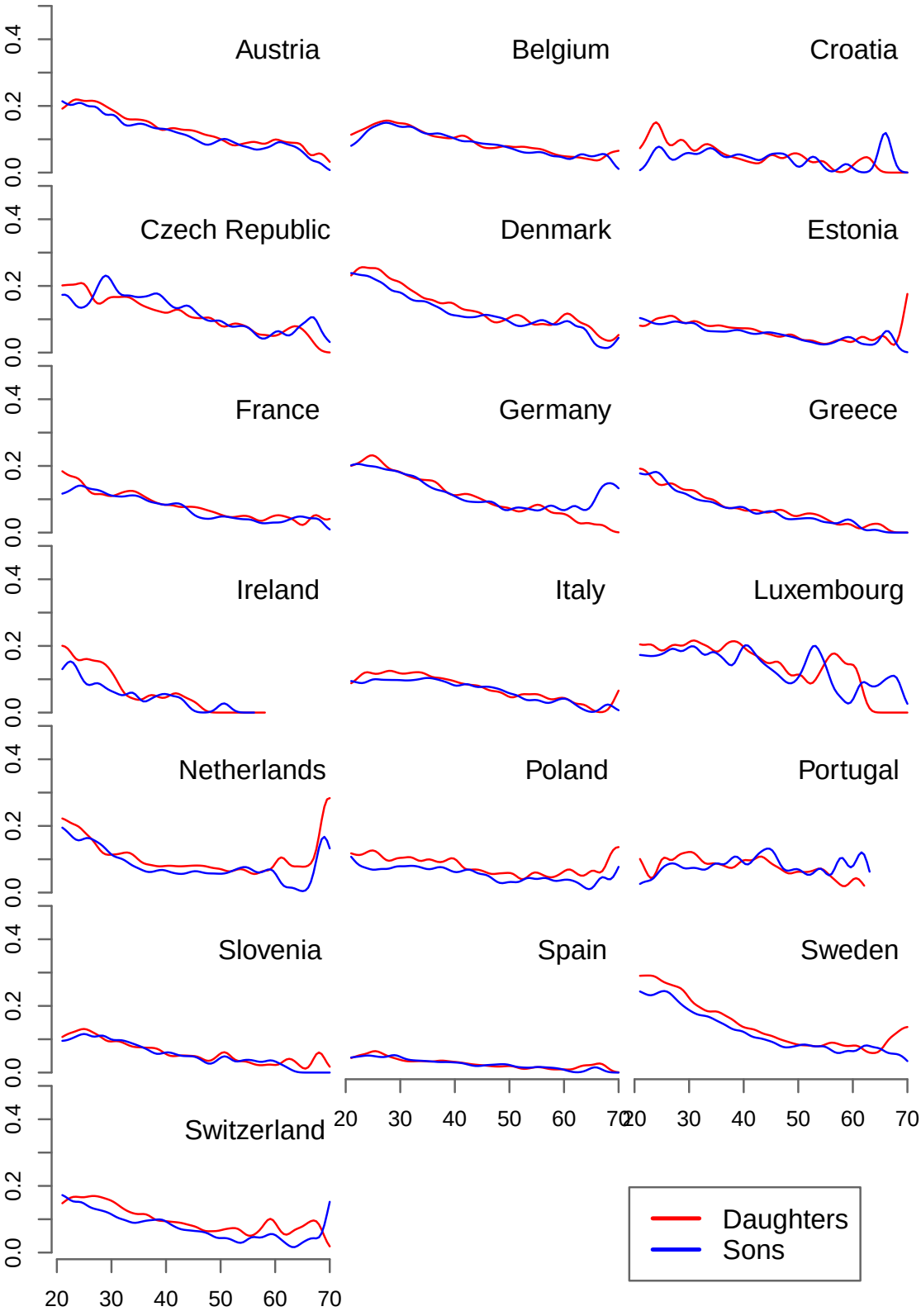

Figure 2.1. Transfer rates by age and country

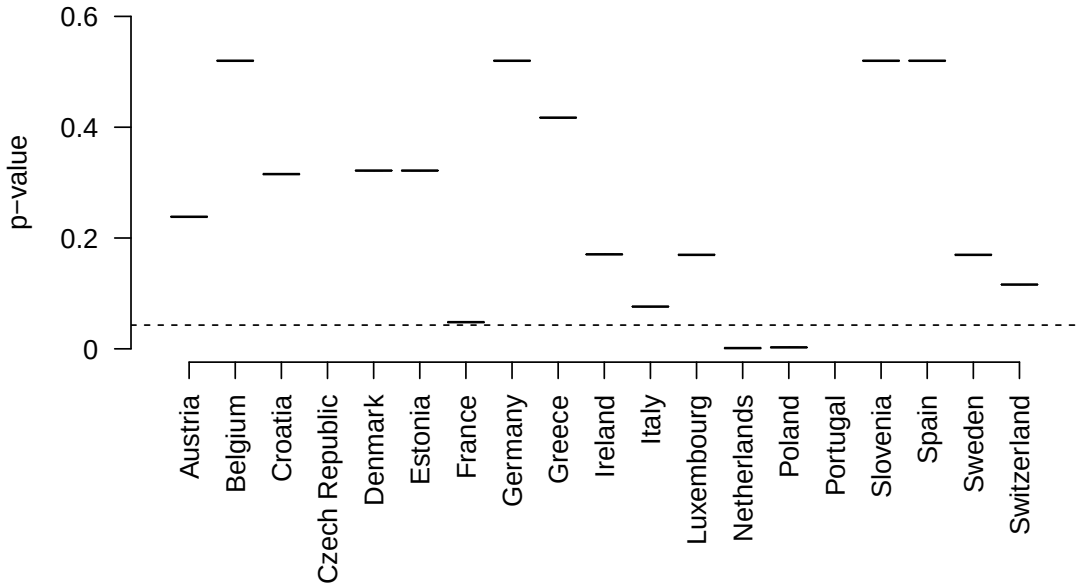

Figure 2.2. Kolmogorov-Smirnov one-sided two-sample statistic for transfer rates, daughters vs. sons. Dashed line indicates 0.05 level.

no longer show a significant difference. This suggests that the upper tail concentrates most of the differences in the Netherlands. Yet, the upper tail represents a tiny portion of the Dutch sample and the case of the Netherlands can thus be ignored.[10]

The results above only adjust for survey design. In order to take into account the correlation of errors within recipients across years and the influence of covariates of interest, I estimated the parameters of a two-level random-intercept logistic regression (specified in (2)). Table 2.3 presents the effect of being female on the predicted probability of receiving a transfer. It compares three models. First, a null model (model A) regressing transfer receipt exclusively on recipient gender. Second, a model (model B) including all of the covariates described in section 3.3.2

[10]There are thirty cases of transfer receipt by children aged ≥ 60 in the Netherlands.

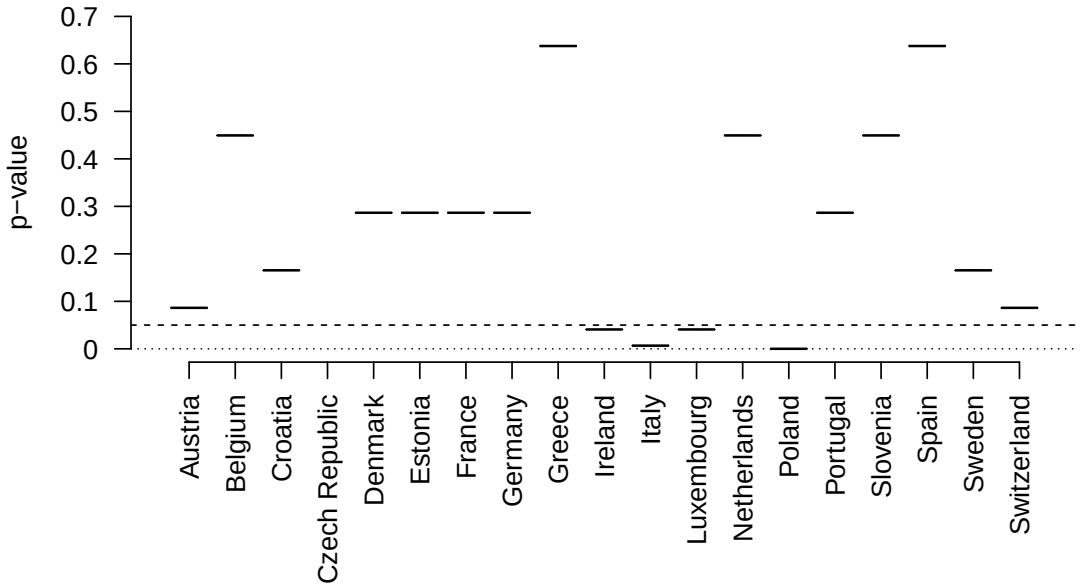

Figure 2.3. Kolmogorov-Smirnov one-sided two-sample statistic for transfer rates, daughters vs. sons, ages 20-40. Dashed line indicates 0.05 level; dotted line 0.01.

with the exception of frequency of contact. Finally, a model (model C) that adds frequency of contact to model B.

The null model finds a positive and statistically significant (at the 5% level) effect of gender on the probability of receiving a transfer in the following countries: Denmark, Estonia, France, Italy, the Netherlands, and Poland. The effect ranges from -0.7% to 3.1%. Only three countries – Hungary, Greece, and Spain – show a negative effect.

Model B, which includes a range of covariates, reduces the effect of gender across all countries. In four countries, the sign of the effect changes. In Estonia and the Netherlands, the daughter advantage is still statistically significant. The effect in Estonia is greater than in the null model.

Table 2.3. Average marginal effect of gender on transfer receipt (log odds)

Country	Model A: Null model	Model B: Covariates	Model C: Contact
Austria	1.2	0.7	0.5
	(0.99)	(0.53)	(0.33)
Belgium	0.2	0.3	0.3
	(0.52)	(0.60)	(0.47)
Croatia	0.2	−2.2	−2.0
	(0.25)	(−1.57)	(−1.45)
Czech Republic	0.5	0.1	0.2
	(0.75)	(0.26)	(0.25)
Denmark	1.6*	0.8	0.6
	(2.17)	(1.37)	(0.88)
Estonia	3.1**	4.0*	4.7*
	(2.95)	(2.38)	(2.55)
France	1.6**	1.0	1.1
	(2.59)	(1.71)	(1.76)
Germany	0.5	0.3	0.2
	(1.01)	(0.81)	(0.49)
Greece	−0.7	−0.4	−0.3
	(−1.05)	(−0.60)	(−0.56)
Hungary	−0.1	1.3	1.7
	(−0.55)	(0.97)	(0.75)
Ireland	1.5	0.5	1.7
	(1.25)	(0.09)	(0.75)
Italy	1.1*	1.0	0.6
	(2.14)	(1.69)	(0.00)
Luxembourg	1.6	1.0	1.8
	(1.10)	(1.69)	(1.15)
Netherlands	1.9***	1.1*	1.1
	(3.23)	(2.36)	(1.91)
Poland	2.2***	0.06	0.15
	(3.41)	(0.18)	(0.13)
Portugal	2.0	1.8	−2.4
	(0.99)	(0.11)	(0.00)
Slovenia	0.5	0.7	0.5
	(0.69)	(0.78)	(0.52)
Spain	−0.3		
	(−1.66)		
Sweden	0.6	−0.2	−0.9
	(0.82)	(−0.34)	(−1.08)
Switzerland	0.5	−1.3	−1.3
	(0.54)	(−1.26)	(−1.3)

Note: The null model regresses transfer receipt on gender in a two-level random-intercept logistic regression. Model 2 adds: child age, presence of coresiding partner, child employment status, child number of children, parental age, parental marital status, parental employment status, parental household income (log), parental net worth (inverse hyperbolic sine). Model 3 adds frequency of contact.

Model C, which adds frequency of contact, has a less clear-cut effect. It reduces the effect in most countries, but increases it in others. The only remaining statistically significant effect comes from Estonia. Remarkably, the effect has increased from model to model, reaching nearly 5% in model C.

The reduction of the effect across models B and C suggests that something about the socio-demographic differences between daughters and sons explains why daughters are more likely to receive transfers. Given that the reduction is not attributable to care only, it is worthwhile investigating the precise social situation of female transfer recipients. Below, I present results on the effect of siblings, children (of the recipients), and labor market status. Here, I want to focus on frequency of contact. As can be seen in the full model (table B.2), less frequent contact is negatively correlated with transfer receipt. This is consistent with our third hypothesis, that care is rewarded with transfers (or vice versa). The fact that the daughter advantage diminishes when this covariate is introduced suggests that daughters are indeed more often the ones to care for their parents, compared to sons. Hypothesis 4 is not contradicted. The decrease of the gender effect is, nevertheless, not so great as to result in a male advantage. In the full model, gender (i.e. being female) has a negative effect but it is not statistically significant at the 5% level (except for Estonia). Hypothesis 8 is invalidated.

To summarize, while there is some evidence that daughters receive transfers more frequently than sons in absolute terms, this difference disappears when taking into account a range of socio-demographic variables. In particular, it appears that daughters tend to be in contact with their parents more often than sons. This explains part of the observed daughter advantage. However, I initially hypothesized a son preference. That hypothesis is not empirically supported.

Nevertheles, before delving into the effects of other covariates, it is interesting to evaluate the impact of the absolute difference in proportions of transfers between genders. While it is of similarly small magnitude across countries, its implications are not comparable given that different countries have different base rates of transfers. In a country like Spain where the overall average transfer probability is around 4%, this difference implies a significant difference in sons' expectations compared to daughters over the long term. In a country like Denmark where the overall transfer probability is close to 25%, the difference is barely noticeable.[11]

To illustrate the implication of a 1% difference over the long term, I calculated the difference in the probability of receiving at least one transfer over the course of thirty years. Figure 2.4 shows how much more likely a daughter is to receive at least one transfer over the duration of thirty years compared to a son with a 1% lower *annual* probability. The figure distinguishes five base rates from 6% to 25% which is representative of the range of base rates found in my sample. The

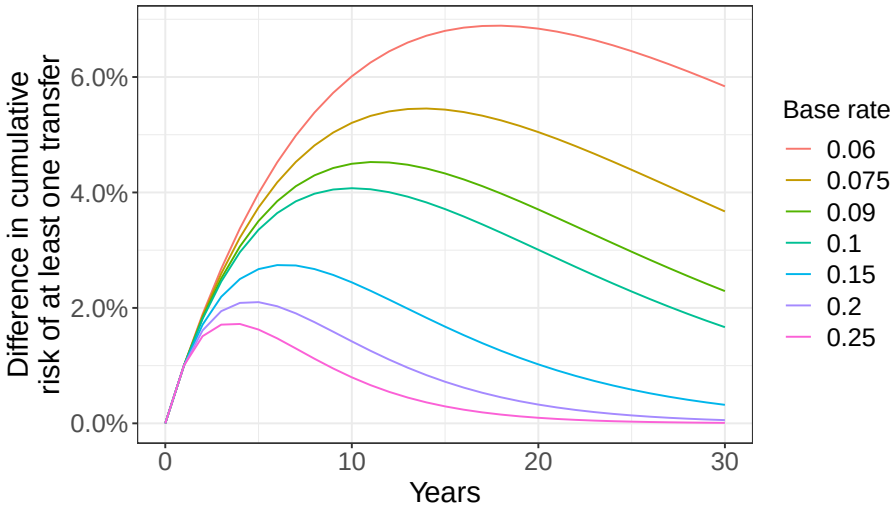

Figure 2.4. Cumulative effect of a 1% difference in transfer probability

difference of the probability of receiving at least one transfer between daughters

[11]Note, however, that the effect tends to be greater in countries with higher base rates.

and sons tends towards zero for transfer rates of 20% and higher. They can be noticeable for base rates of 10% or lower. At that point, we expect a difference in the probability of receiving at least one transfer over the course of thirty years of about 4% or higher.

