Altruistic Bequest Motives and Living Arrangements of Elderly Parents

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Section 1: Introduction:

In this article I explore the association between one particular type of bequest motives, the altruistic bequest motive, and the coresidence status of elderly parents. Our results show that, the higher is the altruistic bequest motive of the elderly parents, the lower bargaining power they will have, and furthermore, the smaller incentive to co-reside with them the potential bequest recipients will have. This, as a result, will lead to a lower probability for them to coresiding with adult children.

In view of microeconomics, household is a producer of goods and services (Becker 1981). Household status is also viewed as a composite goods and the formation of household is a rational choice (Ermisch, 1981; Ermisch and Overton, 1985; Goodman, 1986). In choosing a particular household status, an individual or a couple are in effect choosing some combination of a set of component goods, such as 1) physical shelter, 2) Storage of property both common and personal. 3) Domestic services, 4) Personal care, 5) Companionship 6) Recreations and entertainment, 7) Privacy, 8) Independence/autonomy, 9) Power/authority and 10) Economics of scale in

consumption (Burch and Matthews, 1987). These components can also be further classified within different dimensions. Such a division could be (a) public, private, or mixed, (b) complements of substitutes, (c) interior, normal, or superior (Matsuura and Shigeno 1999).

For the elderly, living in an intergenerational household offers important benefits: net family housing cost is reduced; children can produce informal care more efficiently since transaction cost is minimized; and interaction with children is increased. Balanced against these benefits are the loss of privacy and decreased independence for both generations. With the aging of population and the rising costs of market provided home and institutional care, the benefits of living in an intergenerational household or simply with somebody else are likely to increase.

Many causal factors associated with intergenerational household formation have been investigated. Such factors include marital status, widowhood, divorce and number of marriage (Sweet, 1972; Graefe and Lichter 1999; DaVanzo and Chan, 1994; Burr and Mutchler, 1992; Martin, 1989), kinship availability (Mutchler and Burr, 1991,), culture (Kamo and Zhou, 1994), functional and cognitive limitations (Worobey and Angel 1990), labor force participations (Couch, Daly and Wolf, 1999, Pezzin and Schone 1999), social security (McGarry and Schoeni, 2000), public subsidies (Hoerger, Picone and Sloan, 1996), and intergenerational transfers (Bernheim, Lawrence and Summers, 1986; Cox and Rank, 1992; Stern, 1995),

Whether bequest motives has a causal effect on elderly parents' living arrangement is not clear. There are several kinds of bequest motives in the literature in the field, including absence of bequest, accidental bequest, strategic bequest, and altruistic bequest motives. The life cycle model of Modigliani and Brumberg (1954) assumes that "people are selfish and that they do not harbor feelings of altruism toward their children". This model implies that they will not leave any bequests. Other researchers introduce uncertainty into life cycle model. Unintended or accidental bequests will arise from an uncertain lifespan and/or uncertain medical and long-term care expenses (Levhari and Mirman, 1977; Kotlikoff 1989). Selfish or strategic bequests is defined as bequests that are conditional on the care and attention their children provide to the elderly parents during their old age (Bernheim, Shleifer, and Summers 1985 and Cox 1987). By contrast, the altruism model of Barro (1974) and Becker (1981, 1991) assumes that people have intergenerational altruism toward their children and thus implies that they will leave a bequest to their children regardless of whether their children take care of them and/or provide financial support.

Bernheim, Lawrence and Summers (1986) developed a model of strategic bequests motive and its association with the contacts between elderly parents and their children was studied. In their study, wealth plausible to be used as bequest is regarded as an indicator for strategic bequests motive. By only considering the cases of the elderly parents who are not living within an intergenerational household, the paper found a significant positive correlation. However, whether strategic bequest motives have any impact on intergenerational household formation is not a consideration in that article. Also other types of bequest motives are not discussed.

In this article, I will focus on altruistic bequest motives from parents. A game framework will be set up to analyze how the elderly parents and adult children form their threatening point in the formation of coresidence and thus, how the existence of altruistic bequest changes the living arrangements of elderly people. And a regression will be done to test the general results derived from the theoretical setup.

The paper is organized as the follows: in section 2, a two-player game will be set up to study the possible results of the introduction of altruistic bequest. Section 3 gives the data and regression methods used in the paper. We present the regression results and discusse the possible interpretations in Section 4. And in section 5 we conclude.

