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PARENTS/CHILDREN "DEALS": INTER-VIVOS TRANSFERS AND LIVING PROXIMITY

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Parent–Children "Deals": *Inter Vivos* Transfers and Living Proximity

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Abstract

We investigate the role of the family as an informal market: parents enjoy their children's living proximity, which increases the probability of intra-family care, and reward them with a wealth transfer. Our (Cox-type) model delivers interesting predictions on the relation between proximity and transfers: higher transfers make children live closer to their parents and liquidity constraints on children strengthen the effect. We test the model's predictions on - up to now unexploited - Italian data, taken from the Bank of Italy's Survey on Household Income and Wealth. Our results are in line with the theoretical predictions of the model: higher transfers induce children to live nearer to their parents and liquidity-constrained households live closer to their parents than unconstrained ones.

Keywords: life cycle, imperfect credit markets, informal insurance, living proximity
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Introduction

The role of the family as an informal insurance market, providing different types of coverage against a variety of hazards, has long been recognized (Altonji *et al.*, 1997; Banks *et al.*, 2001; Villanueva, 2005). Transfers within families are motivated not only by altruism (the "joy of giving") but often represent exchange-type transactions among generations (Cox, 1987; Cox and Jappelli, 1990). The existence of this type of exchange is implicitly justified by the contemporaneity of the deal. Cigno (1993) extends the analysis to show that exchanges can still take place under the assumption of the existence of a "family constitution" among household members. According to this theory, the individuals help their parents as the parents did with the grand-parents, following a sort of family "code".

The provision of long-term care, particularly for elderly people, is a prominent example of this role of the family, since direct assistance by a family member (typically a woman) is often provided in return for housing services or *inter vivos* transfers. The exchange does not need to be simultaneous: parents may transfer resources to children in anticipation of assistance when old; children accept the "obligation" as a way to improve the intertemporal allocation of their resources, since they receive financial help in a period when they are (or risk being) credit constrained.

Italy represents an ideal country for studying intergenerational transfers of this kind: on the one hand, the provision of services to the elderly in need is mainly left to families (Coda Moscarola, 2003; Brugiavini *et al.*, 2010); on the other, debt restrictions to the young are more severe than in other countries (Guiso *et al.*, 1993). To complete the picture, housing services usually represent the most important share of the budget of young households, who very often rely on free accommodation in their parents' home or on transfers from parents to buy their own house.

Empirical research has confirmed that these transactions are common practices in Italy, especially at the early stages of the life cycle. Ando *et al*. (1993), Tomassini *et al*. (2004) and Hank (2007) show that, compared to other European countries, Mediterranean countries, and Italy in particular, are characterized by a high number of "contacts" between parents and children. Guiso and Jappelli (2002) illustrate that transfers from parents are mostly directed at young married couples, and are related negatively to income and wealth and positively to the annual rate of house value appreciation. Tomassini *et al.* (2003) point out that past housing assistance from parents - however not quantified in monetary terms - is positively correlated to current proximity to (each spouse's) parents[1]. Cigno *et al.* (2006) find that money transfers from parents to children are only marginally ruled by altruism, while the exchange type motivation is supported by a few studies. Manacorda and Moretti (2006) model the cohabitation of adult children (aged 18–33) with their parents as a deal between the two parties: the former need income, and the latter prefer their children to live longer at home. The authors find that the higher the parents' income, the higher the probability for their children to cohabit. Specularly, Alessie, Brugiavini and Weber (2006), find evidence of a strong positive effects of the child income share on the saving rate of the household in

[1] A recent contribution to the analysis of proximity decisions and birth order of children is given by Konrad *et al.* (2002).

Italy. In that, as pointed out by Chiuri and Del Boca (2010), institutional factors, as labour or mortgage market, clearly play a role.

This paper contributes to the existing literature by concentrating specifically on house-related transfers, which play a major role in realizing such informal insurance contracts between generations. It aims to shed light on two issues: i) the possible effect of *inter vivos* parents to child transfers on the distance of the child's house from her parents' residence and ii) the role played by credit constraints, under the hypothesis that their tightness influences the disposition of the children towards the exchange and also concur in determining the residence proximity between children and parents. To these purposes, we built a two-period toolkit model (*à la* Cox, 1987), where this kind of intergenerational exchanges takes place in settings with as well as without credit constraints.

