One's Own Parents or One's Spousal Parents: A Question of Strategic Bequest Motives*

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Abstract

In this paper, we consider the strategic bequest model with parents who have a married child and unmarried children. Then, we explore how the bequest-attention exchange is influenced not only by the parents but also by the parents-in-law. The implication of our model is as follows: first, the parents have to leave more amount of bequest to their own child in order for the parents to elicit more attention from their child. Second, which is new to our model, if the spousal parents leave more bequest to the spouse of the married child, then the parents of the married child can elicit less amount of attention from the married child with other things the same. Then we empirically analyze the above predictions supported using Japanese data "Japanese Panel Survey of Consumers (JPSC)", which is conducted by the Institute for Research on Household Economics.

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1 Introduction

The importance of bequest has been documented in many papers for its proportion to household assets. In Japan, Horioka [3] estimates the proportion at about 20 to 30 percent, Barthold and Ito [**?**] at about 30 to 40 percent, and Shimono and Ishikawa [**?**] at about 40 to 60 percent. Even though these figures are lower than the estimation by Kotlikoff and Summers [**?**] (about 80 percent), we cannot deny that the bequest has significant impact on the capital accumulation. In addition, bequest is the source of asset inequality (Hurd and Smith [**?**] and Saito and Ohtake [**?**]). Especially in Japan, Saito and Ohtake [**?**] say that consumption inequalities are carried on from the older generations to the younger generations through bequests and inter vivo gifts.

From this, there remains considerable controversy about the motive of bequeathing asset or wealth. One of the most prevailing explanations is of the strategic bequest model first introduced by Bernheim, Shleifer and Summers [1]. In the model, parents are selfish in the sense of not caring the consumption of their children and use bequests as payments or compensations for non-marketable child-provided attentions such as affection and household help.[1] Similar strategic exchanges in inter vivos transfers are researched by Cox [**?**].

A critical condition for the strategic bequest model is that the parents have to have at least two children, which ensures that parents credibly threaten disinheritance by playing their children against each other. Thus, the parents can appropriate all the surplus generated from testator-beneficiary interaction. If parents have only one child, then they cannot credibly threaten universal disinheritance. In fact, Bernheim et al. [1] did not find

[1]There is a model which supposes that altruism of parents, as Barro [**?**] and Becker [**?**], where parents bequeath because they gain utility from the utility or lifetime resource of their children. Accidental model views bequests to be unintended so that parents like to have consumed all their assets by their death, but because the date of death is uncertain, they will die with assets and hence leave bequests.

positive link between visits and bequesthable wealth in one-child families, while they do in families with two or more children.

Even if the parents have more than one child, it is not necessarily the case that the parents are the only person who extracts the surplus from their children. This is because if one of the children have gotten married, the child will provide attention to the parents-in-law, especially when the child is a daughter. Considering the care for elderly parents, which families have been the most basic part of and which coresidence is an important way for the children to provide. In fact, the 2007 National Livelihood Survey, conducted by the Ministry of Health, Labour and Welfare, summarizes that the main caregivers of those who require nursing care are coresident families (60.0%), while non-coresident families are only 10.7 %, and even though the public nursing care system was introduced in 1997 nursing care businesses are only 12.0 %.[2] The most important fact is that, among the coresident family caregivers, the principals are spouse of child (14.3%) and children (17.9%) next to spouse (25.0%).[3] In addition, note that 71.6% of the above caregivers are female, which is consistent with that in Japan the attention provision to elderly family members is traditionally regarded as a sphere of wife or daughters-in-law. In consequence of this, it is no surprising that not only own parents but also spousal parents try to elicit attentions from their children couple in exchange of bequest. Therefore, the parents are no longer in the monopolistic position, instead they are in a competition with the spousal parents of the married child for attention provision of their children.