Section 2: Theoretical Framework

In this section I discuss the theoretical framework that underlies the estimation of the effect of bequest upon coresidence. The definition of coresidence I used here is whether the elderly parents are living with any of their children at the time of the survey.

2.1. Bargaining model of coresidence and bequest

I consider a game with complete information consisting of two players, one potential bequest recipient and one elderly parent who might leave bequest. In order to mapping the probability of parents' altruistic bequest motives to potential bequest recipients' response, I assume that the information is complete in this game, i.e. potential bequest recipients have the same knowledge, as elderly parents, of the chance that the elderly parents will leave any bequest. I believe that utilization of probability will not change the nature of the game. Also, when we controlling for personal wealth and income as well as other important social economic and demographic factors, the probability of leaving any bequest will function as equivalence to the absolute amount of bequest the bequest recipient will get.

I modify existing a bargaining model used in a study on intergenerational household formation and labor force participation (Pezzin and Schone, 1999) for my study. Players are assumed to maximize their utility function Uⁱ (i = c: potential bequest recipient, particularly an offsprings of the elderly parents, and i = p: elderly parents). The utility function is defined over a vector of private goods, X, and a public goods, W, which will be discussed in detail later. I further assume that the bequest recipients face a time allocation problem among informal care-giving, labor force participation and etc. As a result, an additional choice variable, leisure L, enters the utility function of those bequest recipients but not the elderly parents. In addition, both utility functions also depend on a taste parameter θ^i (i= c, p), which reflects each individual's preferences for privacy and independence. As described, the utility functions are given by:

(1) $U^{c}(X^{c}, W, L; \theta^{c})$

 $U^{p}(X^{p}, W; \theta^{p}).$

Now I discuss the definition of the public goods W. I assume that W represents parent's health and well-being, which as I defined, enters utility functions of both players and thus affects both players' overall utility. To be more specific, the production of W, conditional on the parent's originally exogenous functional and cognitive disability D, depends on two forms of cares: formal care¹, FC, which is purchased in the market, and informal care, IC, which is in-kind services provided by the persons other than elderly parents themselves in this setup. Equivalently, the production function of W is given by:

(2)
$$W=W(IC, FC; D)$$

By this setup, the possible bequest recipient, in most cases, the adult child is modeled to be somehow altruistic, since he or she cares about the elderly parents' wellbeing. What follows is that even without any chance of getting bequest, the adult child has incentive to some extent to help the elderly parents, and thus, the elderly parent does

¹ Both parents and their children can purchase formal care. To simplify the model, we consider the purchase by the latter as a form of net intergenerational transfer, t and treat t as given to emphasize the effect of bequest.

have some bargaining power if he or she wants to co-reside with his/her child.

In order to observe the impact of altruistic bequest, I calculate the threatening point of both elderly parents and potential bequest recipients under both cases with and without bequest.

Without any bequest motives, the threat points for both players are the opportunity cost of shared living, i.e. the maximum utility level each individual can achieve by living on his or her own. Analytically, the elderly parents' threatening point can be defined as their maximum utility when living independently by choosing values of X^p and FC.

(3)
$$\underset{\{X^{p},FC\}}{MAX} [U^{p}(X^{p},W(IC,FC;D);\theta^{p})]$$
s.t.
$$V^{p} + t = X^{p} + P_{FC} * FC$$

where V^i denotes the total non-labor income, t denotes the net intergenerational transfers from child generation to parent generation and P_{FC} represents the price level of formal care.

The children's threatening point, the maximized utility of living independently can be calculated analogously.

(4)
$$\begin{aligned} &\underset{\{X^{C}, IC, L\}}{Max} [U^{c}(X^{c}, W(IC, FC), L; D); \theta^{c})] \\ &\text{s.t.} \\ &V^{d} + \omega T = X^{d} + \omega (L + IC) + t \end{aligned}$$

where ω is wage rate and T is the total time constraint.

If we introduce Altruistic bequest B^a into the utility function, the threatening point will change accordingly.

For elderly parents:

(5) Threatening point =
$$\underset{\{X^{p},FC\}}{MAX}[U^{p}(X^{p},W(IC,FC;D);\theta^{p})]$$

s.t.

$$V^p - B^a + t = X^p + P_{FC} * FC$$

Other things being equal, there is a decrease in their budge constraint as compare to no bequest state in formula (3), as a result of which, threatening point of elderly parent drops accordingly

For their children:

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(6) Threatening point =
$$\underset{\{X^{C}, IC, L\}}{Max} [U^{c}(X^{c}, W(IC, FC), L; D); \theta^{c})]$$

$$V^{d} + B^{a} + \omega T = X^{d} + \omega (L + IC) + t$$

Other things being equal, there is an increase in their budge constraints as compare to that in no bequest state in formula (4), as a result of which, their threatening points rises accordingly.

