

Do Good Kids Finish First? Characterizing the Bequest Motive in Mexico

(Extended Abstract)

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For the past several decades, bequests have played a central role in economic models of life cycle saving and intergenerational wealth transfer. The amount of money bequeathed each year is considerable. In the United States, most estimates of the annual flow of bequests are in the hundreds of billions of dollars (Gale and Scholz 1994; Wilhelm 1996). While there is widespread agreement about the importance of bequests, there is little consensus on why people leave assets when they die or how they decide how these assets should be distributed.

There are several competing theories of bequest motives in the literature, each of which yields testable predictions about either the total amounts that people leave or the distribution of those assets or both. The strategic bequest motive, first proposed in Bernheim et al. (1985), posits that parents leave assets to children to compensate them for service. This service might be physical assistance with daily activities or simply more phone calls and visits than the children would otherwise provide. While Bernheim et al. find indirect support for their theory in that parents with more bequeathable assets seem to get more attention from their children than poorer parents, Perozek (1998) finds the conclusions are not robust to reasonable changes in specifications using a different data set with more information about parents and children.

The altruistic theory of bequests espoused in Barro (1974) and Becker (1974) says that parents leave money to their children because they care about their children's utility. While this theory has some intuitive appeal, most formulations imply that parents should give larger gifts to children before they die and that they should leave more assets to those children that are more needy. A problem shared by the altruistic theory and the

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strategic bequest motive is that both predict typically unequal distribution of assets when in the U.S., about two thirds of bequests are distributed equally across children (e.g., Menchik 1988; Wilhelm 1996).²

The third major theory of bequests is the so-called accidental theory that was first proposed by Yaari (1965) and has been more recently championed by Hurd (e.g., Hurd 1987, 1989). This theory states that individuals are risk-averse and that they die with assets that were saved in case they lived longer than expected or had large unforeseen expenses. Most individuals would get little or no utility from the actual bequest. Hurd finds that older people spend down their assets in a way that is consistent with a standard life cycle model of savings that does not include an explicit bequest motive. On the other hand, other researchers (Page 2003; Poterba 2001) have shown that people respond to changes in estate taxes by increasing inter vivos giving and this behavior is consistent with an intentional bequest motive. This theory is not necessarily incompatible with either the strategic bequest motive or the altruistic theory. Because an individual's expected bequest is positive, the individual can still credibly use these assets to induce services from children or compensate those that are less well-off.

To this point, empirical tests of these theories have been inconclusive and mostly confined to developed countries. Most of the research that looks at actual bequests is not generalizable to the whole population as it uses tax records that are only collected for very large estates.³ This paper uses a uniquely appropriate longitudinal data set that includes a population-representative sample of bequests in Mexico to directly test these theories in a developing country context. Because levels of individually-held wealth are fairly low, there is reason to suspect that the motives behind bequests might be substantively different in Mexico than in the U.S. In addition, most people in the developing world get very little institutional support in old age. Fewer people receive social security benefits and there are far fewer market resources for elder care like nursing home facilities or home nursing care. This means older people depend far more on their children for support in old age and thus have more reason to use their assets to influence their children's behavior.

The data used for this project come from the 2001 and 2003 waves of the Mexican Health and Aging Study (MHAS). The 2001 wave interviewed more than 15,000 individ-

²Two recent papers (Lundholm and Ohlsson 2000; Bernheim and Severinov 2003) suggest that parents leave equal bequests to send a message of impartiality to their children, but these theories have received relatively little empirical scrutiny.

³Two exceptions are Behrman and Rosenzweig (2004) which looks at self-reported bequests of twins and Hurd and Smith (2004) which analyzes "exit interviews" in the Health and Retirement Study.

uals over age 50 in Mexico. Extensive measures of assets, family support (both financial and time), income, health, and demographics were collected. These included complete rosters of coresident and nonresident children. During the two year period between waves, about 4% of the original respondents died and in 2003, 546 next-of-kin interviews were conducted. These relatives (usually the surviving spouse or a child) were asked about the period preceding the death as well as the distribution of the estate at the time of death. In particular, relatives reported whether any of the children inherited more than the others and if so, these children were identified and linked back to the 2001 rosters.

Of the 546 observed deaths, 52% of individuals left no surviving spouse and at least two children, and of those, 89% left at least some assets. The results from three preliminary regressions using this sample are shown in Table 1. Observations are the individual children of the deceased and the dependent variable is an indicator for whether the child received more than an equal share of the bequest. The first column pools all children, while columns two and three narrow the sample to coresident and nonresident children, respectively. Overall, 12% of coresident children received more than an average bequest while just 3% of nonresident children did.

I focus here on a subset of the interesting coefficients in Table 1. Among the coresident children, those who helped a parent with at least one instrumental activity of daily living were much more likely ($p < 0.001$) to receive an above average bequest.⁴ Similarly, among nonresident children, those who provided temporary live-in help and had more frequent contact with their parents were significantly more likely to receive a higher bequest than their siblings. These results provide strong support for the strategic bequest motive. On the other hand, if schooling is interpreted as a proxy for earning power, the altruistic theory would predict that children with less schooling than their siblings might receive larger bequests. The relationship is neutral for coresident children and actually the opposite for nonresident children, lending little support to the altruistic theory.