The next set of results concern the influence of the gender of siblings, the presence or absence of a coresiding partner, the number of children of the recipient, and their labor market situation. Figure 2.5 illustrates the differences between the effect of siblings on sons and daughters. It shows the difference of the predictive probabilities calculated for sons and daughters for having zero siblings, only sisters, only brothers, or mixed sibs. To recall, some studies found that daughters in sibships with brothers were particularly disadvantaged. Yet, it appears that the presence of other-gender siblings does not have gender-specific effect. Hypothesis 2 is also invalidated.

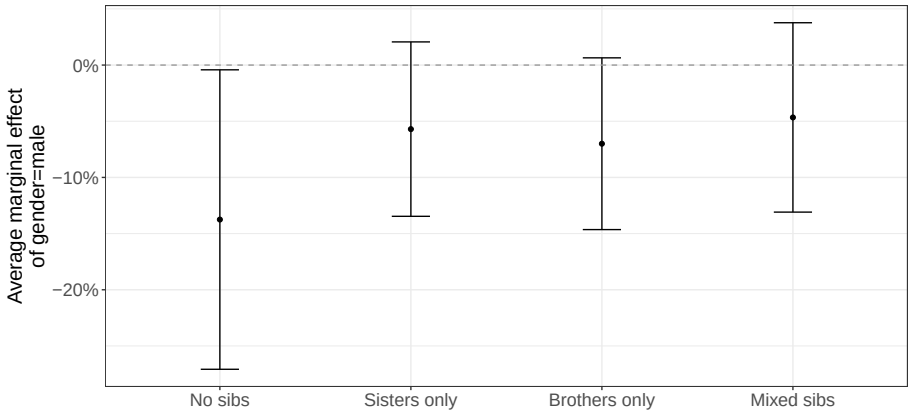

Figure 2.5. Siblings' influence on transfer receipt for a son compared to a daughter

The next figure, figure 2.6, illustrates the difference of the effect of having a coresiding partner present for both sons and daughters. The figure shows the difference of predicted probabilities for an interaction between gender and presence

of a coresiding partner. When a coresiding partner is present, there is no gender-specific effect. Hypothesis 5 is invalidated. The main effect of a gender difference is still present.

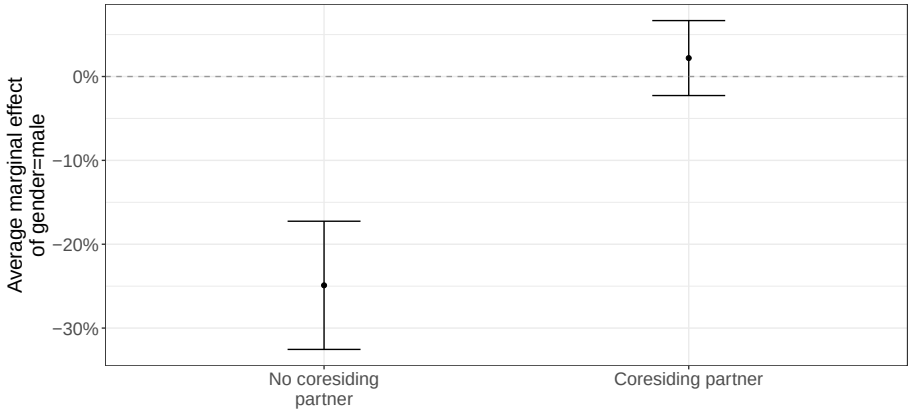

Figure 2.6. Coresiding partner's influence on transfer receipt for a son compared to a daughter

Figure 2.7 illustrates the difference of the effect of recipients having zero, one, or two or more children. There appears to be no gender-specific effect of having children. Hypothesis 6 is invalidated.

Figure 2.8 illustrates the effect of being employed full-time, being employed part-time, being in education or training, and being out of the labor force (incl.

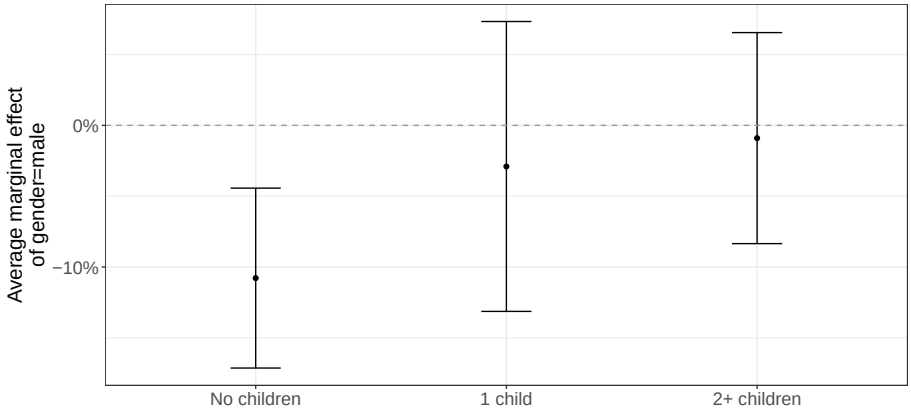

Figure 2.7. Grandchildrens' influence on transfer receipt for a son compared to a daughter

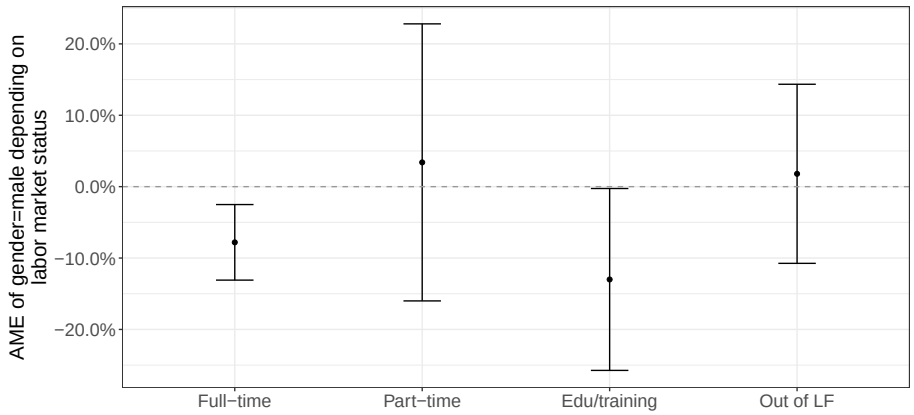

Figure 2.8. Labor market effect on transfer receipt for a son compared to a daughter

Table 2.4. Hypotheses: Results

Hypothesis	Result
H1: sons favored	invalidated
H2: brother penalty for daughters	invalidated
H3: Care (distance, contact) correlated with transfers	validated
H4: Daughters more likely to "care"	validated
H5: partner penalty for daughters only	invalidated
H6: income strains favor sons	invalidated
H7: Son education/training more subsidized	invalidated
H8: Sons favored at equal distance & contact	invalidated

illness, disability, parental leave, homemaker). We see that among full-time employed children, daughters are more likely to receive a transfer than sons. The same is true for children that are in education or in training. Hypothesis 7 is invalidated.

To summarize, most of the initial hypotheses about gender-specific effects of different social situations did not find support in the data:

2.6. Discussion

My analysis joins a small number of recent studies (Nordblom and Ohlsson, 2010; Loxton, 2019) that run counter to the the long-standing result that sons receive more parental resources than daughters.[12] I find that the incidence of inter vivos transfers towards adult children is higher for daughters than for sons. In addition, it appears that the advantage is concentrated in the age range of 20 to 40 years. It also holds true in particular for single daughters and daughters without children of their own. Yet, it also appears that this advantage can be explained with three covariates: age of recipient, parental status of recipient, and frequency of contact between recipient and donor.

My analysis does not accord with previous research that suggests that siblings, and especially male siblings, are particularly disadvantageous for daughters (e.g.: Powell and Steelman, 1989; Lee, 2009). I do find a main effect of presence of siblings, in keeping with the literature on sibship size (Downey, 1995; Guo and VanWey, 1999). I do not find, however, that having either exclusively female or exclusively male siblings is advantageous or disadvantageous for female or male children. One possible explanation for the absence of this effect is that the countries in the sample differ from the countries in which such an effect was demonstrated with regard to college costs or inter vivos transfers – the United States, Japan, Indonesia, and Malaysia – on important dimensions such as cultural attitudes towards gender roles, the cost of higher education, and the importance of higher education for social mobility. The comparatively low cost of higher education and health care in most European countries is another plausible explanation

[12] Cox (1987) and Cox and Japelli (1990) find that female-headed households receive more transfers, but do not discuss gender or marital status in depth.

especially in comparison with the United States. The importance of cultural values would be better probed with a sample of countries from different regions of the world. Another possible explanation is that parental gender attitudes and behaviors changed between the periods of data collection of previous studies and SHARE.

There is also no gendered effect of having children (on part of the recipient). In other words, both daughters and sons who have children are similarly supported while daughters without children are favoured compared to sons without children. This makes it difficult to argue that sons with children are seen as deserving of particular support thanks to their being the primary earner (in aspiration, whether empirically true or not) or that, on the contrary, sons are seen as having to support themselves while daughters remain dependent on their parents.

The absence of a gendered effect of coresiding partners only strengthens this argument. Both daughters and sons receive less support when they report a coresiding partner and this effect is not significantly different between them. It is therefore difficult to argue that daughters pass from parental into spousal responsibility while sons continue to command support. On the contrary, it suggests that parents treat the additional support and resources that a coresiding partner provides in an egalitarian manner. It also lends support to the need-based view of inter vivos transfers.[13]

Finally, there is a gendered effect of labor market status but in the opposite direction of that hypothesized. Full-time employed daughters and daughters in education and training are more likely to receive a transfer than sons in either situation. This is contrary to the theory that, since sons are destined to become the

[13]Unless one wants to argue that a coresiding partner means that children are less available for support and other services, there reducing their exchange potential.

primary wage-earner in their future couples, their wage-earning capacity must be boosted, while daughters may rely on their future partners.

The main result opens up a new puzzle. There are several possible explanations for a daughter advantage and not all of them were tested in this study. One possibility is that parents prioritize supporting the least well-off child (Fan and Porter, 2020) and that, for structural reasons such as the gender wage gap, this happens to be the daughter more often than the son. This, however, would only explain gender differentials within mixed-gender sibships. Single children do not compete with sibs for parental resources. An explanation for the greater propensity of parents of single daughters to initiate inter vivos transfers compared to parents of single sons requires a different explanation. It is possible that parents engage in "satisficing" behavior and support children until the latter attain a given educational, occupational, or other goal (Marco Albertini and Radl, 2012). Structural impediments to female attainment, such as the gender wage gap or direct discrimination, may create a situation where sons attain this goal more quickly than daughters. This would also explain why the female-male difference is concentrated in early to mid-adulthood. If, for example, the objective of parents were to compensate for an existing wage gap, then it would be difficult to explain why this compensating behavior does not occur throughout the recipient's active life. Another possibility for the age effect, of course, is that the "cut-off' is the donor's own retirement. If we assume a child-bearing period of between 20 and 30 years of age, then donors who cease their transfers towards the recipient's 40th year of age would themselves be between 60 and 70 years old, a period which encompasses the official retirement age of most European countries.

Another remaining question is the source of the cross-country variation. The two sets of countries – with and without a female advantage – do not coincide with any readily available classification of gender inequalities. The countries with a clear female advantage are not the countries with the worst gender wage gap. Nor are they the countries with the most gender egalitarian values or the lowest female labor force participation. They do not reflect the usual North-South split that is found in so many comparative studies.

Another limitation is empirical and concerns the combination of incidence and intensity of transfers. A higher incidence of transfers could cumulatively lead to a greater amount of money having been transferred. Or, the difference in incidence could be offset by a reverse difference in amounts. One way to answer it is to compare the difference at different cut-off levels, like I did here. But we need better information on amounts transferred to answer this question convincingly.

CHAPTER 3

Altruism, exchange, and reciprocity: three theories of inter vivos exchange

3.1. Introduction

There is no consensus on the appropriate theoretical framework for explaining inter vivos transfers. Several candidate theories exist in different fields. This chapter proposes to resolve the stalemate. Instead of searching for a single preferred explanation, this chapter suggests that different motives may predominate in different countries or social groups.

3.2. Previous literature

Economists, the earliest to consider inter vivos transfers systematically, proposed a theory of "altruism." Parents behave altruistically toward their children and send them financial transfers in order to improve the children's well-being as if it was their own. Exchange theories, on the contrary, impute more utilitarian to the participants in the exchange. Parents and children exchange financial transfers for in-kind services, be they help with household chores, companionship, or personal care.

3.2.1. Altruism

Becker (1981b) defines "altruism" as the situation where "[one person]'s utility function depends positively on the wellbeing of [another person]" (ibid., p.1).[1] [2] The chief implication of this formulation of altruism is that there exists a relationship between changes in the income of the altruist, changes in the income of the beneficiary, and the amount of transfers for which we can deduce the hypothesized direction (worked out in detail by Cox, 1987). The altruist's utility function is a function of both their own and the beneficiary's income. If the combined income increase, then transfers increase too, i.e. the income elasticity of transfers is positive. When the income of the beneficiary increases, transfers received should decrease on a dollar-for-dollar basis. But because of the positive elasticity, even when the beneficiary's income increases, "the cutback in transfers received will be less than dollar for dollar" (ibid., p. 514).

In economic studies of private transfers, including bequests and inter vivos transfers, the preponderance of evidence is against altruism across a variety of data sources (albeit most of them from the United States) and of specifications (Menchik, 1980; Bernheim, Shleifer, and Summers, 1985; Cox, 1987; Altonji, Hayashi, and L. J. Kotlikoff, 1989; Cox and Rank, 1992; Altonji, Hayashi, and L. Kotlikoff, 1997). The objections are empirical: transfer amounts are not, or only very weakly, negatively correlated with the donee's income. However, Berry (2008) finds some support for altruism by extending the operationalization of altruism to indicators

[1] He acknowledges that this form of altruism is selfish rather than disinterested, but argues that it has the advantage of clear behavioral implications, contrary to other, more metaphysical definitions (Becker, 1981b, footnote 2, p. 13).

[2] For other economic models postulating altruism, see Cox (1987, p. 510).

besides income, such as homeownership, education, parental status, and marital status. If one accepts education and labor market status as proxies for income and if parents try to maintain or increase a child's income, then low education or not being in full-time employment should be positively associated with monetary transfers. I follow his example and formulate the following hypotheses:

> *H1 (altruism-education):* education is negatively correlated with the probability of receiving a monetary transfer.
>
> *H1 (altruism-employment):* full-time employment is negatively correlated with the probability of receiving a monetary transfer.

3.2.2. Exchange

The empirical failure of altruism theory spurred the development of competing theories. Bernheim, Shleifer, and Summers (1985) proposed the initial version of an operationalized theory of exchange between parents/donors and children/beneficiaries. The distinguishing prediction of economic exchange theory is that there is a positive correlation between a beneficiary's income and the transfer amounts they receive. The opportunity cost of providing services to a potential donor, usually a parent, increases with the beneficiary's income. Therefore, in order to be convinced to provide services to said donor, the beneficiary would want to be compensated at least to the amount of lost income.

One of the key results in favor of exchange theory is that single children have less contact with their parents than do children with siblings, conditional on the parents' estate (Bernheim, Shleifer, and Summers, 1985). That is, when there is competition for an estate, children compete via "services." When there is no competition, there is little provision of services. This is consistent with more recent

results that informal care provided by children to parents results in more frequent (financial) downward transfers (Norton and Van Houtven, 2006; Norton, Nicholas, and Huang, 2013).