Differently from Manacorda and Moretti (2006), we look at the role played by living closeness as a proxy for the intensity of the informal care children can make available to their parents, when in need. We also innovate with respect to Tomassini *et al.* (2003), as we extend our analysis not only to consider whether to make a transfer, but we also measure the entity of the transfer and evaluate its effect on proximity for credit constrained and unconstrained individuals separately.

To test whether residence decisions depend on parental transfers, we use the Bank of Italy's Survey of Household Income and Wealth (SHIW) sample for the year 2002, the only wave with information available on both the amount of donations received from parents and the proximity of children's house to their parents'. To our knowledge it is the first time this information is used. Our results are in line with the theoretical predictions of the model: proximity to parents is rewarded with higher transfers and liquidity-constrained households live closer to their parents than non-liquidity-constrained ones. These results have policy implications as incentives to proximity represent an obstacle to mobility of workers.

The rest of the paper is organized as follows. Section 2 develops a simple model of exchange between children and parents. Section 3 describes the dataset. Section 4 discusses both the econometric strategy and the results. Finally, section 5 draws the conclusions.

Theoretical framework

We start by analyzing the saving–consumption problem of a child whose parents are still alive and willing to benefit her with a monetary (or real estate) transfer, conditional on the child's decision to live nearby. The model assumes asymmetric preferences. From the parents' perspective, the closer the child lives, the more likely it is that she will be inclined to provide them with care and help when needed[2]. Having children living nearby generates higher utility to the parents. From the child's perspective, instead, living close to parents generates a disutility, equivalent to foregone

[2] The topic has been highly debated in the sociological literature: in modern times the correlation between distance and interaction is surely less stringent than before, but the literature still recognizes the negative effect of distance on interaction (see Smith, 1998).

leisure. The transfer can thus be considered a compensation to the child for her decision to live nearby and for her implicit pledge to assist her parents.

We simplify the problem, by concentrating on the transfers during the child's youth rather than on bequests, since, from both the parents' and the child's perspectives, bequests are uncertain and unenforceable, while we are interested in concurrent exchanges between parents and children. We thus envisage an exchange by which the child renounces the freedom to independently decide where to live, while the parents reward the child by donating (or helping her to buy) the house, so that they can benefit from the closeness to their children.

This implies that our definition of assistance is rather specific, consisting of "visits" rather than strict health care assistance. Parents enjoy their children's proximity by feeling less lonely and vulnerable and better tended; we are therefore dealing more with affection than with assistance, something that has little (if any) substitute in the market. In this spirit, we postulate the inexistence of a formal market for this kind of care, which can only be exchanged informally within the family; consequently, children only visit their parents.

In the simplified two periods life cycle setting, the child maximizes her utility over consumption and time devoted to parents, who are alive only in the first (time) period of the child's life span. In period 1, the agent (child) receives an (exogenous) income equal to y_1 and decides where to live. Parents, on their part, are willing to increase y_1 with a transfer, which, consistently with our model, is assumed to be dependent on the distance of the child's from the parent's house.

With the hypothesis of a time-separable utility function and of a logarithmic within period utility, the child must solve the following maximization problem:

$$\begin{aligned} &\max \left[\ln(C_1) + \ln(1 - v) + \ln(C_2)\right] \\ &sub \\ &C_1 = y_{1k} + T - s \\ &C_2 = y_{2k} + s \\ &v = f(d) \end{aligned} \qquad (1)$$

where C_{1k} and C_{2k} and y_{1k} and y_{2k} are the kid's (k) consumption and income levels in periods one and two, respectively, and v is the time devoted to visit parents, which is a function of the distance between the parents' and the children's residence.