From the above, we see that the introduction of altruistic bequest will increase children's threatening point while on the other hand, decrease elderly parent's. Threatening point is a major factor determining whether there will be equilibrium and how the surplus from cooperative game equilibrium is allocated among the players. Consequently, increase and decrease in the threatening points of children and elderly parents respectively will lead to results in favor of children in the formation of intergenerational household as well as, if they decide to coreside at all, allocations of time and resources within household. If we can make an assumption that children's threatening point have already been higher than their elderly parents under the state of no bequest, i.e. what prevent coresidence is the unwillingness of the children, not the elderly parent², then such a change will lead to a further reduction in the possibility of coresidence on average within the population.

My hypothesis is that holding other factors, the higher possibility of receiving an

s.t.

 $^{^2}$ I did not find empirical ground to support this argument. I assume that on average, elder parents prefer living within multigenerational household more than their children do.

altruistic bequest, the lower level of incentives of the bequest recipients to co-reside with the elderly parents, and as a consequence the chance that the elderly parents are currently co-residing with any of their children is lower.

Section 3: Data and Method

3.1 DATA

The data used in this article is RAND HRS Data files for the year 2000, a cleaned and processed version of the Health and Retirement Study (HRS) developed for policy analysis use by staff members of the Social Security Administration (SSA) and HRS public data. All observations are from RAND HRS Data files. HRS data are merged onto RAND HRS Data to get coresidence status variable.

The HRS is a biennial panel with several auxiliary files. It is sponsored by the National Institute of Aging and administered by the Institute for Social Research (ISR) at the University of Michigan. The panel started in 1992 with 12,562 respondents in 7,702 households. The study over-samples Hispanics, Blacks, and residents of Florida, and provides weighting variables to make it representative of the community-based population. The baseline survey was conducted face-to-face in the homes of respondents born in 1931-41. In addition, the survey interviews the spouses of married respondents, regardless of age. Follow-up surveys were conducted by telephone in 1994, 1996, 1998, and 2000, with proxy interviews after death. As of late 2001, five waves are available for study (RAND, 2002).

The criteria for choosing sample:

- 1) Community dwelling
- 2) Elderly person aged 60 or over. A cutoff point of age 65 for a person to be considered as the elderly is more common in the literature. However, change in living arrangement may be very salient around the retirement threshold. For this consideration, I include the population aged 60 and over into the sample.
- 3) Not living with spouse or partners. Since our interest is whether altruistic bequest motives have any impact on intergenerational coresidence, people who co-reside with spouse or partner produce noises, since spouse and adult child can be seen as substitution to each other in producing care. To deal with this, I exclude those individuals who are living with spouse or partners and only include the sample of individuals who is not living in marriage union or partnerships. Individuals who are married but separate with spouse are included.
- 4) Having at least one living children.

In RAND HRS Data files data, 1549 individuals are eligible, including 1,141 (73.66%) female and 408 (26.34%) male.

Outcome Variable:

Outcome variable is a binary variable defined as "whether community dwelling elderly parent out of marital unions or partnerships is currently co-residing with any of their children". My interest is essentially in the association between altruistic bequest motives and the current status of living arrangement. Ideally, co-residence with own children is an excellent indicator to be used, since bequest behavior is in theory closely related to own children. However, RAND HRS Data files only provide variables that indicate how many persons are living in respondent's household. There is no indication of whether there is any offsprings among these household numbers. However, there is a variable indicating whether there is any children living in the same household as parent in HRS public data set. To get the right variable, I merge the HRS raw data with RAND HRS Data and generate the variable for whether elderly parents are co-residing with any of their children currently. Ideally, only coresidence with adult children should be considered as meaningful indicator under the structure of our study, since young children are more likely to be dependent rather than supporters. However, due to the data limitations, children's age is not available which prevent us from separate these noises out of the sample. However, since our sample are aged 60 and older, the size of dependent children is supposed to not have very big effect on the analysis.