Social exchange theory, in its elementary theory variant, arrives at the same result on different grounds: "because advantaged actors can receive benefits from multiple partners at the same time, the best strategy for obtaining maximum benefit from all of A's partners is to give more frequently to those partners who are less dependent, and less frequently to those who are more dependent" (Molm, 2003, p. 8). Social exchange theory distinguishes *direct* from *indirect* or *generalized* exchange and, within direct exchange, *negotiated* from *reciprocal* exchange (for an early review, see: Emerson, 1976; for a recent review, see: Molm, 2003). Reciprocal exchange is the type most resemblant to inter vivos transfers. Reciprocal exchange is characterized by the actors performing their contributions separately and without negotiation. They initiate exchanges individually, by performing beneficial acts for an alter, without any assurance that alter will reciprocate (Molm, 2003). In negotiated exchanges, the best strategy for a dominant actor – dominant meaning holding most of the desired good to be exchanged – is to exchange with an actor who is weak enough to accept very unfavorable terms of exchange.[3] In reciprocal exchanges, because a dominant actor can expect to receive one-off contributions from weakers actors hoping to coax her into reciprocity and therefore should focus on the "second-placed" actor in order to induce her into reciprocity. In terms

[3]To make matters more concrete, assume three actors A, B, and C. A valued resource is unequally distributed, resulting in a ranking $A > B > C$. In order to exchange, A proposes to split a given quantity of the valued good with B or C. The overall quantity to split is greater when exchanging with B than when exchanging with C. Because B and C know this, it is likely that C would accept a less favorable split than B. Extended to many participants, this setup has A searching for the combination the size of the pot when contracting with actor x and the acceptable split that maximizes her payout. B follows the same reasoning and, instead of trying to initiate an exchange with A, finds a lesser-ranked actor in pursuit of a more favorable split.

of inter vivos transfers, this suggests that parents should focus their transfers on better-off children in order to kickstart a cycle of reciprocity. The worse-off children will autonomously provide services to their parents in the same hope.

What distinguishes economic exchange theory from social exchange theory is that the former's predictions apply both the extensive and intensive margins while the latter only considers the extensive margin. In other words, the occurence of exchange is similarly theorized by both. The intensity of exchange, on the other hand, is only formalized by economic exchange theory. However, it is also on the intensive margin that economic exchange theory fails empirically. The amount of informal care provided did not influence the extensive or intensive margin of downward transfers and the occurence of informal transfer inly influence the extensive margin of downward transfers (Norton, Nicholas, and Huang, 2013; Norton and Van Houtven, 2006).

In sum, both version of exchange theory hold that higher income or status should be associated with a higher probability of receiving a transfer.

> *H4 (exchange-education):* Education is positively correlated with the probability of receiving a transfer.
>
> *H4 (exchange-employment):* Full-time employment is positively correlated with the probability of receiving a transfer.

The final theoretical approach that I would like to discuss is that of Mauss' theory of gift exchange (Mauss, 2007). In fact, I will defer the discussion to the next section and, here, only justify this separation. Mauss' gift exchange differs fundamentally from both economic exchange theory and social exchange theory. Economic exchange theory applies a model of human behavior that for Mauss falls under a different heading and follows a different logic: that of calculating market or

commercial exchange. Social exchange theory includes the dynamics that Mauss' framework tries to explain but is not reducible to it. Maussian gift exchange is a particular form of social exchange and, in my view, particular enough to deserve its own discussion.

3.2.3. Reciprocity

I discuss Maussian gift exchange under the heading of reciprocity because I consider the obligation to reciprocate one of the two distinguishing characteristics of the framework, the other being the deferral of the reciprocal gift. Mauss summarizes gift exchange as the interaction of three obligations: the obligation to give, the obligation to receive, and the obligation to reciprocate (Mauss, 2013). Gouldner (1960) points out that the first two – the obligations to give and to receive – can also be understood in a framework of *complementary rights* and *duties*: "[A] right (x) of Ego against Alter implies a duty (-x) of Alter to Ego" and "a duty (-x) of Alter to Ego implies a right (x) of Ego against Alter" (ibid., p. 168).[4] It is possible to understand Mauss' obligations to give and to receive as compacts of complementary duties and rights. In this formulation, exchange is not a fundamental pattern of human behavior but merely the consequence of rights and duties attached to different hierarchically or horizontally differentiated status positions.

The obligation to reciprocate, on the other hand, implies a *sui generis* mechanism of human interaction. Gouldner (ibid.) uses the term of "starting mechanism" to illustrate reciprocity as a potential explanation of emergent interaction patterns. To underscore the difference, imagine an invitation to dinner at one's

[4]It may seem scholastic to distinguish between the two but Gouldner (1960) underlines that they are not necessarily transitive. For example, the duty to charity in Christian and Muslim faith does not necessarily translate into a right – legally or morally sanctioned – to receive charity.

home between two parties A and B. If A extends the invitation, it is understood that its corrolary is a duty to provide sustenance and possibly entertainment. A failure to do so, or to shift this responsibility to B, would be morally reprehensible. On the other hand, B's status of guest implies a duty of presenting A with a token of appreciation. Either party would be amiss in refusing the other's offering. Refusing A's offer of sustenance or entertainment is as impossible for B as it is for A to not accept B's token of appreciation. The point of this example is that all of this could very well be empirically the case without B ever reciprocating the invitation. The rights and duties of A and B implied by their temporary status of host and guest would not change if it were clear from the beginning that the interaction will remain a singular occurence. It is the case, however, that, in many societies, there exists an expectation for B to reciprocate at some point in the future by extending a similar invitation to A. This creates, then, a lasting, dynamic relationship between A and B that has some particular characteristics.

If the logic of reciprocity explains inter vivos transfers, we would see particular patterns of gift and counter-gift.

> *H5 (reciprocity requires distinct acts):* Reciprocal exchange is characterized by alternating unilateral transfers.

Gouldner (1960) mentions another fundamental element of reciprocity: the existence of an interval between gift and counter-gift.

3.2.3.1. The interval between gift and counter-gift. One distinctive characteristic of gift exchange is the existence of an interval between gift and counter-gift. Mauss did not discuss this interval except to note in passing that "[b]y definition, a shared meal [...] cannot be reciprocated immediately. "Time" is necessary to

realize a counter-service." (Mauss, 1923, p. 70).[5] [6] The importance of the time interval has been elaborated by later scholars (Gouldner, 1960; Bourdieu, 1980, 1994). Bourdieu (1994, p. 329), based on fieldwork in Kabylie, argues that a gift that is immediately reciprocated is a gift refused and that the "function of the interval is to erect a partition between the gift and counter-gift and to thus allow both acts, though perfectly symmetrical, to appear unique and without relation." Different explanations of why this would be necessary have been proposed, besides the notion that there is a general norm against refusing a gift. Bourdieu (ibid.) argues that this separation allows both acts to be seen as generous and disinterested, i.e. demonstrating desired qualities in opposition to calculated exchange based on base interests. Both Mauss (1923, p. 80) and Bourdieu (1994, p. 329) underline that initiating a gift exchange forces the counter-party to overbid and is, therefore, a challenge to the other party's public image and status. In addition, the opening gift creates a situation of indebtness of the donee towards to donor until the counter-gift occurs (Gouldner, 1960, p. 175; Bourdieu, 1980, pp. 180-182, 1994, p. 329).

> *H6 (reciprocity requires an interval):* Reciprocal exchange requires participants to wait at least one or more periods where they interact before reciprocating.

[5] My translation. Page references, especially to footnotes, may differ slightly from the original since I refer to the public domain version published by Université du Québec à Chicoutimi: http://classiques.uqac.ca/classiques/mauss_marcel/socio_et_anthropo/2_essai_sur_le_don/essai_sur_le_don.html

[6] But see p. 80, especially footnote 7, for a counter-example. I venture, however, that Mauss references here a form of generalized instead of reciprocal exchange and that that which is immediately reciprocated (a misnomer here) or consumed is given to a third party.

To formulate H5 and H6 differently, reciprocal exchange implies that there is little instantaneous exchange, i.e. gift and counter-gift happen at the same moment. What distinguishes the two hypotheses from each other, is that H6 suggests that there is a sort of minimum delay.

3.3. Data

As in chapters 1 and 2, I use survey data from SHARE. For a detailed description of SHARE, see sections 1.3 and 2.3. In short, SHARE is a cross-national longitudinal survey across twenty European countries that was fielded biennially from 2004 to 2017 (and is ongoing). The target population are residents aged 50 years and older together with their partners or spouses. Contrary to the previous chapters, I use the longitudinal version of SHARE in this chapter. This means that instead of a nationally representative cross-section of households with members aged 50 years and above at during each survey year, this chapter uses a sample that can be interpreted as representative of the cohort of residents of European countries aged 50 years and above in 2004 *as they age over the time of the survey*. This also restricts the sample to a smaller number of countries: Austria, Belgium, Denmark, France, Germany, Italy, Spain, Sweden, and Switzerland.[7]

3.3.1. Dependent variable

I analyse transfers between parents and children. These transfers can be both monetary and in-kind. In-kind transfers include childcare (parents taking care of a child's child), personal care, and help with household tasks. Monetary transfers

[7]Note that, even in this restricted sample, we have Northern, Continental, and Southern European countries.

are gifts equivalent to at least ≥ 250€. Gifts are defined as "giving money, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home," excluding loans or donations to charities.

To evaluate altruism and exchange theories, I choose the incidence of monetary transfers from parents to child as the outcome.

To describe reciprocity, I use all combinations of the five types of transfers (see table 3.1). However, I combine "childcare P>C" with "Help P>C" in the analysis. I break them out individually here in order to provide a more detailed description. Section 3.4 explains in more detail how combinations of outcomes can be analysed.

I only include transfers to and from a child when I can uniquely identify the child across waves. Combining the unique respondent identifier, child gender, and the child's year of birth allows me to match children across survey waves. 87% of all children are thus matched.

Table 3.1. Proportion of parent-child dyads engaged in transfers

Transfer P>C	0.14
Transfer C>P	0.02
Help P>C	0.20
Help C>P	0.05
Childcare P>C	0.14

3.3.2. Independent variables

The two independent variables of interest are donee labor market status and donee education. Since I lack information on donee's income, I use these two covariates as proxies for the prosperity of the donee. I assume that education is positively associated with income. I also assume that full-time employment is positively associated with income compared to all other labor market situations.

I use the following controls for the donee: age; presence of a coresiding partner; and number of children.

I also use the following controls for the donor: age; marital status; labor market status; education (highest degree attained between the respondent and their spouse); total household income (logged); and household net worth (transformed by the inverse hyperbolic sine function). Five sets of imputations are used for households with missing information on income or net worth. Income is imputed for 33% of households, and net worth is imputed for 41%.

Table 3.2. Descriptive statistics of children in longitudinal sample

	Mean	Median	SD	Min	Max
Age	37.2	38	11	16	70
Female	0.49			0	1
Coresiding partner	0.66			0	1
Number of children					
0	0.44			0	1
1	0.17			0	1
2 or more	0.39			0	1
Labor market					
Full-time empl.	0.59			0	1
Part-time empl.	0.07			0	1
Self-/family empl.	0.07			0	1
Unemployed	0.12			0	1
Education/training	0.09			0	1
Parental leave	0.01			0	1
Caregiver/homemaker	0.05			0	1
Highest degree					
Primary	0.06			0	1
Lower secondary	0.15			0	1
Upper secondary	0.43			0	1
Graduate	0.32			0	1
Other	0.05			0	1

Multiple imputation is performed based on age, gender, and geographic location Christelis, 2011.

Table 3.3. Descriptive statistics of parents in longitudinal sample

	Mean	Median	SD	Min	Max
Age	64.8	66	10.4	50	105
Household income (in thousands)	39.6	22.8	68.4	0	3000
Household income (imputed; in thousands)	38.8	22.8	65	0	3000
Household net worth (in thousands)	245	129	444	−8000	20000
Household net worth (imputed; in thousands)	272	143	490	−8000	20000
Marital status					
Married	0.69			0	1
Separated/divorced	0.10			0	1
Never married	0.01			0	1
Widowed	0.20			0	1
Labor market					
Retired	0.49			0	1
Employed	0.29			0	1
Out of labor force	0.22			0	1
Education					
Primary	0.27			0	1
Lower secondary	0.17			0	1
Upper secondary	0.30			0	1
Graduate	0.22			0	1
Other	0.04			0	1

3.4. Methods

3.4.1. Hierarchical model

To test hypotheses 1 through 4, I estimate the parameters of a hierarchical logistical model of transfer receipt. Observations are nested within parent-child dyads and errors are clustered at the sibship/family level. I prefer a hierarchical over a non-hierarchical model to better model the nested nature of errors. I prefer a random-effects model over a fixed-effects model because the fixed-effects model requries variation within units and would therefore discard parent-child dyads that don't vary in the outcome or one of the covariates of interest over time. I pool data over countries since I am more interested in statistical power than in country-specific estimates.

The model can be written the same way as equation 1 (ch. 2, p. 96):

$$y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) = \beta_0 + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + \xi_{ij} \tag{4}$$

where i is the year, j the recipient, β_2 through β_p are covariates, and ξ_{ij} is a residual. The residual has two components, one of which is shared between different observations of the same recipient:

$$\xi_{ij} \equiv \zeta_j + \epsilon_{ij}$$

Substituting for ξ_{ij}, we obtain:

$$\begin{aligned} y_{ij} = \ln\left(\frac{P(y_{ij}=1|x_{ij})}{1-P(y_{ij}=1|x_{ij})}\right) &= \beta_0 + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + (\zeta_j + \epsilon_{ij}) \\ &= (\beta_0 + \zeta_j) + \beta_2 x_{2ij} + \cdots + \beta_p x_{pij} + \epsilon_{ij} \end{aligned}$$

3.4.2. Sequence analysis

I use sequence analysis to measure the importance of deferred reciprocity (for recent reviews focused on the social sciences, see: Fasang, 2010; Lesnard, 2006; Abbott and Tsay, 2000). Sequence analysis has a long tradition in the social sciences (Abbott and Forrest, 1986) and is used to study such questions as the career of academics, shifts between different living arrangements, education-work transitions, and work-motherhood trajectories. As discussed above, gift and counter-gift often happen at certain intervals. A cross-sectional approach might mistake an exchange with deferred reciprocity, i.e. that takes place across two or more periods, for a series of unrelated, instantaneous, and gratuitous gifts. It is therefore important to measure both immediate and deferred reciprocity.

Sequence analyses studies *sequences* made up of several *elements* including *states*, *transitions*, and *events* (Gabadinho et al., 2011). *States* last as long as nothing happens, while *events* happen at a given time point (for a detailed discussion of the ontology, see pp. 157-8 of Ritschard et al., 2009). Events may also be transitions, but *transitions* can encompass more than one event. For example, in a life course sequence, the movement from the state "single, childless" during period 1 to the state "married, 1 child" during period 2 represents one transition but (at least) two events, marriage and child birth.

Transfers can be thought of as events or transitions. A transfer as event underlines the importance of its timing, relative to other events, transitions, or states. One can think of the coincidence of ritualized transfers and rites of social or legal maturity. A transfer as transition underlines the change in an underlying state that accompagnies the transfer. As discussed below, certain transfers create a situation of indebtedness between donor and donee and thereby change their respective status. The difference between state, event, and transition often lies in the importance of time in the analysis. Social science data is often characterized by the importance of time information – absolute, e.g. date, or relative, e.g. intervalsor duration – (see especially: Lesnard, 2006). However, in this chapter, I will focus exclusively on the *ordering* of events (transfers). I use what Gabadinho et al. (2011) and Ritschard et al. (2009) call *distinctive-successive-states* or *distinct-state-sequence* sequence representations (DSS). The conceptual and methodological distinctions between the different types collapse in this situation and one can apply state sequence techniques to what are strictly speaking events or transitions (Ritschard et al., 2009, p. 160; Gabadinho et al., 2011, pp. 8-9).