The Lagrangian function associated with this problem is

$$L = \left[\ln(y_{1k} - s + T) + \ln(1 - v) + \ln(y_{2k} + s)\right] + \lambda(s) \qquad \lambda \geq 0 \qquad (2)$$

where λ is the associated Lagrangian multiplier. When a credit constraint is added to the problem, savings - that is, assets, in a two-period model - must be non negative($s >= 0$), since borrowing is not allowed.

Parents, on the other hand, engage in the exchange by arranging the transfer to their children in such a way as not to reduce the utility for the case of receiving informal care (unobtainable in the marketplace), compared to the utility associated with no care ($v = 0$), as follows:

$$\ln (Y_P - T) - \ln (1 - v) \geq \ln (Y_P) \qquad (3)$$

where Y_p is the parent's (p) total wealth and T is the amount transferred to their children.

Equations (1) and (3) determine the transfers parents make to their children and the time children allocate to caring parents. From (3), we can derive T as a function of v, such that the parent's participation constraint holds as an equality. Thus, T can be expressed as

$$T = Y_P v \qquad (4)$$

To obtain v, we distinguish between constrained and unconstrained young households. Starting with the simple case of no liquidity constraints (at the optimum $s > 0$, and thus $\lambda = 0$), the Lagrangian function to maximize becomes

$$L = \left[\ln(y_{1k} - s + vY_P) + \ln(1 - v) + \ln(y_{2k} + s)\right] + \lambda(s)$$

and the first-order conditions with respect to s and v are, respectively,

$$\frac{1}{c_{1k}} = \frac{1}{c_{2k}}$$
$$\frac{1}{c_{1k}} Y_P = \frac{1}{1 - v} \qquad (5)$$

where Y_P is the parent's lifetime wealth. The first-order condition with respect to s simply states the equality of consumption flows over the two periods, consistently with a simple life cycle framework, with both the interest and the subjective discount rates equal to zero.

For an unconstrained kid, $s > 0$ implies that $(2Y_{2k} - Y_{1k})$ is lower than Y_P, and the optimal values of v and T are

$$1 - v = \frac{Y_K + Y_P}{3Y_P}$$
$$T = 2/3Y_P - 1/3Y_K \qquad (6)$$

The amount of time devoted to parents—and, correspondingly, the amount of transfer—is thus positively related to parents' wealth ($\frac{\partial v}{\partial Yp} > 0$) and negatively related to the child's lifetime income Y_k ($\frac{\partial v}{\partial Yk} < 0$).

Let us now focus on the case where children are subject to binding financial constraints. Optimal consumption cannot be achieved and savings are constrained to be zero. Substituting s=0, the first-order condition on v implies that

$$1-v=\frac{Y_{1k}+Y_P}{2Y_P} \qquad (7)$$

Thus, the optimal value of care is higher for the constrained child than for the unconstrained one if ($Y_P < 2y_{2K} - y_{1K}$), which is always true when the constraints bind.

The model's theoretical predictions hence suggest that liquidity-constrained households are more likely to live closer to their parents, since the utility associated with wealth is higher, for them, in the first period than later on in life. Therefore, children are more inclined to take care of their parents in order to ease financial constraints and increase consumption when young. Parental transfers thus increase the (constrained) child's welfare quite independently of endowing her with greater resources.

Empirical strategy, data and descriptive statistics

Empirical strategy

The model presented in section 2 provides the following testable implications: *the amount of time children devote to parents depends positively on the amount the latter transfer to the former and the optimal value of care is higher for the constrained child than for the unconstrained one.* As previously discussed, proximity can be considered a good proxy for the time devoted by children to their parents; indeed, more distant children are less likely to provide direct care. To test the model's prediction, we investigate the determinants of the proximity by running a regression of the distance (D) between the child's and her parents' home on the amount of transfers received by the parents and a set of explanatory variables:

$$D_i=a_1\ T1_i+a_2\ T2_i+a_3\ T3_i+X_{it}'b+u_i \qquad (8)$$

Here *D* is the distance of the child's from parents' house measured in minutes, *T1, T2 and T3 are dummy variables* indicating if the total transfer received from parents (excluding bequests) is in the 33rd lowest percentile of the distribution, between the 33 rd and the 66th percentile or above the 66th percentile respectively, and *X* is a set of regressors, including:

- the year of birth of the individual (*birth year*), to capture the cohort effect
- the age of the youngest parent (*age of the youngest parent*), to control for the probability of having a parent more in need of care due to old age
- a dummy variable equal to one if the respondent is a man (*man*), meant to capture the gender differences;

- a dummy for the absence of kids (*no kids)* and a set of dummy variables for marital status (*married, single, divorced,* or *widowed*), to take into account the possibility that the child modifies proximity to her parents according to whether she has children of her own and/or whether she is married or not;
- a dummy variable equal to one if the respondent holds a degree (*degree*), used as a taste-shifter;
- the log of per capita consumption (*log per capita consumption*) as a proxy for family well-being;
- a dummy variable capturing the father's professional activity (*parent blue collar*), as a proxy of the parents' wealth ;
- the number of siblings (*siblings*) to account for the potential external help in taking care of the parents;
- finally, a set of dummy variables capturing the geographical area of residence (*North, Center and South*).

Data and descriptive statistics

For the empirical analysis, we make use of the Bank of Italy's Survey on Household Income and Wealth (SHIW) for the year 2002. SHIW covers about 8,000 households - defined as groups of individuals related by blood, marriage, or adoption and sharing the same dwelling - and it is representative of the Italian population. It is carried out every other year and its primary purpose is to collect detailed information on households' status (such as family composition, age, education, geographical residence), income, consumption, and (net) wealth, including housing assets. In particular, each wave contains a core set of questions, repeated at each time survey and special in-depth sections on particular issues of interest that vary across waves.

For our purposes, we need information on donations received by individuals and their living proximity to parents. In SHIW every homeowner respondent is asked to indicate the subjective value of the house where she resides and how home ownership was attained, whether through a purchase, an inheritance or a donation by parents (or relatives). In addition, for year 2002 only, a random subsample of households (more precisely, those household heads born in an odd year) was asked a question providing a very useful (for our analysis) piece of information: the amount of the monetary transfers, if any, received from parents and the proximity to the parents' house.

Finally, SHIW also contains information allowing to detect liquidity-constrained households. To this purpose, we use two different indicators. The first (drawn from the approach used by Jappelli *et al.* 1998) defines liquidity-constrained households as those who a) gave an affirmative answer to the question: *in 2002, did your household apply to a bank or a financial company for a loan or a mortgage*? and b) answered that such a request was refused or only partially accepted to the subsequent question: *Has your request for a mortgage or a loan been accepted?* This method could, however, exclude from the constrained group those households who might not have applied

for credit because they thought they would be turned down. We thus add all potentially discouraged borrowers who reported an affirmative answer to the following question: "*In 2002 did you, or another member of your household, consider the possibility of applying to a bank or a financial company for a loan or a mortgage but then change your mind, thinking that the application would be rejected*?".

The second measure is simply based on lack of financial assets. According to the standard life cycle model, a necessary condition for a household to be liquidity constrained is to own zero or very low financial assets and we fixed a threshold of 5,000 euro[3].