Key Explanatory Variable:

Key explanatory variable in my model is a continuous variable, "the self-reported probability of leaving any bequest". In the HRS 2000 survey, individuals were asked what are the probabilities for them to leave any bequest. It is reasonable to believe that the answer to this question is not a reflection of strategic bequest motive. The reasons are the following: (1) the survey question is framed in the way that there is no prerequisite or condition for leaving any bequest. There is no obligation, either formally or informally, for the bequest recipients to get such bequest, at least in the questions. (2) The answers to the question are not supposed to be revealed to any child or relatives. So it is also reasonable to assume that what is revealed in the answers has nothing to do with the bargaining process of coresidence decisions.

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent variable					
Coresidence with somebody or not	1549	0.29	0.46	0=living along	1= coreside
Key Explanatory Variable					
Probability of living bequest	1549	59.05	42.21	0	100
Controlling Variables					
age	1549	64.41	3.16	60	85
gender	1549	1.74	0.44	1=male	2=female
education	1547	2.78	1.39	1	5
# of marriage	1536	1.33	0.74	0	6
black or not	1549	0.26	0.44	0=non black	1=black
Hispanic or not	1547	0.09	0.29	0=non hispan	1=Hispanic
# of living children	1546	0.09	0.29	1	16
personal income (\$)	1549	8882.92	16324.23	0	113000
total non-housing wealth (\$)	1549	43119.9	130539.6	-475000	1614000
whether receive social security	1549	0.71	0.45	0 = not	1=yes
self rated health	1549	2.94	1.15	1=worst	5=best
Ability of Daily Living	1549	0.30	0.83	0=best	5=worst
Instrumental Ability of Daily Living	1549	0.19	0.62	0=best	5=worst
IV					
Whether having Cars	1549	0.63	0.48	0= no	1=yes
Whether having Stocks	1549	0.13	0.34	0= no	1=yes
Whether having business	1549	0.13	0.34	0= no	1=yes
Whether having CD bonds	1549	0.03	0.17	0= no	1=yes

Table 1. Variable summary table

Data source: RAND HRS Data files for the year 2000.

On the contrary, we can deem the information contained in the answer as altruistic bequest motives. Several things should be noted. For one thing, it should be considered as a revealed preference with complete information for children as well as elderly parents, i.e. children in the game can also observe this information through other channels. It will be reasonable to make an assumption that the information revealed in the answer to the survey question is a valid proximate to revealed preference observed by other players. Secondly, unlike strategic bequest motives, there is no reputation hazard for altruistic bequest motives, since the latter is merely a reflection of altruism and not conditional on other player's behavior, there is no incentive for the elderly parents to cheat in answering the question³. Thirdly, the answer is only a reflection of the probability of leaving any request, not the absolute amount. However, after controlling for income and wealth, the probability will contain the same information as the amount of bequest would do.

Controlling and Instrumental Variables

Controlling variables include the demographics of those single elderly parents (such as age, gender, ethnicity, highest achieved education); health status (such as self-reported health, ADL (Ability of Daily Living, measured by number of

³ Respondent may pretend to be more altruistic as they real are, or try to conceive their real wealth as they answer the question, which will lead to over-reporting and under-reporting for the altruistic bequest motives respectively.

difficulties in daily activities, reflecting physical capability) IADL (Instrumental Ability of Daily Living, measured by number of difficulties in daily social activities, reflecting social capability)); financial situations (such as social security status, personal income, net value of non-housing financial wealth). Instrumental variables include two binary variables: whether having car, stock, CD bonds and own business⁴. The choice of these instrumental variables will be further discussed in the following section deal with endogeneity issue.

Summary for all the variables can be found in table 1.

3.2 Empirical Method:

3.2.1 Probit model:

Since the dependent variable is binary, the regression model can be conceptualized as follows:

(1)
$$y_i^* = \alpha + \beta X_i + \varepsilon_i$$

(2)
$$y_i = 1$$
 if $y_i \ge \delta$

= 0 if yi*
$$<\delta$$

(3)
$$\epsilon_i \sim N(0, \sigma^2)$$
, i.e.

y* is latent variable for coresidence, and y_i is the binary outcome of coresiding or not for each elderly parent. The taste parameter ε_i is assumed to be normally distributed. OLS estimation is biased for binary choice model. I apply maximum likelihood to estimate the Probit model. The likelihood function is

⁴ Continuous variables for the value of car, stock, CD bonds and own business are not available in RAND data. Such information is available in HRS raw data.