To illustrate the approach, consider the following sequence: "money transfer from parent to child→no transfer→social support from child to parent→concurrent exchange of money for social support between parent and child." This sequence comprises two elements: money transfers from parent to child and social support from child to parent. I will use "social support" and "help" interchangeably. We can extend its generality by allowing for the two transfers to work in reverse too. I will use the following notation: M_{source} for a money transfer and H_{source} for social support/help. The subscript indicates the source of the transfer: P for parents and C for child. Finally, we can denote the absence of an element with a barred symbol, like $\bar{M}_{source}$. Thus, we can note the sequence above as: $M_P\bar{H}_P\bar{M}_C\bar{H}_C \rightarrow \bar{M}_P\bar{H}_P\bar{M}_C\bar{H}_C \rightarrow \bar{M}_P\bar{H}_P\bar{M}_CH_C \rightarrow M_P\bar{H}_P\bar{M}_CH_C$. This illustrates how one can combine several events into larger events, since the absence of a given action or event during a given period may be as significant as its occurence.

A taxonomy of the exchange of money and social support between parents and children can be built up with these four elements and their opposite: M_P, H_P, M_C, and H_C. If we keep the order of the elements and we denote their absence or presence by $Y(es)$ or $N(o)$, we obtain sixteen unique combinations. Certain combinations are conceptually more interesting than others, in addition to being more resemblant with certain combinations than others. Table 3.4 illustrates two different conceptualizations of all sixteen combinations.

The first conceptualization is represented by the grouping of combinations into different columns. It follows the empirical distribution of the combinations across survey waves (see table 3.7), i.e. the four most frequent combinations are grouped into the first column and so forth. However, empirical importance does not equal

Table 3.4. Two typologies of exchange configurations

Most common	…	…	Least common
NNNN	NNNY	NNYN	NNYY
NYNN	NYNY	NYYN	NYYY
YNNN	YNNY	YNYN	YNYY
YYNN	YYNY	YYYN	YYYY

Note: Red/dotted = unilateral parental transfer. Green/solid = unilateral filial transfer. Blue/dashed = exchange.

conceptual importance and the columns conflate sometimes very disparate elements, such as the absence of any transfer ($NNNN$) in the first column. An alternative conceptualization is indicated by the colored boxes. One group, in red (dotted line), comprises all situations in which parents transfer money or support without any (concurrent) counter-transfer. Another group, in green (solid line), comprises all such situations but for transfers originating from children. The blue group (dashed line) includes all situations with some variation of concurrent exchange. Finally, the absence of any transfer stands on its own.

The sequences shown in table 3.4 are the basic analytical building blocks for *one single period*. The sequence analysis proper begins when we combine these elements across periods. For example, we are interested in whether $YNNN$ (money transfer from parent to child) is ever followed by either of $--NY, --YN, --YY$ (money transfer by child, social support by child, both by child). The number of possible sequences is n^p where n is the number of elements and p is the number of periods. In this chapter, we could try to analyse 16 elements across 6 periods, i.e. 16.7×10^6 possible unique sequences. I prefer, however, the more parsimonious and conceptually more interpretable grouping into "None," "unilateral parental

transfer," "unilateral child transfer," und "exchange." This results in $4^6 = 4096$ possible unique sequences.

Sequence analysis helps with determining the most frequently actually observed sequences, the most probable transitions between two adjacent states, and the diversity and stability of different sequences. In this chapter, I will focus on frequency distributions for the most frequently observed sequences and on grouping sequences by similarity.

Similarity of sequences can be evaluated according to various distance measures (Gabadinho et al., 2011). I use an optimal matching distance based on Levenshtein (1966)'s edit distance and its implementation in the `R` software package `TraMinR` (Gabadinho et al., 2011; Needleman and Wunsch, 1970). The informal intuition behind this distance is to calculate the "cost" of transforming one sequence into another via three operations, deleting, inserting, and substituting elements. The "cost" of deletions, insertions, and substitions, must be defined by the analyst and I use a cost matrix based on the empirically observed transition rates between elements, i.e. the probability of element X_A occuring at $t + 1$ if we observe X_B at t. There is no strong theory for choosing measures or for defining costs (see the critiques, in the same issue, of: Abbott and Tsay, 2000; Brzinsky-Fay, Kohler, and Luniak, 2006, p. 450; but see: Lesnard, 2006; Studer, 2012; Fasang, 2010). Optimal matching and a transition-rate-based cost matrix are conventional choices widely used in the social sciences (Abbott and Tsay, 2000; Studer, 2012; Gabadinho et al., 2011).

3.5. Results

To make the discussion of the results easier, table 3.11 recapitulates the hypotheses.

Table 3.5. Hypotheses

H1 (altruism-education):	Education is negatively associated with the probability of receiving a transfer.
H2 (altruism-employment):	Full-time employment is negatively associated with the probability of receiving a transfer.
H3 (exchange-education):	Education is positively associated with the probability of receiving a transfer.
H4 (exchange-employment):	Full-time employment is positively associated with the probability of receiving a transfer.
H5 (reciprocity-distinct acts):	Exchange happens not simultaneously but in distinct acts.
H5 (reciprocity-interval):	Parties to the exchange will wait one or more periods before reciprocating.

3.5.1. Altruism or exchange: the role of education and employment

Section 3.2 suggested that education could be positively (exchange) or negatively (altruism) correlated with the probability of receiving a transfer. Similarly, employment could be positively (exchange) or negatively (altruism) correlated with the probability of receiving a transfer. Table 3.6 presents the logistic coefficients for education and employment. The full model can be found in table B.6.

As we can see from table 3.6, the logistic coefficients for education are negative throughout. Compared to the reference category (an upper secondary degree, i.e. high school), every other degree reduces the odds of receiving a transfer. The difference between an upper secondary and a lower secondary or a primary degree are statistically significant at conventional levels. The difference between a lower

Table 3.6. Logistic coefficients of education and employment

Variable	Estimate	(t-value)
Education (ref.: Upper secondary)		
Primary	–0.65	–4.05
Lower secondary	–0.18	–2.42
College	–0.07	–1.40
Other	–0.05	–0.49
Employment (ref.: Full-time)		
Part-time	–0.02	–0.27
Self-/family-employed	0.13	1.84
Unemployed	0.27	4.04
Education/training	0.47	6.00
Parental leave	0.39	2.56
Caregiver/homemaker	0.05	0.41

secondary and a primary degree is also statistically significant ($z = 2.85$). The difference between an upper secondary and a college degree is not.[8] In other words, there is a positive correlation between the level of degree and the probability of receiving a transfer, but only up the level of high school.

As to employment, the statistically significantly different estimates compared to the reference category (full-time employment) are: being unemployed, being in education or training, and being on parental leave. The coefficients of these categories are all positive, indicating that, compared to full-time employment, a child in one of these situations has better odds of receiving a transfer. These results favor the interpretation of a negative correlation between employment and the probability of receiving a transfer.

[8]The "other" category comprises different nationally specific vocational degrees that are difficult to compare.

3.5.2. Synchronous flows of money and social support between parents and children

Table 3.7 shows the frequence of all combinations of flows of money and social support between two generations within each wave. The values are averages across countries within waves.[9] Given that the country sample changes over time, direct comparisons across waves are not possible. I will focus on the ranking in terms of frequency of different configurations within each wave. We shall see that a common pattern exists across waves.

The sixteen configurations that constitute the rows of table 3.7 correspond to all possible combinations of four variables: parents donated money to child i, parents donated social support (incl. child care) to child i, child i donated money to parents, and child i donated social support to parents. Financial transfers are indicated by M and their absence by $\bar{M}$. Social support is indicated by H and its absence by $\bar{H}$. The period covered are the twelve months preceding the interview.

The table describes situations of *direct* exchange (or its absence).[10] It shows clearly that there is a great imbalance between different configurations of flows. In consequence, certain types of direct exchange are more probable and others less so. Of interest to use are the most frequent configurations of transfers and counter-transfers.

The most frequent configuration is the one indicating the absence of any flow in any direct: $\bar{M}\bar{H} \leftrightarrow \bar{M}\bar{H}$. More than two thirds of all households indicate being in this situation during any given year.

[9] For detailed country-by-country data, see table B.5.

[10] It would be possible to measure *indirect* exchange by relaxing the constraint that the child-donor and the child-donee be the same person. There is, however, no theoretical guidance on how indirect exchange *within* the family would be motivated and structured.

The second-most frequent configuration is the one indicating a unilateral flow of social support from parents to children: $\bar{M}H \leftrightarrow \bar{M}\bar{H}$. One in eight households reports providing social support to a child without receiving either money nor social support from any child and while not engaging themselves in financial support. This reflects the importance of parents caring for their children's children: three-fourths of parental social support is made up of childcare.

The third-most frequent configuration indicates a unilateral flow of money from parents to children: $M\bar{H} \leftrightarrow \bar{M}\bar{H}$. One in sixteen households reports being in this situation. While this may appear like a low frequency in the absolute, note that this represents 24% ($= \frac{0.072}{1-0.703}$) of all situations where a transfer occurs.

Another flow represents a noticeable portion of the observations. The unilateral flow of social support from a child to a parent, $\bar{M}\bar{H} \leftrightarrow \bar{M}H$, characterizes roughly 1 in 33 households.

Overall, configurations in which a financial transfer from parents to a child was involved account for 10.4% of the observations while configuratinos in which a transfer of social support from parents to a child was involved account for 17.8%. For transfers from children to parents, the numbers are, respectively, 1.6% and 6.2%. Finally, 22.4% of parental households report providing some sort of support while receiving "nothing" in return. In other words, three out of four parental transfers do not elicit a counter-transfer during that same period.[11]

Table 3.8 focuses on a subset of configurations. It shows the average frequency across countries and within waves of transfers that involve a downward financial transfer and an upward transfer of social support. This is the type of transfer that is the theoretical focus of economic and social exchange theories. The table also

[11]The percentage of children receiving "nothing" while providing something is 3.8%.

Table 3.7. Households reporting transfers of money and help to and from children

Parent↔Child	Wave 1	Wave 2	Wave 5	Wave 6	Wave 7	Average
$\bar{M}\bar{H} \leftrightarrow \bar{M}\bar{H}$	71.7%	69.9%	69.5%	69.9%	70.7%	70.3%
$\bar{M}\bar{H} \leftrightarrow \bar{M}H$	2.7%	2.9%	3.4%	3.1%	3.4%	3.1%
$\bar{M}\bar{H} \leftrightarrow M\bar{H}$	0.6%	0.7%	0.7%	0.6%	0.5%	0.6%
$\bar{M}\bar{H} \leftrightarrow MH$	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
$\bar{M}H \leftrightarrow \bar{M}\bar{H}$	13.5%	13.3%	14.0%	13.7%	13.4%	13.6%
$\bar{M}H \leftrightarrow \bar{M}H$	1.3%	1.4%	1.8%	1.7%	1.9%	1.6%
$\bar{M}H \leftrightarrow M\bar{H}$	0.3%	0.3%	0.3%	0.3%	0.4%	0.3%
$\bar{M}H \leftrightarrow MH$	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
$M\bar{H} \leftrightarrow \bar{M}\bar{H}$	6.7%	8.0%	7.2%	7.5%	6.8%	7.2%
$M\bar{H} \leftrightarrow \bar{M}H$	0.8%	0.7%	0.6%	0.6%	0.6%	0.7%
$M\bar{H} \leftrightarrow M\bar{H}$	0.1%	0.2%	0.3%	0.3%	0.2%	0.2%
$M\bar{H} \leftrightarrow MH$	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
$MH \leftrightarrow \bar{M}\bar{H}$	1.7%	1.9%	1.5%	1.4%	1.5%	1.6%
$MH \leftrightarrow \bar{M}H$	0.4%	0.4%	0.3%	0.3%	0.3%	0.4%
$MH \leftrightarrow M\bar{H}$	0.1%	0.1%	0.1%	0.2%	0.2%	0.1%
$MH \leftrightarrow MH$	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%

Note: M means that money was transferred, $\bar{M}$ means that no money was transferred, H means that help was provided, and $\bar{H}$ means that no help was provided. Columns sum up to 100%.

contains minimal and maximal values in order to illustrate the amount of variation across countries.

The category that interests us most, $M \leftrightarrow H$, is the category with the lowest incidence. On average, 1 out of 50 households will experience giving a financial transfer and receiving social support during any given year. To repeat, this concerns only situations where the two transfers happen between the same two parties, i.e. direct exchange, and in the same period.

We can compare this to the case of parents giving a financial transfer but not receiving any social support. This concerns on average one out of twelve parental households per year. The spread across country-years is considerable: the minimal value is one out of fifty and the maximal value is one out of seven.

Together, these two categories encompass all cases where parents declare at least one financial transfer to a child. We see that it is much more probable for them to receive nothing "in return" than to receive social support. On average, one in eleven parental households will initiate at least one financial transfer to a child per year. Out of these, three quarters do not receive any social support from any child during the same year.

Table 3.8. Households reporting money and help outgoing to and incoming from children

Parent↔Child		Wave 1	Wave 2	Wave 5	Wave 6	Wave 7	Total
$\bar{M} \leftrightarrow \bar{H}$	Mean	75.2%	73.8%	74.1%	74.1%	75.1%	74.5%
	Min	68.8%	65.9%	67.3%	65.9%	66.5%	65.9%
	Max	84.8%	84.5%	84.5%	85.7%	85.5%	85.7%
$\bar{M} \leftrightarrow H$	Mean	15.1%	15.0%	16.0%	15.8%	15.7%	15.5%
	Min	10.6%	10.9%	11.8%	11.6%	10.4%	10.4%
	Max	18.9%	19.3%	20.8%	20.7%	19.6%	20.8%
$M \leftrightarrow \bar{H}$	Mean	7.5%	8.8%	8.1%	8.3%	7.5%	8.1%
	Min	2.5%	3.3%	3.3%	2.3%	3.4%	2.3%
	Max	11.3%	14.8%	11.7%	13.5%	10.7%	14.8%
$M \leftrightarrow H$	Mean	2.2%	2.4%	1.9%	1.8%	1.8%	2.0%
	Min	0.6%	0.2%	0.4%	0.3%	0.5%	0.2%
	Max	3.7%	3.9%	2.8%	3.2%	3.3%	3.9%

Note: M means that money was transferred, $\bar{M}$ means that no money was transferred, H means that help was provided, and $\bar{H}$ means that no help was provided. Mean cells within columns sum up to 100%. For example, the mean values of $\bar{M} \leftrightarrow \bar{H}$, $\bar{M} \leftrightarrow H$, $M \leftrightarrow \bar{H}$, and $M \leftrightarrow H$ for wave 1 sum up to 100.

3.5.3. Diachronous flows of money and social support between parents and children

In subsection 3.5.2, I explored the synchronous flows of money and social support between parents and children. The results showed little exchange during any given

year. The preponderant configurations were absence of any type of flow or unilateral flows of money or social support in either direction. However, the exchange dynamic between parents and children may take place across periods longer than 12 months. This subsection presents results on exchange flows across a period of up to seven survey waves ($2004 - 2017$). I use the longitudinal sample composed of observations with complete data across waves 1, 2, 5, 6, and 7.

In contrast to subsection 3.5.2, here I consider complete sequences of transfers across all waves. Out of $4^6 = 4096$ possible unique sequences, 216 are represented in the data. The sequence of no transfer at all during any period represents 46% of all observations. The next most frequent sequence, with 14%, is "unilateral parental giving" during all five periods. Of the ten most frequent sequences, eight are different combinations of "unilateral parental giving" with "no transfers," distinguished by the duration and timing of either. These eight sequences that represent situations where transfers flow exclusively from parents to children make up $> 30\%$ of all sequences. It follows that direct exchange between parents and children is the exception rather than the rule.

To underscore this further, table 3.9 shows the distribution of the four elements that make up the sequences across individual countries and waves. It clearly shows the preponderance of absence of transfers and, conditional on there being a transfer, the predominant role of parents.