We focus on a sample of individuals who are either heads of the household or spouses whose parents are still alive but do not cohabit with them. We select into our sample only those respondents who have received a transfer within the age range 18-45 or did not receive any transfer and are currently in that age range[4]. In this way our final sample consists of 1,474 observations. Descriptive statistics are reported in Table 1. The sample contains both men (43 per cent) and women (57 per cent) residing in Italy and almost equally distributed across macro-areas of residence (i.e. North, Center and South). About 44 per cent of the sample are subject to borrowing constraints, according to the definition we have given above (the incidence of constrained people is high because of the age range of the sample) and the fraction of them whose parents – that are on average over 60 - are or were employed as blue collars is quite high (50 per cent of the sample). Individuals are born on average in the middle 60s. Most of them are married (86 per cent), only 9 per cent are single and 4 per cent are divorced. The incidence of widower is low, only 1 per cent. Individuals without children are 22 per cent of the sample. No relevant differences in socio-demographic status are observed across constrained and unconstrained individuals except that constrained individuals have a greater number of brothers and sisters with respect to the unconstrained (2.62 versus 1.76). The incidence of individuals with a degree is quite low (only 12 per cent). Unsurprisingly, as education is a proxy of labour income, the average educational level is lower among constrained than among unconstrained (7 per cent versus 16 per cent hold a university degree) as well as the consumption level. On average constrained individuals spend in consumption 6,556 euros per capita per year, almost 3 thousands euros less than the unconstrained. The distance from the parents' house is about 98 minutes and about 10 per cent of the individuals received a transfer from parents of an average amount - including both the monetary values and, in case, the value of the house donated[5] - of 15,820 euro. At first glance, our theoretical predictions do not seem to be supported by the descriptive statistics: constrained people leave normally farther from their parents (137 vs 68 minutes) and receive on average less transfers than unconstrained (about 5.4 of constrained versus 13.4 per cent of unconstrained received a transfer and the average amount of this transfer is 5,258 for constrained versus 24,039 for unconstrained). However, we can derive conclusions only from an accurate econometric analysis. Table 2 reports some more details about the distribution of the transfers received. The 33rd lowest percentile collects individuals that received a transfer up to 55 thousands euro; the 66th percentile, instead, includes individuals who

[3] This measure does not take real estate assets into account, as they are not easily made liquid. It does not exclude, in addition, those households who *chose* neither to save nor to dissave.

[4] In the 2002 wave of SHIW, only people born in odds years are asked about donation received.

[5] Donations of house property involve approximately 10% of the sample.

received up to 167 thousands euro. The average transfer for individuals pertaining to the 33rd lowest percentile (T1) is about 18 thousands euro, while the average transfers for the individuals between the 33 rd and the 66th percentile (T2) is about 105 thousands euro. Finally for the individuals above the 66th percentile (T3) the average transfer is 300 thousands euro. Constrained individuals are about 30 per cent of the individuals in T1 and T2 and 15 per cent of individuals in T3.

Results

We first use OLS to estimate equation (8), running our regressions on the whole sample and then separately on the subsamples of constrained and unconstrained individuals. The subsamples are identified by using the definitions illustrated in Section 3 to capture the different effects of parents' transfers on children proximity, given the tightness of liquidity constraints. The results are presented in Table 3. The first column of Table 3 refers to the overall sample of respondents. The regression results confirm the main implications of our theoretical model. Children's distance to parents is negatively related to parental transfer. Parents enjoy the proximity to their children and these are ready to comply. In our estimate, a transfer up to 55 thousands euro (a transfer below the 33rd percentile) reduces the distance of about 40 minutes. If parents transfer between 55 and 167 thousands euro, the distance is reduced by 74 minutes. Finally if they give more than 167 thousands euro, the distance is 47 minutes lower. The different magnitude of the three coefficients seems to suggest a non linear path, however they are not statistically different from each other.

Proximity is sensitive to household demographic and socioeconomic characteristics, although it does not appear to depend on birth year, age of the youngest parent alive or gender. Respondents not cohabiting with children of their own and singles tend to live farther away from their parents (respectively +58 and +79 minutes), while widows/ers live nearer (-72 minutes). This result can be interpreted considering that parental transfers could also be made in kind such as in the form of baby sitting care to grand-children. This fact explains why families with children are also more motivated to live closer to their parents so as to receive informal care to their children. Individuals with a university degree do not seem to live farther from their parents' house (the coefficient is not significant); specialization often forces them to move from their birthplace, since highly qualified jobs are typically concentrated in big cities.

Surprisingly, proximity to parents' home is positively correlated with the child's income (the coefficient of the log per capita consumption is -44 minutes) and negatively correlated (but in a non significant way) with parent's income, here proxied by a dummy indicating whether the parent was a blue collar. This could be due to a phenomenon that prevents the correct identification of the two effects, that is, the strong correlation between child's and parents' income in a society characterized by low mobility, such as Italy (Di Pietro and Urwin, 2003). It could, however, also be that income acts as a taste shifter and that children's preferences concerning proximity to their parents' homes are positively influenced by their own resources, and negatively by their parents' income.