$$L = \sum_{i:y_i=1} \log[\Pr{ob(y_i = 1 \mid \delta, \alpha, \beta, \sigma)}] + \sum_{i:y_i=0} \log[\Pr{ob(y_i = 0 \mid \delta, \alpha, \beta, \sigma)}]$$
$$= \sum_{y_i=1} \log[1 - F(\frac{\delta - \alpha - \beta X_i}{\sigma})] + \sum_{y_i=0} \log[F(\frac{\delta - \alpha - \beta X_i}{\sigma})]$$

3.2.2. Endogeneity:

Endogeneity is a problem in evaluating the association between bequest motives and co-residency. Theoretically, the causality can go either way. Like the story in the theoretical framework, an intention of leaving altruistic bequest tends to decrease the bargaining power in terms of threatening point of elderly parents while increase that of the potential bequest recipient. As a result, higher probability of leaving bequest anyway will reduce the chance of forming a coresiding household for the elderly parents. Under this scenario, altruistic bequest is the cause and coresidence status is the effect. However, we also believe that whether to leave any bequest can also be affected by living arrangements. Family solidity evolved from coresidence and mutually caring may give elderly parents incentive to leave more bequest to their children; while deficiency in family solidity may hurt the emotion of elderly parents and disincentive them to leave any bequest.

In general, Endogeneity will bias the results toward null. To remedy, I use instrumental variables. From our dataset, two IV's are chosen: Car, Stock, CD bonds and own business (description of these variables are presented in Table 1). The criteria for these IV's are: correlated with Altruistic Bequest, and uncorrelated with Coresidence. The IV's have no impact on Coresidence through any mechanism other than Altruistic Bequest. Car, stock, CD bonds and own business are major non-housing assets. These assets affect not only the ability of leaving a bequest, but also the willingness of leaving a bequest. Another attributes of these instrumental variables are that they can be readily perceived by the potential bequest recipients, as a result, they can be used to explain children's response. At the same time, they have no direct influence on coresidence. So they are both relevant and valid.

Section 4: Empirical Results

As shown in table 2, columns under "Equation (1)" show the result of Probit estimation without IV. Unadjusted for other factors, the association is negative and significant.

Equation (2) shows the results after controlling for demographic, health and financial variables. The association under this situation is reversed but is however not significant. This result is, of course, not surprising given the possibly existing endogeneity problem. We can further notice that besides gender, earnings and net value of non-housing wealth are significantly negatively associated with living arrangement, while self-rated health are not significant.

The results indicate that the more financially independent an elderly person is (or

more wealthy he or she is), the less likely that he or she is co-residing with their children. Furthermore, old female tend to coreside with their children more than male do.

	Probit w/o IV				2SLS Probit				
	Equ(1)		Equ(2)		Equ(3)		Equ(4)		
-	Coef.	SE.	Coef.	P>z	Coef.	SE.	Coef.	P>z	
Constant	-0.6721	0.000	-3.2093	0.029	0.3220	0.124	-2.5269	0.09	
prob. of living bequest	-0.0036	0.007	0.0021	0.216	-0.0208	0.000	-0.0088	0.041	
age	-	-	0.0109	0.62	-	-	0.0121	0.578	
gender	-	-	0.6120	0.000	-	-	0.5590	0.000	
education	-	-	-0.0454	0.366	-	-	-0.0089	0.857	
# of marriage	-	-	-0.2457	0.005	-	-	-0.2379	0.007	
# living children	-	-	0.2299	0.000	-	-	0.2256	0.000	
black or not	-	-	0.1330	0.294	-	-	0.0740	0.56	
Hispanic or not	-	-	0.6768	0.001	-	-	0.5969	0.005	
personal income	-	-	0.0000	0.319	-	-	0.0000	0.457	
total non- housing wealth	-	-	0.0000	0.147	-	-	0.0000	0.435	
whether receive social security	-	-	-0.3482	0.03	-	-	-0.3435	0.032	
self rated health	-	-	-0.0089	0.885	-	-	-0.0324	0.596	
Ability of Daily Living	-	-	0.0002	0.998	-	-	-0.0116	0.901	
Instrumental Ability of Daily Living	-	-	0. 0855	0. 485	-	-	0.0644	0. 597	
Number of obs	1549		153	1535		1549		1535	
log likelihood	-919.7	-919.78 -845.30		-934.21		-843.96			

Table 2. Probit^a Estimation of Coresidence of Elderly parents

Data source: RAND HRS Data and HRS public raw data for the year 2000.

a. Data are analyzed in STATA 8 using Probit Command Penal.