Table 3.9. Distribution of four sequence elements

	Freq	Percent
None	32318	66.74
Parents	12124	25.04
Child	2047	4.23
Both	1936	4.00

Figure 3.1 illustrates the amount of variation by country by showing the ten most frequent sequences by country. As can be seen from the figure, the ten most frequent sequences represent between 73 and 93% of the sample across countries and, within that share, "no transfer" and "unilateral parental giving" across five periods take first and second place. The major distinguishing characteristic is how much of the total sample is represented by the "no transfer" sequence, which recalls the results of chapter 1 about mean transfer rates. Yet, there are some noticeable differences between countries. They begin to distinguish themselves from each other starting with the third-most frequent sequence. In Belgium and Denmark, a continuous exchange involving both parties across all five periods takes the third place. In Sweden, we find the same at fourth place. Germany and France show no sequence involving direct exchange among the ten most frequent sequences.

The preponderance of the absence of transfers is so great that it becomes difficult to analyse the structure of exchange when it actually happens. For this reason, I here present results of sequence distribution conditional on the sequence including some sort of transfer. To be precise, I subset the data to find the sequences in which at least two of the elements "Parents," "Child," and "Both" occur. In other words, I select those sequences that could potentially be construed as representing exchange. This reduces the sample to 450 out of 5464 sequences.

Surprisingly, a majority of the elements that make up these sequences are transfers from children to parents with no counter-transfer during the same period (see table 3.10). We observe also more elements of type "Both," i.e. transfer and counter-transfer between parents and children, than unilateral parental transfers.

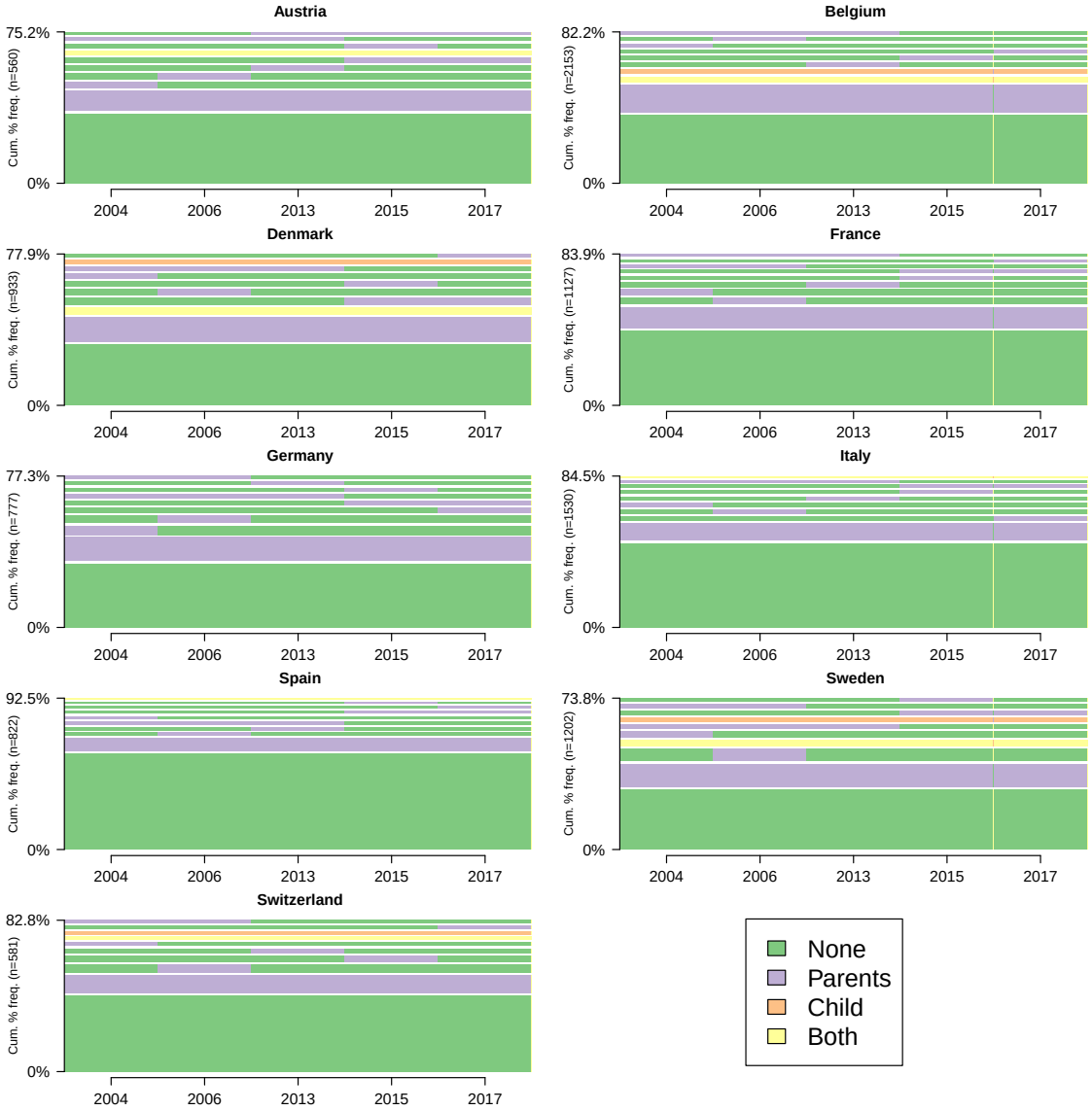

Figure 3.1. Sequence frequencies across countries, longitudinal sample

Figure 3.2 illustrates these results on a country-by-country basis. Note that, visually too, the combination of "Child" and "Both" predominates.

I conclude from the above that hypotheses 5 and 6 are not supported by the data.

Table 3.10. Distribution of four sequence elements, conditional on exchange

	Freq	Percent
None	186	8.27
Parents	602	26.76
Child	827	36.76
Both	635	28.22

Table 3.11. Empirical support for hypotheses

	Empirical support	Result
H1 (altruism-education):	no	High school and college graduates have higher odds of receiving a transfer than individuals with lower degrees.
H2 (altruism-employment):	yes	Full-time employment reduces one's chances of receiving a transfer.
H3 (exchange-education):	mixed	The odds of receiving a transfer increase from primary school to high school, but stagnate afterwards.
H4 (exchange-employment):	no	Full-time employment reduces one's chances of receiving a transfer.
H5 (reciprocity-distinct acts):	no	Unilateral or coinciding transfers are the majority.
H5 (reciprocity-interval):	no	When exchange happens, it happens during the same period of observation.

3.6. Discussion

Section 3.5 underscored the rarity of actual exchanges between parents and children. This gives the lie to economic and social theories of exchange. Contrary to economic exchange theory, parents seem quite ready to transfer money and social support towards children without receiving anything (equivalent) in return. Yet, in accordance with social exchange theory and Maussian reciprocity, parents are sometimes successful in eliciting a "virtuous cycle" of gift and counter-gifts from their children.

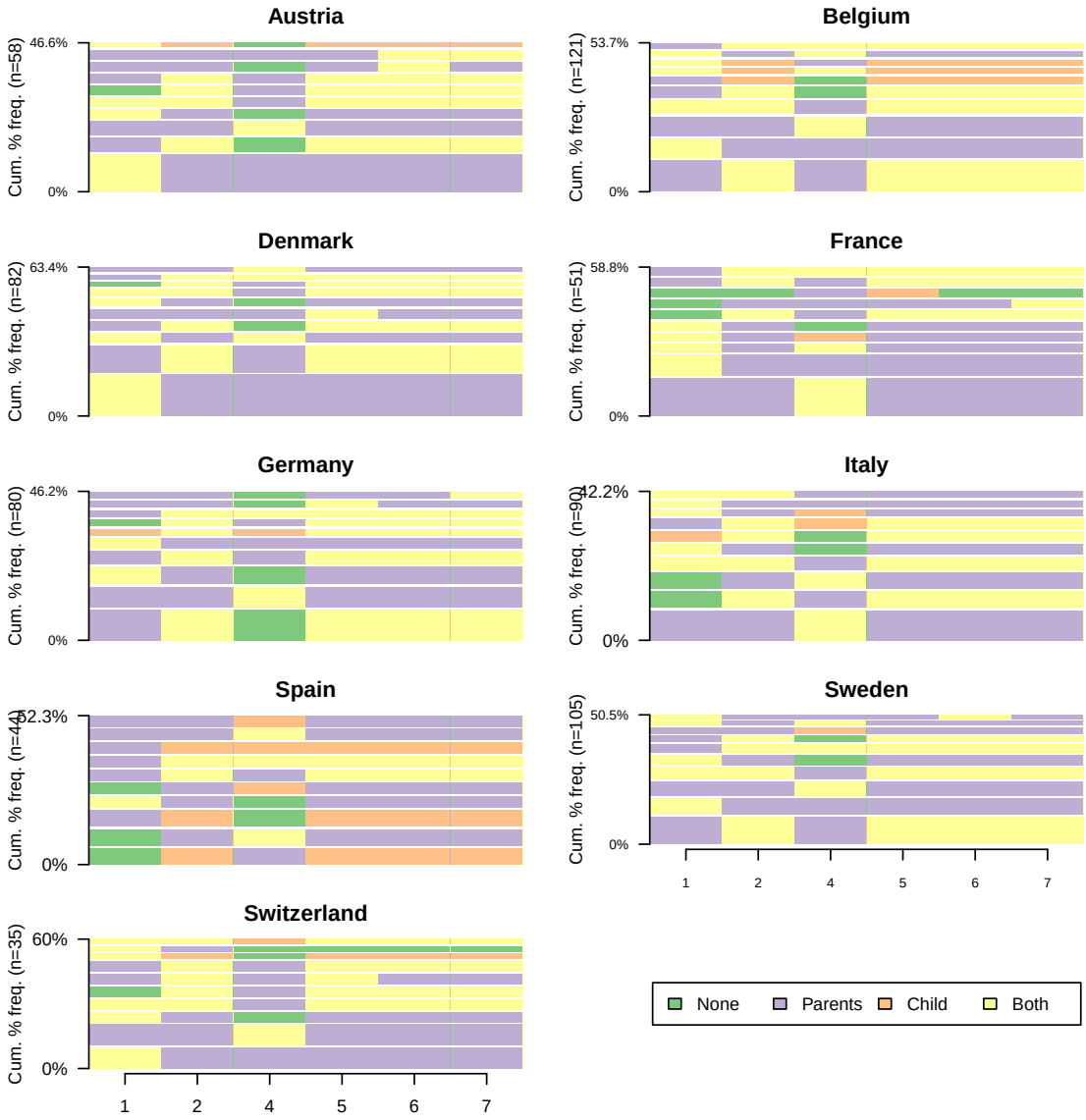

Figure 3.2. Frequency of ten most frequent sequences by country

The main competitor to various forms of exchange theory, altruism, remains a plausible candidate for explaining the observed facts. The research program, in its economic variant, seemed to have run aground on the reefs of inconclusive or negative empirical results. If we allow other indicators of "need" than income, however, there is some support for altruism. Children that are outside of the labor market, because of unemployment, parental leave, or education/training, have

greater odds than full-time employed children of receiving a transfer. In addition, the fact that parents routinely engage in transfers towards their children but see little transfers in return, suggests the existence of normative pressure or some unobserved benefit. The latter, i.e. an unobservable psychic benefit of parental "generosity," is difficult to reconcile with the variation of absolute transfer rates across countries. Proponents of the psychic benefit theory would have to explain why parents in some countries derive five times more pleasure from their own generosity than those in other countries. The existence of a general norm towards generosity is easy to posit and difficult to observe. It is rendered somewhat more likely by the results from chapters 1 and 2 that individual characteristics of children explain little of the variation in parental transfers. In other words, it seems like the individual "deservedness" of a child does not explain whether parents engage in transfers. Future research could investigate whether "collective deservedness" is a better predictor of national levels of transfers. By "collective deservedness," I refer to the perception of the economic and social situation and needs of a generation (in the life-course sense). For example, the timing of the Great Recession of 2008 and the pandemic-related recession of 2020 has resulted in a double labor market penalty for individuals born between 1980 and 1995 that is recognized by government and media (Kurz, Li, and Vine, 2018; Seib, 2020; Shirazi, 2020). It remains to be seen if this correlates with the emergence of a sense of generational solidarity.

Nevertheless, the rarity of a phenomenon does not imply a lack of importance or interest. It is well possible that we could still learn important lessons about the dynamics of intra-familial exchange along the lines indicated at the beginning of this chapter if we had access to a bigger study population. Some of the results of this chapter pose indeed new questions that previous theories did not anticipate

or thought answered. Chief among them is the proportion of unilateral transfers originating from children.

It is, of course, also possible that intra-familial exchange takes place over periods longer than that covered by the present survey. SHARE currently covers thirteen years and most of its respondents are aged between 50 and 70 years while their children are aged between 30 to 50 years. It is remarkable that during this life-course period downwards transfers remain the dominant form. Yet, this may be due to longer life spans and, especially, an extension of the period with an elevated quality of life. In this case, one would expect a reversal of the dominant direction of flows only later in life. In fact, it may be that the age category that makes up most of SHARE's respondents in parallel cares for their own ageing parents. This chapter did not investigate this possibility and, thus, this remains a possible avenue for future research.

Conclusion

This thesis examines the distribution and structure of inter vivos transfers from three points of view: differences between countries, between donees of different gender, and between varying sequences of gift and counter-gift. In three chapters, I analysed these questions with the aid of descriptive and inferential statistics and sequence analysis.

Chapter 1 posited that cross-national differences should follow a prominent framework of welfare state regimes – the three worlds of welfare state capitalism theory – in order to test the assertion that household inter vivos transfers substitute for state efforts to supplement or replace income. That proposition was not borne out by the data. Adjusting national transfer rates for socio-demographic covariates did not cancel out national differences, suggesting that there are factors beyond household income and wealth, age structure, and family structure that are important for the incidence of inter vivos transfers on a national level. More detailed analysis of social and family policies and the investigation of cultural factors could be fruitful avenues for further research. Moreover, I found that within-country differences between income and wealth quantiles showed almost the same amount of variation as between-country differences. In sum, there is much of the variation in inter vivos transfers that depends on one's rank in one's country's income and wealth distributions or other individual-level or family-level characteristics.

Chapter 2 focuses on recipient gender and sibship sex composition. Previous literature on parental investment into children and on inter vivos transfers documented a clear son preference, especially in mixed-gender sibships. Yet, these studies relied principally on U.S. data and covered the 1980s and 1990s. Extending this research to European countries and a more recent period had the potential for new findings. Indeed, in my findings, there was no son preference in any country across the whole study period. On the contrary, certain countries showed a slight daughter preference in the occurence of inter vivos transfers. This preference, however, is entirely mediated by demographic factors or care provision by the recipient, depending on the country. It appears that the daughter effect is concentrated among young, single, childless women in most countries. Coupled women and women with children are not treated preferentially to their male counterparts. Children who, in turn, provide social support to the donor – personal care, household help, and help with daily tasks – are more likely to receive transfers. Since daughters engage more often in these behaviors, they also receive transfers more often. Accounting for these dynamics reduces the daughter preference to zero or even reverts it, albeit not to a statistically significant degree.

Overall, chapter 2 provides more empirical support for the thesis of increasing gender equality across European countries. Previous literature focused on employment outcomes and social policies, especially concerning labor market attachment, childcare, and parental leave. This chapter suggests that in the private realm too, more egalitarian behaviors have taken root.