The presence of siblings, who could also provide care to parents, increases the distance between respondents and their parents (+20 minutes). Finally, proximity is significantly influenced

by geographical variables. Respondents living in the northern regions tend to live farther from their parents with respect to those living in the central and southern regions (living in the North or in the Center increases the distance from the parents' house respectively of about 116 and 72 minutes).

If we focus on the subgroup of credit-constrained individuals (second column of Table 3)[6], we notice that transfers keep their negative sign but for transfers between 55 and 167 thousands euro, the distance is now reduced by 147 minutes, which more than doubles with respect to the coefficient relative to the whole sample. Instead, transfers below the 55 and above the 167 thousands euro lose statistical significance. At the opposite, for the subgroup of unconstrained individuals (see the third column of Table3) we obtain estimates of these coefficients significantly lower and in line with the results for the full sample: about -52 minutes for transfers between 55 and 167 thousands, -31 and -36 minutes for transfers below 55 thousands or above 167 thousands, but these last two are not significant at any standard significance level. Minor changes are also detected in the other coefficients, but we omit to discuss them for sake of brevity.

The results reported and commented up to now may however suffer from an endogeneity bias. Family preferences can be influenced by unobserved characteristics—such as generosity—that are common to both children and parents, thus making parental transfers likely to be correlated with the equation error. We deal with the endogeneity issue by using the instrumental variables (IV) estimation techniques. We instrument the transfers with dummies identifying the tax regime in force when the house and/or the first monetary transfer has been received. This instrument is particularly suitable for our analysis, since the change in the law is exogenous with respect to preferences for proximity but, at the same time, affects parental behavior in deciding the amount of the transfer. The taxation on donations has been introduced in 1942 in the form of two taxes: a capital transfer tax (*imposta sui trasferimenti*) and a capital levy (*imposta patrimoniale*). In 1972 the two taxes have been unified and in 1990 Italy moved to a progressive tax with increasing percentage rates. Finally, in 2001 the tax on donations has been repealed (for family relationship up to 4th degree and/or amount lower than 181 thousand euro)[7]. The revenue from the tax on donations has never been very high *per se*. However, each time a tax changes, new costs - not only monetary ones, but also in terms of time - are charged to the individuals to meet the new requirements fixed by the law or, eventually, to find ways to elude the imposition. The performance of the instrument (measured by the Shea partial R2 and the F-test on excluded instruments) indicates its statistical validity[8].

Estimation results relative to the IV model are presented in Table 4. Since there are only minor differences between the OLS and IV coefficients, we provide comments on the most significant only. As expected, the coefficient of the dummies for the transfers is biased upward (downward in absolute values) by endogeneity. Accounting for this, we find the effect of transfers between 55 and 167 thousands euro on proximity to be slightly higher than before. The coefficients for transfers below 55 or above 167 thousands become instead not significant. In the overall sample (first column of Table 4), a transfer between 55 and 167 thousands euro from parents to child reduces the time distance between parent and child by 75 minutes. If we focus on the subsample of

[6] We repeated the estimations using different thresholds of wealth to determine the group of individuals that are credit constrained. Results do not differ substantially form the ones presented here and are available upon request.

[7] The tax has been reintroduced in 2007, but this is not relevant for our analysis as we focus on donations up to year 2002.

[8] The results of the ancillary equation, presenting the first step estimates, are available upon request.

credit-constrained individuals (second column of Table 4), such an effect is amplified and it reaches 158 minutes. At the opposite, unconstrained respondents (third column of Table 3) show a reduction in the time-distance of about 53 minutes. The estimated coefficients for the groups of constrained and unconstrained individuals significantly differ among them at the standard statistical level. Once again, such an effect was expected, given that credit-constrained families derive more utility from parents' transfers and then reward them by choosing to be closer to them.