⁴The instrumental activities of daily living enumerated in MHAS were preparing a hot meal, making purchases/shopping, taking medication, and managing money.

References

- Barro, R. J. (1974). Are government bonds net wealth? *Journal of Political Economy*, 82(6):1095–1117.
- Becker, G. S. (1974). A theory of social interactions. *Journal of Political Economy*, 82(6):1063–1093.
- Behrman, J. and Rosenzweig, M. (2004). Parental allocations to children: New evidence on bequest differences among siblings. *The Review of Economics and Statistics*, 86(2):637–640.
- Bernheim, B. D. and Severinov, S. (2003). Bequests as signals: An explanation for the equal division puzzle. *Journal of Political Economy*, 111(4):733–764.
- Bernheim, B. D., Shleifer, A., and Summers, L. H. (1985). The strategic bequest motive. *Journal of Political Economy*, 93(6):1045–1076.
- Gale, W. G. and Scholz, J. K. (1994). Intergenerational transfers and the accumulation of wealth. *The Journal of Economic Perspectives*, 8(4):145–160.
- Hurd, M. and Smith, J. P. (2004). The division of bequests. Preliminary draft prepared for an HRS-University of Michigan Conference on the Family.
- Hurd, M. D. (1987). Savings of the elderly and desired bequests. *The American Economic Review*, 77(3):298–312.
- Hurd, M. D. (1989). Mortality risk and bequests. *Econometrica*, 54(7):779–813.
- Lundholm, M. and Ohlsson, H. (2000). Post mortem reputation, compensatory gifts, and equal bequests. *Economics Letters*.
- Menchik, P. L. (1988). Unequal estate division: Is it altruism, reverse bequests, or simply noise? In Kessler, D. and Masson, A., editors, *Modelling the Accumulation and Distribution of Wealth*. Oxford University Press.
- Page, B. R. (2003). Bequest taxes, inter vivos gifts, and the bequest motive. *Journal of Public Economics*, 87:1219–1229.
- Perozek, M. G. (1998). A reexamination of the strategic bequest motive. *Journal of Political Economy*.
- Poterba, J. (2001). Estate and gift taxes and incentives for inter vivos giving in the us. *Journal of Public Economics*, 79:237–264.
- Wilhelm, M. O. (1996). Bequest behavior and the effect of heirs' earnings: Testing the altruistic model of bequests. *The American Economic Review*, 86(4):874–892.
- Yaari, M. E. (1965). Uncertain lifetime, life insurance, and the theory of the consumer. *Review of Economic Studies*, 32:137–150.

Table 1: Regression Analysis of Bequest Distribution to Children

	All Children	Coresident Children	Nonresident Children
Child provided temp live-in help	0.410 (0.535)		1.149* (0.511)
Child helped parent with an ADL	0.178 (0.374)	-0.595 (0.537)	0.200 (0.363)
Child helped parent with an IADL	1.187** (0.333)	2.613** (0.568)	0.324 (0.347)
Child is male	0.188 (0.224)	0.327 (0.390)	0.318 (0.263)
Child has least schooling of siblings	-0.261 (0.315)	-0.397 (0.592)	0.024 (0.303)
Child has most schooling of siblings	0.528** (0.201)	0.215 (0.376)	1.055** (0.292)
Child is married	-0.048 (0.249)	-0.080 (0.442)	0.384 (0.574)
Child is youngest sibling	0.194 (0.311)	-0.059 (0.396)	0.427 (0.412)
Child is oldest sibling	0.061 (0.268)	-0.356 (0.462)	0.096 (0.256)
Child is nonresident	0.920* (0.447)		
Child has always been coresident	1.093** (0.354)	0.948† (0.494)	
Child is non-resident in same community	-0.138 (0.469)		-0.080 (0.415)
Child lives outside Mexico	0.782† (0.449)		0.769 (0.535)
# Mail/phone/visits per week	0.071 (0.063)		0.108* (0.055)
Parent is male	-0.121 (0.217)	0.531 (0.332)	-0.572† (0.331)
Parent \geq 72 years old	-0.234 (0.209)	-0.449 (0.415)	-0.036 (0.252)
Parent has 1–6 years of schooling	0.623* (0.272)	0.929* (0.442)	0.226 (0.340)
Parent has \geq 7 years of schooling	0.648 (0.507)	0.944 (1.026)	0.098 (0.417)
Parent lives in urban area	-0.252 (0.222)	-0.833** (0.316)	0.293 (0.233)
Parent owned a house	0.218 (0.232)	0.125 (0.393)	0.739* (0.350)
Constant	-4.027** (0.819)	-3.249** (0.773)	-4.479** (1.151)
N	949	165	784

Notes: †p<0.10, * p<0.05, ** p<0.01

Observations are children of parents who died between 2001 and 2003, had positive assets, left no surviving spouse, and had at least two children. The dependent variable is an indicator which is one when the child received a larger bequest than at least one of his/her siblings.

Source: MHAS 2001,2003