Chapter 3 reviews three higher-level theories of exchange. Economists proposed the idea of altruism, i.e. that parents integrate their children's well-being

into their own utility function. Enhancing a child's consumption/income, therefore, also increases the parents' well-being. Previous studies had empirically invalidated the central quantitative predictions of altruism theory, but I propose to salvage the central intuition that parental transfers may be based on children's needs or intrinsically motivated. Another economic theory – (economic) exchange theory – proposes that parents and children are engaged in exchanging monetary transfers for in-kind goods – companionship, attention, and social support. This coincides with social exchange theory that posits the existence of exchange within the family not out of a utilitarian calculation but because it enhances the status of some participants and the solidarity felt by all. Finally, I extract a general principle – reciprocity – from Marcel Mauss' theory of gift exchange that could explain why exchange takes place even when what is exchanged is incommensurable and the exchange is not instantaneous but deferred. I leverage sequence analysis and the longitudinal nature of my data to check whether any qui pro quo exists between donor and donee and, if so, whether exchange is instantaneous or deferred. I find that there is very little exchange or reciprocity. An overwhelming majority of parent-child dyads never engage in transfers at all, or engage solely in unilateral transfers from parents to children, during the 14-year period that the data covers. Only about ten percent of all dyads participate in exchange or reciprocity. Finally, the idea of reciprocity seems difficult to apply since most cases are a variation on the principles of continual parental transfers and discrete child counter-transfers. In sum, this chapter provides grounds to go back to altruism theory in order to understand why so many parents engage in transfer behavior that seems to provide no material gratification.

More generally, there are methodological and conceptual opportunities for further development of this thesis and for future research.

Methodologically, there are several avenues for improvement. To study individual donor and donee characteristics in inter vivos transfers, fixed-effects (at the recipient or family level) instead of random-effects models are a viable alternative. Their advantage is to account for unobserved heterogeneity at the level of the individual or family, depending on the analyst's choice. If there are reasons to suspect such heterogeneity to exist, then fixed-effects estimates should be preferred. For example, one could speculate that there exists an unmeasured propensity to be "generous" among donors, that is relatively stable over time, and that causally influences the extent and intensity of transfers. Fixed-effects models also have drawbacks. The major inconvenience is that they are not suited to study time-invariant covariates. Thus, it becomes a challenge to analyse factors such as gender or nationality. Another drawback consists in the loss of information that fixed-effects models entail over random-effects models. Since the variation must be internal to the fixed-effect unit, observations without internal variation are discarded. In this thesis, this means that families without variation in the outcome, i.e. transfers (across years), or in covariates of interest, e.g. the gender of recipient children, would have been left out of the analysis. Besides reducing statistical power, this also changes the population to which inferences can be drawn, which may or may not be problematic.

Another methodological avenue to pursue in the future would be to leverage sequence and cluster analysis for further statistical inference. Having identified

clusters of sequences or representative sequences for pre-defined groups, inferential techniques can be brought to bear on these groupings to ask which individual-level or group-level covariates are correlated with their occurence. One could extend chapter 3 in this way and ask, for example, why sequences of unilateral child transfers or of predominant child transfers are more common in some countries than in others. This may be particularly interesting since this configuration is at odds with all theories of inter vivos transfers and has the potential for both empirical and theoretical insights.

Conceptually, this thesis presents at least two opportunities.

The egalitarian treatment of daughters and sons in inter vivos transfers breaks with older research on parental investment into children, but fits with narratives of increase gender equality in Western countries. It would be interesting to investigate how egalitarian transfers relate to other spheres of gender (in)equality. The economic situation of women throughout the life course is one of several possible starting points. Given that the daughter advantage, when it exists, is concentrated among young, single, childless women, it seems that the beginning of their professional but also matrimonial trajectories differs across men and women in a way to elicits a familial response. Variation of cultural values of gender equality is another candidate for further research. To the degree that there is gendered variation in inter vivos transfers, does it correlate with self-reported value positions? And to the degree that there is little such variation, how do we reconcile this with very distinct national histories of gender roles? Finally, the question of reciprocity vs. altruism still holds potential. Since a non-negligible portion of parent-child dyads engage in reciprocity, one question to study is what distinguishes them from parent-child dyads engaged in exclusively unilateral parental transfers during the

same time. One could further ask whether it is possible to discern periodicities in the child transfers occuring in response to parental transfers. Turning to altruism, it is not entirely clear whether altruism implies an intrinsically motivated behavior or whether it is activated by donee needs. The failure of economic altruism theory suggests that the latter is not the entire story, at least if needs (or their absence) can be equated with income. If altruism has an intrinsic component, it is surprising that inter vivos transfers should vary this much even between relatively prosperous nations.

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Appendices

APPENDIX A

Additional figures

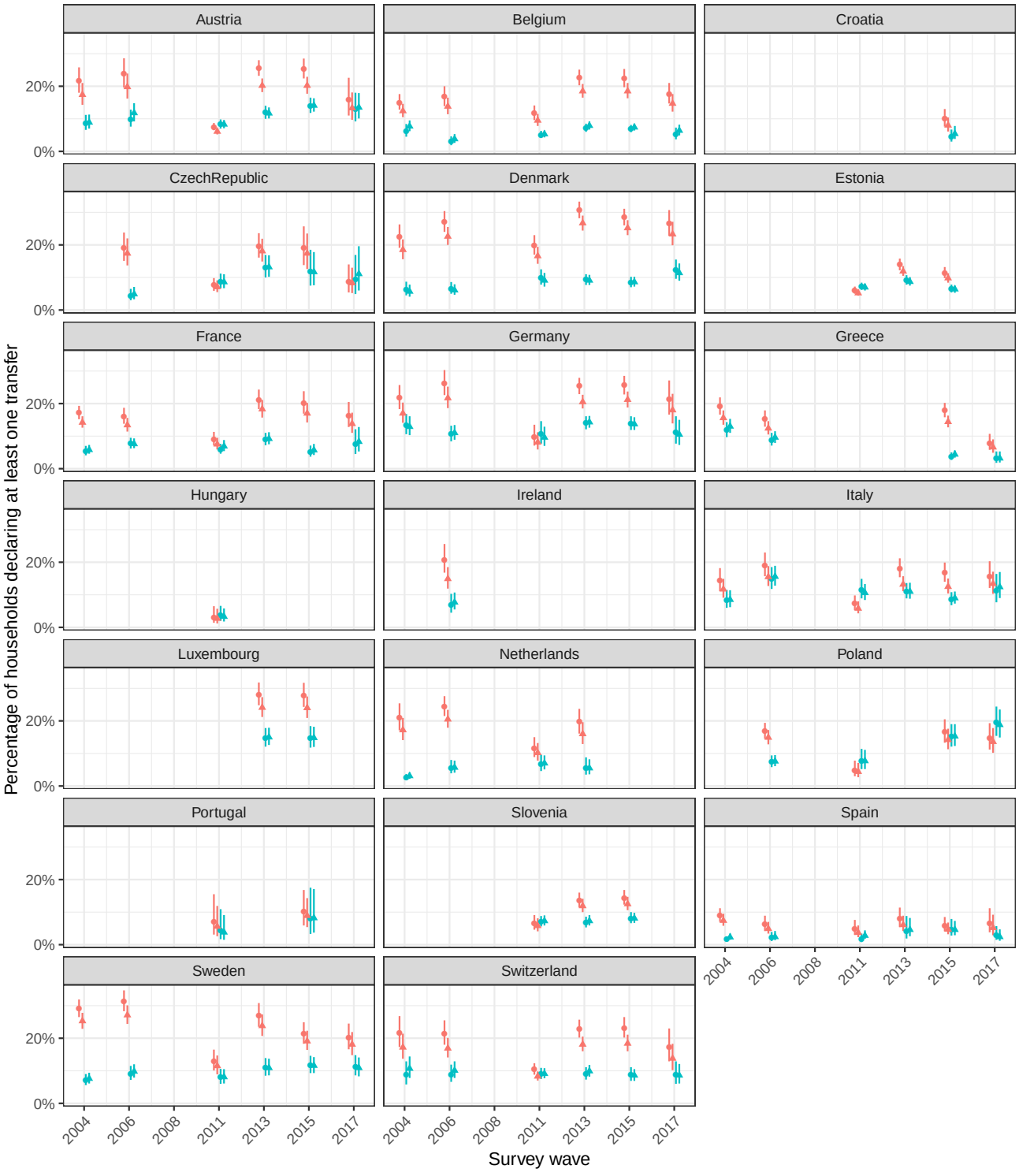

Figure A.1. Financial transfers by sender and receiver relationship

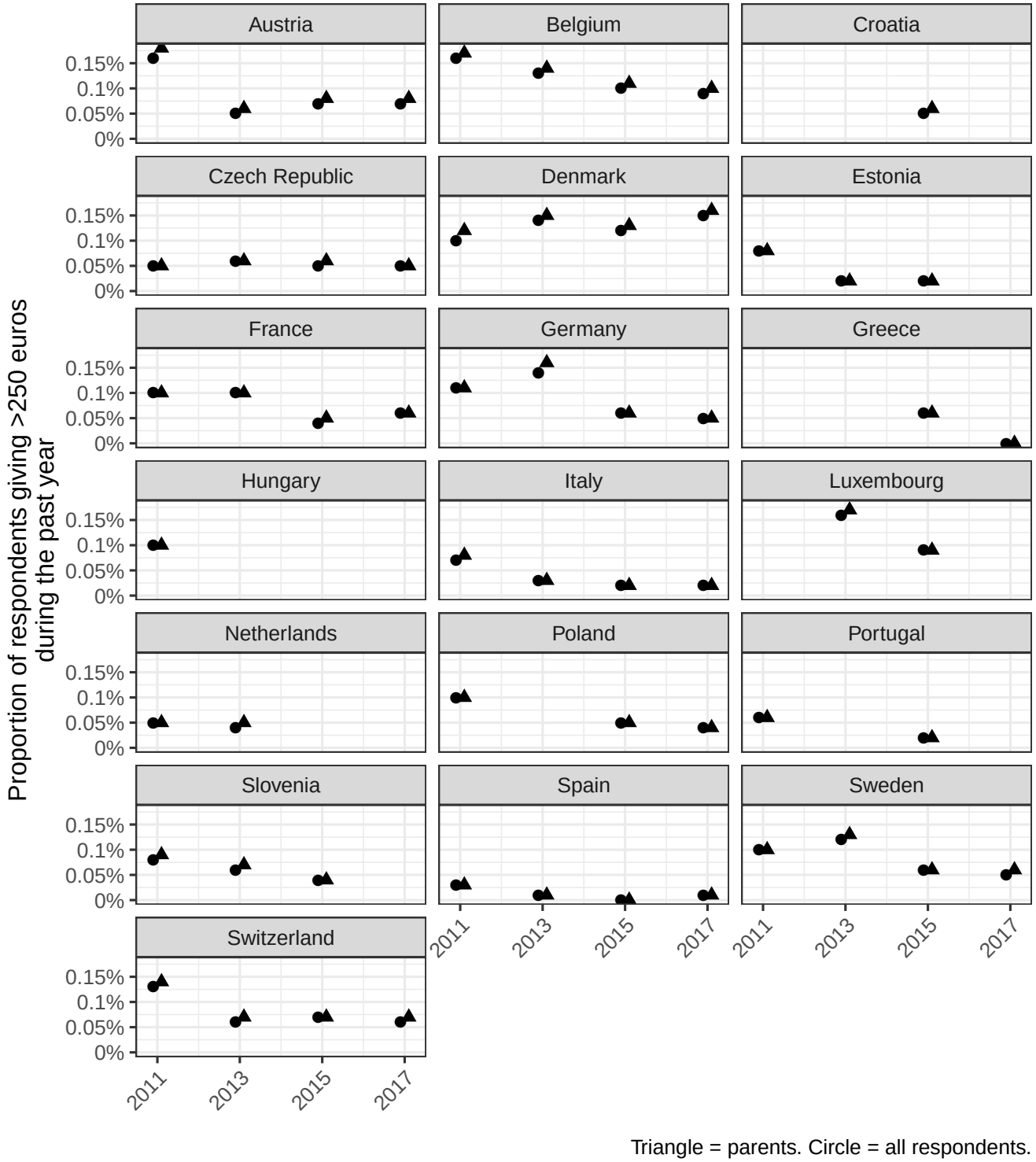

Figure A.2. Share of respondents declaring at least one large gift

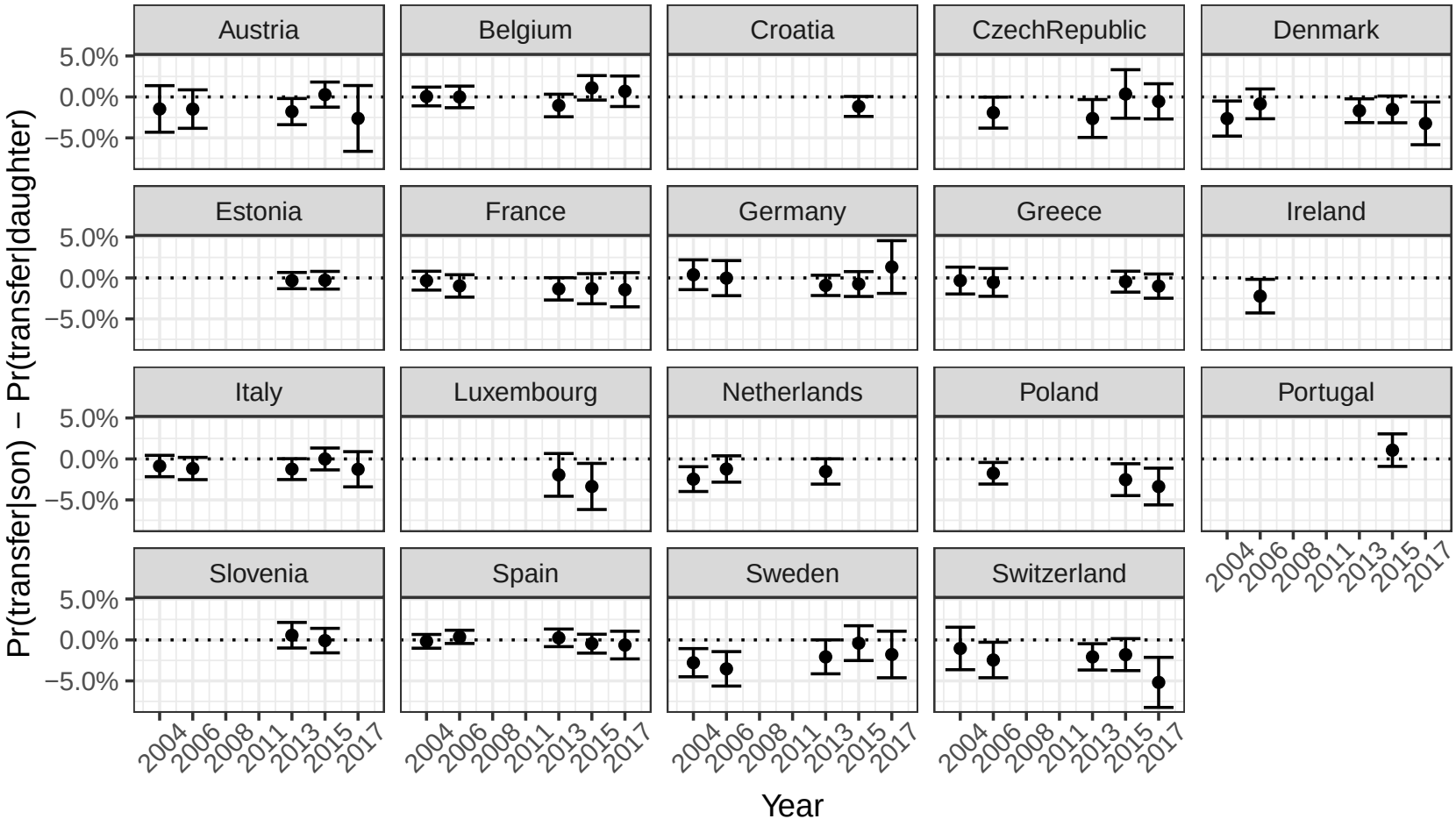

Figure A.3. Gender differences (male-female) in transfer receipt probabilities over time