Conclusions

This paper investigates one aspect of the role of the family as an informal market. More specifically, we postulate that parents enjoy the living proximity to children (as it makes them feeling looked after, less lonely and vulnerable) and they are ready to reward children (who, on their part do not enjoy living proximity per se) with a transfer. The kind of "informal care" we envisage has no substitute in the marketplace. From their perspective, children welcome the reward, particularly when they are (or are likely to be) subject to liquidity constraints.

We introduce a Cox-type model, characterized by asymmetric preferences between parents and children, in order to analyze to what extent parental financial assistance can influence the children's decision as to where to live, near or far from their parents. We emphasize the role played by credit constraints, which, if binding, enhance the children's disposition to increase the living proximity to their parents. Parental transfers act as a loan by allowing young constrained families to smooth their consumption over time. Consequently, credit-constrained children are more likely to live closer to their parents than their unconstrained siblings.

We test the model's predictions on Italian data taken from the Bank of Italy SHIW for the year 2002 by distinguishing between liquidity-constrained households and unconstrained ones. Our results, in line with the model's predictions, show that higher transfers are rewarded with greater proximity. As for financial imperfections, liquidity-constrained households live indeed closer to their parents than non-liquidity-constrained households.

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Table 1 - Descriptive statistics

	Full sample		Constrained		Unconstrained	
Variable	*mean*	*s.d.*	*mean*	*s.d.*	*mean*	*s.d.*
Man	0.43	0.49	0.42	0.49	0.43	0.49
North	0.39	0.49	0.33	0.47	0.44	0.50
Center	0.29	0.45	0.20	0.40	0.36	0.48
South	0.32	0.47	0.47	0.50	0.20	0.40
Married	0.84	0.34	0.83	0.38	0.89	0.31
Single	0.09	0.28	0.10	0.31	0.07	0.26
Divorced	0.04	0.20	0.05	0.23	0.03	0.17
Widowed	0.01	0.09	0.01	0.11	0.00	0.07
No_kids	0.22	0.41	0.22	0.41	0.22	0.42
Parent blue collar	0.50	0.50	0.58	0.49	0.43	0.50
Age of the youngest parent	63.43	8.48	61.86	9.13	64.65	7.73
Birth year	1,964.6	6.02	1,965.97	6.32	1,963.53	5.56
Siblings	2.14	1.87	2.62	2.14	1.76	1.54
University degree	0.12	0.32	0.07	0.25	0.16	0.36
Consumption (euros)	8,005.81	6,112.01	6,556.76	4,832.45	9,133.23	6,736.87
Distance (minutes)	98.51	261.09	137.11	312.85	68.49	207.56
Transfer received (euro)	15,820.5	79,954.04	5,258.02	33,690.11	24,038.59	101,661.7
Observations	1,474		645		829	
Received a transfer	146		35		111	

Note: Monetary values expressed in euro at 2002 prices.

Table 2 - Descriptive statistics on transfers received

	n.	% of constrained individuals	mean	min	max
T1: transfers below 33rd percentile	*49*	30.61	18,263	1,642	55,001
T2: transfers between 33rd-66th percentile	*47*	31.91	104,526	58,861	166,668
T3: transfers above 66th percentile	*47*	14.89	301,173	166,890	1,820,133

Table 3. Regression analysis: OLS - Dependent variable: distance to parents in minutes grouped in percentiles