However, a very strict assumption for consistent estimation by probit model is that the probability of leaving bequest has to be exogenous from the dependent variable. As we discussed above, such an assumption may not be realistic. There might be reverse causality, between coresidence and bequest motives. As a result, the estimation in

equation (1)(2) will be biased toward null.

To remedy, I introduce 2SLS Probit with instrumental variable (as discussed in section 3.2.2) into the model. The results are shown in equation (3) and (4). Equation (3) shows the results of Probit estimation with IV. We can observe that, unadjusted for other factors, the association is again negative and significant. Compared to the results of equation (1), the strength of the association is more than 5 folders stronger, which encourages the inclusion of instrumental variable that helps reduce the reverse causality and find out the net effect of altruistic bequest on coresidence.

After controlling for other relevant factors, the results of 2SLS show similar results with that of equation 2, except for altruistic bequest motives. After correcting for then endogeneity problem, we now observe a negative and significant association between coresidence and the altruistic bequest motives, which indicates that other thing being equal, the higher probability the elderly parents is planning to leave a bequest that is not conditioned on children's behavior, the lower probability that the elderly parents are currently living with their children in the same household. The strength of the association is about 4 times as strong in 2SLS as in original Probit model. This result is consistent with our hypothesis that stronger altruistic bequest motives undermine the possibility for elderly parents to coreside with their children, the mechanism of which is very likely to be the shift in threatening point in the bargaining process.

Among the controlling variables, number of marriage, numbers of living children, gender, whether Hispanic or not and social security status are statistically associated with coresidence status. Larger number of marriage, smaller number of living children, being a father, not Hispanic, and qualified for social security are negatively associated with living together with adult children. These results are in accordance with many of previous findings in research concerning determinants of living arrangement. At the same time, our estimation shows that age does not have a significant association with coresidence status. In addition, I include three health indicators within our regression model. However their coefficients indicate a negative but non-significant association between health gradient and chance of coresidence. These findings strengthen our belief that children's altruism is only part of the game, on the contrary selfish consideration and maximization of their own monetary payoffs also plays an important role. Non-housing wealth and earning capacity of the elderly parents is not statistically significant as well, which indicates that after controlling for other factors, parental wealth do not play a important role in forming intergenerational household between potential bequest recipients and elderly parents.

Section 5: Conclusion:

In this article, we use a 2SLS Probit model to estimate the effect of altruistic bequest motives on elderly parents' coresidence with their children. By using instrumental variable technique, we correct the reversal causality from the dependent variable to independent variables. Our findings show a significant and negative correlation after controlling for relevant indicators. The results suggest that altruistic bequest motives undermines the elderly parents' chance of living together with their children. The mechanism of this, according to the theoretical framework we set up in the previous sections, would be that the intention of leaving altruistic bequest tends to decrease the bargaining power in terms of threatening point of elderly parents while increase that of the potential bequest recipient. Under the context of bargaining, the shift in each player's threatening point will lead to a living arrangement more favorite to the potential bequest recipients, i.e. living independently without taking elderly into the household or not have to go to accompany them in their household.

This article is of interest because it studies a sort of interaction between the "players" in a possible intergenerational household. Most studies in the literature in coresidence focus on which factors have impact on the choice of coresidence or the resource allocations in the case of coresidence. However, how the elderly parents, if they want to coreside with their children, do things to stimulate their adult children's willingness and how the adult children react to their elderly parents' intentional or unintentional behavior are seldom studied.

Our study does show some interesting interactions and calls for further research in this field. We use a static bargaining game to illustrate the association. However, if we structure our thinking under a dynamic game with a longer horizon, could there be strategic co-residing behaviors from the adult children, the purpose of which is to modify elderly parents' bequest motives? Under dynamic setup, lower altruistic bequest motives may give adult children incentives to live together with their elderly parent, in order to enhance their possibility to receive bequests. The rationale is that adult children believe that living together with parent will enhance intergenerational solidity, which make elderly parents more willing to leave a bequest. In this means, adult children can utilize co-residing as a strategy to trigger bequest. Consequently, adult children of parents with high bequest motives will not have strong incentive to utilize the strategic co-residence, since they know they will get the bequest anyway. While, for those adult children of parents with low bequest motives, utilization of strategic bequest have the potential to bring great payoffs. In this way, our finding in this study can be explained through another mechanism. We need more information about the junior generation before we are able to test the hypothesis for children's strategic coresidence. This hypothesis cannot be tested by the data we used in this study, which calls for further exploration on this topic.

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