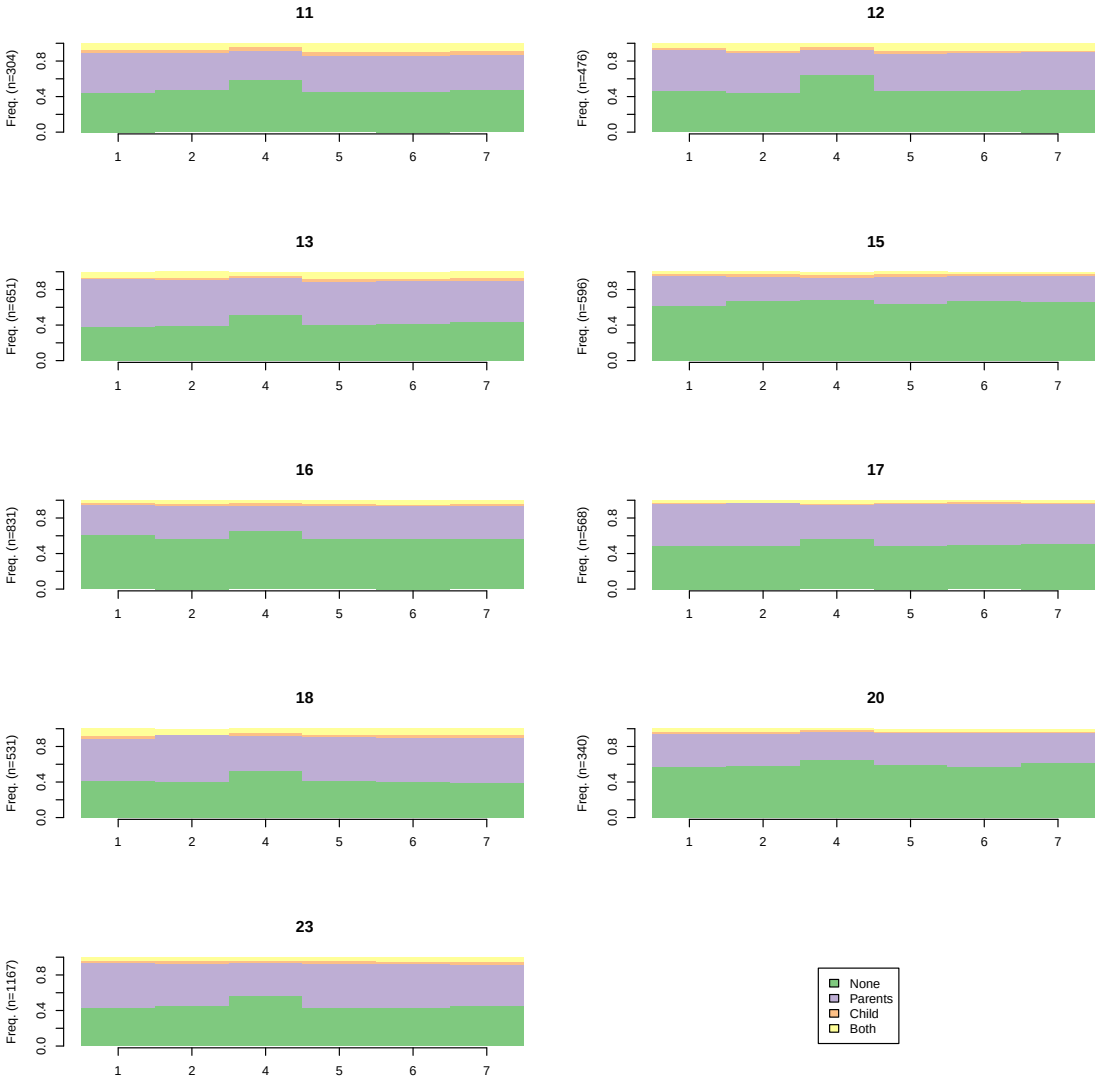

Figure A.4. State distributions across countries, longitudinal sample

APPENDIX B

Additional tables

Table B.1. Countries participating in SHARE

	2004/5	2006/7	2011/12	2013	2015	2017
Austria	x	x	x	x	x	x
Belgium	x	x	x	x	x	x
Croatia					x	
Czech Republic		x	x	x	x	x
Denmark	x	x	x	x	x	x
Estonia			x	x	x	
France	x	x	x	x	x	x
Germany	x	x	x	x	x	x
Greece	x	x			x	x
Hungary			x			
Ireland		x				
Italy	x	x	x	x	x	x
Luxembourg				x	x	
Netherlands	x	x	x	x		
Poland		x			x	x
Portugal			x		x	
Slovenia			x	x	x	
Spain	x	x	x	x	x	x
Sweden	x	x	x	x	x	x
Switzerland	x	x	x	x	x	x

Table B.2. Mixed effects logistic regression of transfer receipt, incl. country fixed effects and recipient random intercept

Variable	Coef. | t-value | CI
Female	-.07846
	-1.258852
	-.2006181,.043698
Coresiding parther	-.31415
	-5.952921
	-.417582,-.210718
One child	.0500266
	.8554755
	-.0645885,.1646417
Two children	-.1206065
	-2.198673

Continued on next page

Table B.2 – *Continued from previous page*

Variable	Coef. | t-value | CI
	-.2281188,-.0130942
Three or more ch.	0
	.
	.,.
Part-time	.4792815
	4.383549
	.2649861,.693577
Self-/family-employed	.1408636
	2.118448
	.0105382,.271189
Unemployed	.3099057
	4.843101
	.1844893,.435322
In edu/training	.5688533
	8.159379
	.432209,.7054975
Parental leave	.7474843
	1.196891
	-.4765557,1.971524
Carer/homemaker	-.0333457
	-.0684132
	-.9886623,.9219709
Only female sibs	Omitted
Only male sibs	-.0985838
	-1.816767
	-.2049379,.0077703
Mixed sibs	-.4517184
	-9.582779
	-.5441087,-.3593281
Once every (other) week	-.1160817
	-2.535657
	-.2058083,-.026355
Once a month or less	-.9781519
	-11.27931
	-1.148122,-.8081819
Female∗Coresiding partner	.3943284
	5.530075
	.2545709,.5340859
Female∗One child	.0864616
	1.091603
	-.0687795,.2417027
Female∗Two or more children	.1421364
	2.002294
	.0030049,.281268
Female∗Part-time	-.2745031
	-2.258705
	-.5126998,-.0363064
Female∗Self-/family-employed	.1162179
	1.105358
	-.0898536,.3222894
Female∗Unemployed	.0244576
	.2883562
	-.1417815,.1906968
Female∗In edu/training	-.1298142

Continued on next page

Table B.2 – *Continued from previous page*

Variable	Coef. | t-value | CI
	-1.571407
	-.2917271,.0320988
Female∗Parental leave	-.3924073
	-.6203692
	-1.63216,.8473451
Female∗Carer/homemaker	-.0469528
	-.0950229
	-1.015411,.921505
Female∗Only female sibs	Omitted
Female∗Only male sibs	Omitted
Female∗Mixed sibs	Omitted
Female∗Once every (other) week	-.1192972
	-1.929253
	-.2404936,.0018991
Female∗Once a month or less	.127573
	1.190337
	-.0824838,.3376298
Recipient's age	-.0235131
	-7.686921
	-.0295083,-.0175178
Donor's age	-.0069335
	-2.164477
	-.0132119,-.0006551
Donor separated/divorced	-.0293936
	-.5464893
	-.1348142,.0760271
Donor never married	-.3841684
	-2.857208
	-.6476984,-.1206384
Donor widowed	-.1313921
	-2.524517
	-.2334014,-.0293828
Donor employed	.1623754
	3.242421
	.0642235,.2605274
Donor out of labor force	-.2903039
	-5.405709
	-.3955605,-.1850472
Donor edu: primary	-.5929948
	-10.17719
	-.7071962,-.4787933
Donor edu: lower secondary	-.3234711
	-5.93017
	-.4303807,-.2165614
Donor edu: college	.4852812
	10.1033
	.3911398,.5794227
Donor edu: post-grad	.0905187
	1.140606
	-.0650244,.2460619
Donor household income (log)	.1589177
	9.56567
	.1263551,.1914804
Donor net worth (IHS)	.0688737

Continued on next page

Table B.2 – *Continued from previous page*

Variable	Coef. | t-value | CI
	11.37871
	.0569363,.0808112
Belgium	-.462489
	-4.037794
	-.6869834,-.2379947
Croatia	-.6328089
	-3.289931
	-1.009803,-.2558151
Czech Republic	.10549
	.8420919
	-.1400373,.3510172
Denmark	.1442333
	1.273093
	-.0778182,.3662848
Estonia	-.6633319
	-3.266328
	-1.061365,-.2652988
France	-.3573306
	-3.014155
	-.589686,-.1249752
Germany	.1022019
	.9450523
	-.1097568,.3141605
Greece	.2680637
	2.335772
	.0431294,.4929979
Ireland	-.8813751
	-5.415273
	-1.200374,-.5623758
Italy	-.2482232
	-2.133525
	-.4762535,-.0201928
Luxembourg	.0816021
	.5623249
	-.2028197,.366024
Netherlands	-.2720702
	-2.375133
	-.496583,-.0475573
Poland	-.1440304
	-1.069646
	-.4079448,.1198839
Portugal	-1.522881
	-1.792548
	-3.187993,.1422303
Slovenia	-.6146464
	-4.146414
	-.905183,-.3241098
Spain	-1.335114
	-9.679153
	-1.605466,-1.064762
Sweden	.2731069
	2.400789
	.050147,.4960668
Switzerland	-.4897731

Continued on next page

Table B.2 – *Continued from previous page*

Variable	Coef. | t-value | CI
	-3.482885
	-.7653889,-.2141574
Wave: 2	.0256526
	.520539
	-.0709361,.1222413
Wave: 3	.0002849
	.0064051
	-.0869011,.0874709
Wave: 6	-.0295234
	-.4765454
	-.1509489,.0919021
Wave: 7	.0286673
	.0379438
	-1.452121,1.509456
Constant	-2.867808
	-10.03195
	-3.428106,-2.30751
$\log \sigma_u^2$	.7688718
	3.540963
	.343286,1.194458
σ_u^2	0.7688
	0.2171
	0.3432,1.1944
ρ	0.396
	0.0519
	0.2999,0.5009

Table B.3. Average transfer probability

Wave	Male	Female	Total
Austria			
1	13.82%	15.99%	14.91%
2	17.75%	19.80%	18.76%
2	17.75%	19.80%	18.76%
4	5.81%	6.13%	5.97%
4	5.81%	6.13%	5.97%
5	18.86%	21.68%	20.25%
5	18.86%	21.68%	20.25%
6	20.08%	19.72%	19.90%
6	20.08%	19.72%	19.90%
7	12.78%	17.57%	15.16%
7	12.78%	17.57%	15.16%
Belgium			
1	12.65%	12.63%	12.64%
2	13.80%	13.75%	13.78%
2	13.80%	13.75%	13.78%
4	3.56%	3.73%	3.65%

Continued on next page

Table B.3 – *Continued from previous page*

Wave	Male	Female	Total
4	3.56%	3.73%	3.65%
5	14.14%	15.47%	14.79%
5	14.14%	15.47%	14.79%
6	16.72%	14.98%	15.86%
6	16.72%	14.98%	15.86%
7	14.66%	13.77%	14.21%
7	14.66%	13.77%	14.21%
Croatia			
6	6.80%	8.63%	7.73%
CzechRepublic			
2	13.55%	15.89%	14.73%
4	3.85%	4.52%	4.18%
4	3.85%	4.52%	4.18%
5	12.75%	17.09%	14.89%
5	12.75%	17.09%	14.89%
6	15.35%	15.00%	15.18%
6	15.35%	15.00%	15.18%
7	8.23%	9.27%	8.71%
7	8.23%	9.27%	8.71%
Denmark			
1	15.16%	18.60%	16.89%
2	20.57%	21.90%	21.23%
2	20.57%	21.90%	21.23%
4	3.86%	4.34%	4.10%
4	3.86%	4.34%	4.10%
5	20.23%	22.18%	21.21%
5	20.23%	22.18%	21.21%
6	23.13%	24.56%	23.85%
6	23.13%	24.56%	23.85%
7	17.61%	21.35%	19.44%
7	17.61%	21.35%	19.44%
Estonia			
4	3.38%	4.63%	4.01%
5	9.46%	9.82%	9.64%
5	9.46%	9.82%	9.64%
6	8.23%	8.61%	8.42%
6	8.23%	8.61%	8.42%
France			
1	10.89%	11.44%	11.16%
2	12.39%	13.72%	13.05%
2	12.39%	13.72%	13.05%
4	2.30%	3.03%	2.65%
4	2.30%	3.03%	2.65%
5	12.28%	14.29%	13.23%
5	12.28%	14.29%	13.23%
6	13.37%	15.07%	14.17%

Continued on next page

Table B.3 – *Continued from previous page*

Wave	Male	Female	Total
6	13.37%	15.07%	14.17%
7	10.70%	12.76%	11.66%
7	10.70%	12.76%	11.66%
Germany			
1	17.49%	16.80%	17.15%
2	19.48%	19.08%	19.29%
2	19.48%	19.08%	19.29%
4	4.09%	6.25%	5.15%
4	4.09%	6.25%	5.15%
5	17.47%	18.72%	18.09%
5	17.47%	18.72%	18.09%
6	18.62%	19.48%	19.04%
6	18.62%	19.48%	19.04%
7	15.60%	14.18%	14.87%
7	15.60%	14.18%	14.87%
Greece			
1	14.98%	15.21%	15.10%
2	14.81%	15.45%	15.13%
2	14.81%	15.45%	15.13%
6	13.80%	14.52%	14.15%
6	13.80%	14.52%	14.15%
7	6.32%	7.86%	7.09%
7	6.32%	7.86%	7.09%
Hungary			
4	4.58%	2.75%	3.67%
Ireland			
2	7.80%	10.41%	9.07%
Italy			
1	8.26%	9.43%	8.83%
2	12.82%	14.46%	13.61%
2	12.82%	14.46%	13.61%
4	4.59%	5.13%	4.85%
4	4.59%	5.13%	4.85%
5	12.08%	13.75%	12.87%
5	12.08%	13.75%	12.87%
6	12.09%	11.99%	12.04%
6	12.09%	11.99%	12.04%
7	12.12%	13.67%	12.85%
7	12.12%	13.67%	12.85%
Luxembourg			
5	19.03%	21.78%	20.34%
6	18.64%	23.09%	20.72%
6	18.64%	23.09%	20.72%

Continued on next page

Table B.3 – *Continued from previous page*

Wave	Male	Female	Total
Netherlands			
1	11.46%	14.58%	13.01%
2	12.90%	14.54%	13.71%
2	12.90%	14.54%	13.71%
4	1.93%	2.61%	2.27%
4	1.93%	2.61%	2.27%
5	11.38%	13.62%	12.46%
5	11.38%	13.62%	12.46%
Poland			
2	7.79%	9.91%	8.86%
4	2.08%	2.21%	2.15%
4	2.08%	2.21%	2.15%
6	10.97%	13.82%	12.45%
6	10.97%	13.82%	12.45%
7	7.91%	12.47%	10.20%
7	7.91%	12.47%	10.20%
Portugal			
4	3.00%	1.63%	2.29%
6	10.38%	7.99%	9.10%
6	10.38%	7.99%	9.10%
Slovenia			
4	2.03%	2.81%	2.42%
5	9.03%	8.24%	8.64%
5	9.03%	8.24%	8.64%
6	11.50%	11.62%	11.56%
6	11.50%	11.62%	11.56%
Spain			
1	3.80%	3.96%	3.88%
2	4.60%	4.00%	4.32%
2	4.60%	4.00%	4.32%
4	1.44%	1.35%	1.40%
4	1.44%	1.35%	1.40%
5	5.39%	4.72%	5.06%
5	5.39%	4.72%	5.06%
6	4.38%	4.95%	4.66%
6	4.38%	4.95%	4.66%
7	4.41%	5.86%	5.10%
7	4.41%	5.86%	5.10%
Sweden			
1	19.43%	24.47%	21.82%
2	23.73%	26.91%	25.21%
2	23.73%	26.91%	25.21%
4	1.99%	4.64%	3.17%
4	1.99%	4.64%	3.17%
5	13.91%	19.66%	16.53%
5	13.91%	19.66%	16.53%