	Full sample	**Constrained**	**Unconstrained**
T1: transfers below 33rd percentile	-39.684*	-62.319	-31.445
	(23.745)	(50.642)	(27.179)
T2: transfers between 33rd-66th percentile	-73.717***	-147.344***	-51.978***
	(13.158)	(36.478)	(14.684)
T3: transfers above 66th percentile	-47.088*	-62.095	-36.210*
	(26.652)	(138.332)	(22.042)
Birth year	-0.462	-0.364	-2.66
	(1.713)	(2.961)	(1.883)
Age of the youngest parent	-0.734	-1.486	0.165
	(1.216)	(2.137)	(1.277)
Man	-15.378	-5.006	-25.917**
	(10.964)	(18.407)	(12.742)
No kids	58.320**	29.378	80.749**
	(27.133)	(42.422)	(34.911)
Single	78.603**	77.54	41.754
	(33.460)	(56.659)	(38.013)
Divorced	11.929	-30.327	28.905
	(29.157)	(43.969)	(38.076)
Widowed	-71.755***	-95.978**	-68.799**
	(19.388)	(42.580)	(27.249)
Degree	44.345	39.808	46.738*
	(27.993)	(76.162)	(25.465)
Log per capita consumption	-43.913***	-13.386	-51.858**
	(16.972)	(26.584)	(22.513)
Parent blue collar	-22.341	-49.923	-13.065
	(16.545)	(32.333)	(14.962)
Siblings	19.616***	18.385**	16.746***
	(5.382)	(8.138)	(5.673)
North	115.561***	190.970***	58.587**
	(21.930)	(39.718)	(27.073)
Center	72.272***	122.890***	34.055
	(21.343)	(44.147)	(24.901)
Constant	1327.614	946.087	5669.975
	(3438.254)	(5950.203)	(3780.735)
R squared	0.055	0.078	0.042
N	1,474	645	829
Wald tests :			
T1=T2=T3	1.41	1.26	0.48
$T1^{constr}=T1^{unconstr}$	-0.54		
$T2^{constr}=T2^{unconstr}$	-2.42		
$T3^{constr}=T3^{unconstr}$	-0.18		

Note: Robust standard errors, clustered at family level, are in parentheses.
Asterisks indicate the levels of statistical significance: * is 10%, ** is 5%, and *** is 1%
Omitted dummies: Married and South.

Table 4. Regression analysis: IV - Dependent variable: distance to parents in minutes grouped in percentiles

	Full sample	**Constrained**	**Unconstrained**
T1: transfers below 33rd percentile	-31.497	-29.335	-30.261
	(27.963)	(70.586)	(29.143)
T2: transfers between 33rd-66th percentile	-75.127***	-157.623***	-52.578***
	(13.420)	(35.872)	(15.011)
T3: transfers above 66th percentile	-39.086	-16.841	-35.531
	(27.744)	(149.857)	(23.068)
Birth year	-0.396	-0.288	-2.651
	(1.702)	(2.896)	(1.871)
Age of the youngest parent	-0.723	-1.472	0.166
	(1.209)	(2.103)	(1.265)
Man	-15.428	-5.737	-25.917**
	(10.895)	(18.147)	(12.605)
No kids	58.319**	29.225	80.711**
	(26.985)	(41.868)	(34.529)
Single	78.542**	77.359	41.74
	(33.259)	(55.846)	(37.609)
Divorced	11.604	-30.64	28.835
	(28.911)	(42.671)	(37.736)
Widowed	-71.678***	-93.702**	-69.012**
	(19.256)	(42.390)	(27.114)
Degree	44.319	40.094	46.723*
	(27.820)	(75.115)	(25.174)
Log per capita consumption	-44.226***	-13.893	-51.883**
	(16.875)	(26.262)	(22.264)
Parent blue collar	-22.22	-49.235	-13.073
	(16.446)	(31.879)	(14.811)
Siblings	19.699***	18.581**	16.758***
	(5.359)	(8.044)	(5.617)
North	115.790***	191.463***	58.607**
	(21.791)	(39.293)	(26.796)
Center	72.313***	123.393***	34.035
	(21.209)	(43.557)	(24.662)
Constant	1199.702	798.415	5652.744
	(3415.326)	(5820.388)	(3755.418)
R squared	0.055	0.078	0.042
N	1,474	645	829
Wald tests :			
T1=T2=T3	3.86	3.86	1.02
$T1^{constr}=T1^{unconstr}$	0.01		
$T2^{constr}=T2^{unconstr}$	-2.7		
$T3^{constr}=T3^{unconstr}$	0.12		

Note: Robust standard errors, clustered at family level, are in parentheses.
Asterisks indicate the levels of statistical significance: * is 10%, ** is 5%, and *** is 1%.
Omitted dummies: Married and South.
Excluded instruments: Dummies indicating the taxation regime for the donations.

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