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Table B.3 – *Continued from previous page*

Wave	Male	Female	Total
6	15.18%	15.87%	15.50%
6	15.18%	15.87%	15.50%
7	14.08%	17.05%	15.50%
7	14.08%	17.05%	15.50%
Switzerland			
1	11.82%	13.04%	12.43%
2	12.44%	15.27%	13.90%
2	12.44%	15.27%	13.90%
4	2.69%	3.27%	2.98%
4	2.69%	3.27%	2.98%
5	13.00%	15.79%	14.40%
5	13.00%	15.79%	14.40%
6	14.60%	17.09%	15.83%
6	14.60%	17.09%	15.83%
7	7.25%	13.47%	10.37%
7	7.25%	13.47%	10.37%

Table B.4. Households reporting transferring money to and receiving help from children

Wave	$\bar{M} \leftrightarrow \bar{H}$	$\bar{M} \leftrightarrow H$	$M \leftrightarrow \bar{H}$	$M \leftrightarrow H$	Total
Austria					
1	72.62%	15.45%	8.75%	3.18%	100.00%
2	71.45%	14.50%	10.49%	3.57%	100.00%
5	70.40%	15.13%	11.68%	2.79%	100.00%
6	68.36%	15.76%	13.46%	2.42%	100.00%
7	71.83%	16.37%	9.19%	2.62%	100.00%
Belgium					
1	72.52%	18.86%	6.30%	2.32%	100.00%
2	70.95%	19.30%	7.38%	2.36%	100.00%
5	70.41%	20.84%	6.69%	2.06%	100.00%
6	68.29%	20.75%	8.43%	2.54%	100.00%
7	70.31%	19.58%	7.57%	2.54%	100.00%
Denmark					
1	68.80%	18.89%	8.97%	3.33%	100.00%
2	67.34%	18.16%	10.61%	3.90%	100.00%
5	67.31%	19.85%	10.08%	2.77%	100.00%
6	65.89%	19.19%	11.70%	3.23%	100.00%
7	66.46%	19.54%	10.68%	3.31%	100.00%
France					
1	77.51%	15.09%	5.84%	1.56%	100.00%
2	75.87%	14.89%	7.59%	1.65%	100.00%
5	76.11%	15.37%	7.10%	1.42%	100.00%
6	75.50%	15.37%	7.83%	1.31%	100.00%

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Table B.4 – *Continued from previous page*

Wave	$\bar{M} \leftrightarrow \bar{H}$	$\bar{M} \leftrightarrow H$	$M \leftrightarrow \bar{H}$	$M \leftrightarrow H$	Total
7	77.16%	14.51%	6.99%	1.35%	100.00%
Germany					
1	71.10%	16.89%	8.81%	3.20%	100.00%
2	70.06%	15.65%	10.78%	3.52%	100.00%
5	71.43%	15.90%	10.07%	2.59%	100.00%
6	72.10%	15.80%	9.28%	2.82%	100.00%
7	72.12%	15.89%	9.69%	2.30%	100.00%
Greece					
1	73.66%	15.86%	8.80%	1.68%	100.00%
2	75.58%	16.65%	6.57%	1.20%	100.00%
6	79.29%	15.64%	4.73%	0.35%	100.00%
7	80.70%	14.70%	4.10%	0.49%	100.00%
Italy					
1	81.57%	11.62%	5.53%	1.28%	100.00%
2	77.90%	11.46%	8.40%	2.23%	100.00%
5	78.64%	12.99%	6.95%	1.43%	100.00%
6	77.86%	13.70%	7.41%	1.03%	100.00%
7	77.34%	14.16%	7.59%	0.92%	100.00%
Netherlands					
1	74.47%	15.82%	8.08%	1.62%	100.00%
2	74.65%	15.65%	7.88%	1.82%	100.00%
5	73.73%	17.92%	6.88%	1.47%	100.00%
Spain					
1	84.78%	12.15%	2.50%	0.57%	100.00%
2	84.47%	12.08%	3.28%	0.17%	100.00%
5	84.50%	11.77%	3.31%	0.42%	100.00%
6	85.70%	11.56%	2.29%	0.45%	100.00%
7	85.53%	10.43%	3.37%	0.68%	100.00%
Sweden					
1	69.84%	15.26%	11.25%	3.66%	100.00%
2	65.88%	15.56%	14.77%	3.79%	100.00%
5	70.68%	16.69%	10.00%	2.64%	100.00%
6	70.95%	16.90%	9.57%	2.58%	100.00%
7	70.36%	17.97%	9.75%	1.92%	100.00%
Switzerland					
1	80.10%	10.59%	7.77%	1.53%	100.00%
2	77.69%	10.95%	9.52%	1.85%	100.00%
5	77.85%	13.25%	7.91%	0.99%	100.00%
6	77.13%	12.96%	8.62%	1.29%	100.00%
7	78.76%	13.43%	6.17%	1.64%	100.00%

Table B.5. Households reporting money and help transfers to and from children

Wave	$\bar{M}\bar{H}$ $\bar{M}\bar{H}$	$\bar{M}\bar{H}$ $\bar{M}H$	$\bar{M}\bar{H}$ $M\bar{H}$	$\bar{M}\bar{H}$ MH	$\bar{M}H$ $\bar{M}\bar{H}$	$\bar{M}H$ $\bar{M}H$	$\bar{M}H$ $M\bar{H}$	$\bar{M}H$ MH	$M\bar{H}$ $\bar{M}\bar{H}$	$M\bar{H}$ $\bar{M}H$	$M\bar{H}$ $M\bar{H}$	$M\bar{H}$ MH	MH $\bar{M}\bar{H}$	MH $\bar{M}H$	MH $M\bar{H}$	MH MH	Total
Austria																	
1	69%	2%	1%	0%	14%	2%	0%	0%	8%	1%	0%	0%	3%	0%	0%	0%	100%
2	67%	2%	1%	0%	13%	1%	0%	0%	10%	1%	0%	0%	3%	0%	0%	0%	100%
5	66%	2%	1%	0%	13%	2%	1%	0%	9%	1%	2%	0%	2%	1%	0%	0%	100%
6	64%	3%	1%	0%	13%	2%	0%	0%	12%	1%	1%	0%	2%	0%	0%	0%	100%
7	67%	3%	1%	0%	13%	3%	0%	0%	8%	1%	0%	0%	2%	0%	0%	0%	100%
Belgium																	
1	67%	5%	0%	0%	17%	2%	0%	0%	5%	1%	0%	0%	2%	1%	0%	0%	100%
2	65%	5%	0%	0%	17%	2%	0%	0%	6%	1%	0%	0%	2%	1%	0%	0%	100%
5	63%	7%	0%	0%	18%	3%	0%	0%	6%	1%	0%	0%	2%	0%	0%	0%	100%
6	62%	6%	0%	0%	18%	3%	0%	0%	7%	1%	0%	0%	2%	0%	0%	0%	100%
7	64%	6%	0%	0%	16%	3%	0%	0%	7%	1%	0%	0%	2%	0%	0%	0%	100%
Denmark																	
1	64%	5%	0%	0%	16%	3%	0%	0%	7%	2%	0%	0%	3%	1%	0%	0%	100%
2	62%	5%	0%	0%	15%	3%	0%	0%	9%	2%	0%	0%	3%	1%	0%	0%	100%
5	61%	5%	1%	0%	16%	3%	0%	0%	9%	1%	0%	0%	2%	1%	0%	0%	100%
6	60%	5%	0%	0%	15%	3%	0%	0%	10%	1%	0%	0%	2%	1%	0%	0%	100%
7	60%	5%	1%	0%	15%	4%	0%	0%	9%	2%	0%	0%	3%	1%	0%	0%	100%
France																	
1	75%	2%	0%	0%	14%	1%	0%	0%	5%	1%	0%	0%	1%	0%	0%	0%	100%
2	73%	2%	0%	0%	14%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
5	73%	2%	1%	0%	14%	1%	0%	0%	7%	1%	0%	0%	1%	0%	0%	0%	100%
6	72%	3%	0%	0%	14%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
7	74%	2%	0%	0%	13%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
Germany																	
1	68%	3%	1%	0%	15%	1%	0%	0%	8%	1%	0%	0%	2%	1%	0%	0%	100%

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Table B.5 – *Continued from previous page*

Wave	$\bar{M}\bar{H}$ $\bar{M}\bar{H}$	$\bar{M}\bar{H}$ $\bar{M}H$	$\bar{M}\bar{H}$ $M\bar{H}$	$\bar{M}\bar{H}$ MH	$\bar{M}H$ $\bar{M}\bar{H}$	$\bar{M}H$ $\bar{M}H$	$\bar{M}H$ $M\bar{H}$	$\bar{M}H$ MH	$M\bar{H}$ $\bar{M}\bar{H}$	$M\bar{H}$ $\bar{M}H$	$M\bar{H}$ $M\bar{H}$	$M\bar{H}$ MH	MH $\bar{M}\bar{H}$	MH $\bar{M}H$	MH $M\bar{H}$	MH MH	Total
2	66%	3%	0%	0%	14%	1%	0%	0%	10%	1%	0%	0%	2%	1%	0%	0%	100%
5	67%	3%	2%	0%	14%	1%	1%	0%	9%	0%	0%	0%	2%	0%	0%	0%	100%
6	69%	3%	1%	0%	14%	1%	0%	0%	9%	0%	0%	0%	2%	0%	0%	0%	100%
7	69%	2%	0%	0%	14%	1%	1%	0%	9%	0%	0%	0%	2%	0%	0%	0%	100%
Greece																	
1	70%	1%	2%	0%	14%	1%	2%	0%	8%	0%	0%	0%	1%	0%	0%	0%	100%
2	72%	1%	2%	0%	14%	1%	1%	0%	6%	0%	0%	0%	1%	0%	0%	0%	100%
6	76%	1%	1%	0%	13%	1%	1%	0%	5%	0%	0%	0%	0%	0%	0%	0%	100%
7	77%	2%	1%	0%	13%	1%	1%	0%	4%	0%	0%	0%	0%	0%	0%	0%	100%
Italy																	
1	80%	1%	0%	0%	11%	1%	0%	0%	5%	0%	0%	0%	1%	0%	0%	0%	100%
2	75%	1%	1%	0%	10%	1%	0%	0%	8%	0%	0%	0%	2%	0%	0%	0%	100%
5	76%	1%	0%	0%	12%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
6	75%	1%	1%	0%	12%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
7	75%	1%	1%	0%	13%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
Netherlands																	
1	71%	3%	0%	0%	14%	1%	0%	0%	7%	1%	0%	0%	1%	0%	0%	0%	100%
2	71%	3%	0%	0%	14%	2%	0%	0%	7%	1%	0%	0%	2%	0%	0%	0%	100%
5	69%	4%	0%	0%	16%	2%	0%	0%	6%	1%	0%	0%	1%	0%	0%	0%	100%
Spain																	
1	83%	1%	1%	0%	12%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%	100%
2	83%	1%	1%	0%	11%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	100%
5	83%	1%	0%	0%	11%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	100%
6	84%	1%	0%	0%	11%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	100%
7	84%	1%	0%	0%	10%	0%	0%	0%	3%	0%	0%	0%	1%	0%	0%	0%	100%
Sweden																	

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Table B.5 – *Continued from previous page*

Wave	$\bar{M}\bar{H}$ $\bar{M}\bar{H}$	$\bar{M}\bar{H}$ $\bar{M}H$	$\bar{M}\bar{H}$ $M\bar{H}$	$\bar{M}\bar{H}$ MH	$\bar{M}H$ $\bar{M}\bar{H}$	$\bar{M}H$ $\bar{M}H$	$\bar{M}H$ $M\bar{H}$	$\bar{M}H$ MH	$M\bar{H}$ $\bar{M}\bar{H}$	$M\bar{H}$ $\bar{M}H$	$M\bar{H}$ $M\bar{H}$	$M\bar{H}$ MH	MH $\bar{M}\bar{H}$	MH $\bar{M}H$	MH $M\bar{H}$	MH MH	Total
1	65%	4%	0%	0%	13%	2%	0%	0%	10%	1%	0%	0%	3%	1%	0%	0%	100%
2	61%	4%	0%	0%	13%	2%	0%	0%	13%	2%	0%	0%	3%	1%	0%	0%	100%
5	65%	5%	1%	0%	14%	3%	0%	0%	9%	1%	0%	0%	2%	1%	0%	0%	100%
6	65%	5%	0%	0%	14%	3%	0%	0%	9%	1%	0%	0%	2%	0%	0%	0%	100%
7	64%	6%	0%	0%	15%	3%	0%	0%	8%	1%	0%	0%	2%	0%	0%	0%	100%
Switzerland																	
1	77%	3%	0%	0%	9%	1%	0%	0%	7%	0%	0%	0%	1%	0%	0%	0%	100%
2	74%	3%	1%	0%	10%	1%	0%	0%	9%	1%	0%	0%	2%	0%	0%	0%	100%
5	72%	4%	1%	0%	11%	2%	0%	0%	7%	0%	1%	0%	1%	0%	0%	0%	100%
6	71%	4%	0%	0%	11%	2%	0%	0%	8%	1%	1%	0%	1%	0%	0%	0%	100%
7	72%	5%	0%	0%	11%	2%	0%	0%	6%	1%	0%	0%	1%	0%	0%	0%	100%

Table B.6. Random-effects logistic regression of transfer receipt

Variable	Logistic coefficient (t-value)
Child characteristics	
Female	0.10*
	(2.12)
Age	−0.03***
	(−6.29)
Coresiding partner (yes)	0.01
	(0.29)
Number of children (ref.: none)	
One	0.16*
	(2.52)
Two or more	0.00
	(0.01)
Labor market (ref.: full-time)	
part-time	−0.02
	(−0.27)
self-/family-empl.	0.13
	(1.84)
unemployed	0.27***
	(4.04)
edu/training	0.47***
	(6.00)
parental leave	0.39*
	(2.56)
caregiver/homemaker	0.05
	(0.41)
Education (ref.: high school)	
primary	−0.65***
	(−4.05)
lower secondary	−0.18*
	(−2.42)
college	−0.07
	(−1.40)
other	−0.05
	(−0.49)
Parent characteristics	
Age	−0.01
	(−1.77)
Income (logged)	0.15***
	(6.45)
Net worth (ihs)	0.09***
	(9.94)
Marital status (ref.: married)	
Separated/divorved	0.31***
	(4.13)
Never married	0.30
	(1.54)
Widowed	0.39***
	(6.29)
Labor market (ref.: retired)	

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Table B.6 – *Continued from previous page*

Variable	Estimate (*t*-value)
Employed	0.04 (0.71)
Out of labor force	−0.37*** (−5.89)
Education (ref.: high school)	
Primary	−0.57*** (−7.88)
Lower secondary	−0.17* (−2.24)
College	0.29*** (4.88)
Other	0.14 (1.27)
Country (ref.: Austria)	
Belgium	−0.52*** (−5.26)
Denmark	−0.34** (−3.11)
France	−0.50*** (−4.65)
Germany	−0.16 (−1.42)
Italy	−0.30** (−2.74)
Spain	−1.24*** (−9.38)
Sweden	−0.03 (−0.25)
Switzerland	−0.62*** (−4.88)
Const.	−3.03*** (−8.56)
$\ln \sigma_u^2$	0.41*** (8.22)