In this paper, we consider the strategic bequest model with parents who have a married child and unmarried children. Then, we explore how the bequest-attention exchange is influenced not only by own parents but also by parents-in-law. The implication of our model is as follows: first, the parents have to leave more amount of bequest to their own

[2]Others and unknown are 17.4%.
[3]Other relatives (2.5%), father or mother (0.3%).

child in order for the parents to elicit more attention from their child. Second, which is new to our model, if the spousal parents leave more bequest to the spouse of the married child, then the parents of the married child can elicit less amount of attention from the married child with other things the same. Then we empirically analyze the above predictions supported using Japanese data "Japanese Panel Survey of Consumers (JPSC)", which is conducted by the Institute for Research on Household Economics.

This paper is organized as follows: in Section 2, we develop the theoretical model, in Section 3, we present the data we use in our analysis. Section 4 presents our empirical model. Section 5 presents our variable definitions. Section 6 is descriptive statistics. Section 7 presents our result. And Section 8 concludes.

2 Theoretical Model

We consider parents P who have $N > 1$ children. We assume that one of the children (say, a daughter) is married, who is denoted by m. For simplicity, we assume that the other $N-1$ children are unmarried.

The utility function of parents P is given by,

$$u_P(c_P, a_m, \boldsymbol{a}_u), \tag{1}$$

where c_P denotes the consumption of parents P. a_m denotes the attention given to the parents by the married child m and $\boldsymbol{a}_u \equiv (a_{u_1}, \ldots, a_{u_{N-1}})$ denotes the vector of the attentions given to the parents by the other unmarried $N-1$ children.

Parents bequeath an amount of their wealth to each child in order to elicit attention from the child, and then the budget constraint of parent P is,

$$c_P = Y_P - B_m - \sum_{i=1}^{N-1} B_{u_i}, \tag{2}$$

where Y_P is the wealth of the parents. B_m is the amount of bequest to the married child, while B_{u_i} is that to the unmarried child $i \in \{1, \ldots, N-1\}$.

If the parents can commit to a bequest rule that each of their children will be disinherited if the child does not provide attention, then the parents have all the bargaining power in the exchange between parents and children. If so, the parents appropriate the entire surplus generated from parent-child interaction, and thus we can assume that each child has the maximum amount of the attention that the child can afford to provide to the parents for the exchange of the given amount of the bequest, denoted by functions $a_m(B_m; a_m^s)$ for the married child and $a_{u_i}(B_{m_i})$ for the unmarried child i. What is the most important assumption in our model is that the maximum amount of the married child is dependent of how much she and her spouse provide attention to the parents of her spouse, a_m^s, which is justified by that her spouse will be also engaged in an attention-bequest exchange with the parents of her spouse and that resource allocation between husband and wife usually exhibits a high degree of the division of labor (see the review of Lundberg and Pollak [**?**]).

With assuming that the children's cost of providing attention is increasing in the amount of attention, this model gives us an implication on the attention provision. That is, in order for the parents to elicit more attention from their children, the parents have to leave more amount of bequest to their own children,

$$\frac{\partial a_m}{\partial B_m} > 0 \text{ and } \frac{\partial a_{u_i}}{\partial B_{u_i}} > 0 \text{ for all } i \in \{1, \ldots, N-1\}. \tag{3}$$

Note that this is the same as the model of Bernheim et al. [1]'s strategic bequest model. In addition, we have a negative dependence of the maximum amount of attention of the married child on the attention to the parents of her spouse, $\frac{\partial a_m}{\partial a_m^s} < 0$. That is, under the circumstance that the spousal parents elicit more attention from the couple, her

own parents can elicit less attention for the exchange of a given amount of bequest to the married daughter, which is due to the higher cost of the married child to provide attention to his/her parents induced by more attention elicited by the spousal parents.

With the negative dependence of the maximum amount on a_m^s, the parents P are no longer in the monopolistic position of attention exchange with their married child, instead they are in a competition with the spousal parents of the married child for the attention provision. Therefore, given the amount of attention that the spousal parents of their married child elicit from the couple, a_m^s, parents P solve the following non-cooperative game;

$$\max_{B_m, \boldsymbol{B}_u} u_P \left(Y_P - B_m - \sum_{i=1}^{N-1} B_{u_i}, a_m(B_m; a_m^s), \boldsymbol{a}_u(\boldsymbol{B}_u) \right), \tag{4}$$

where $\boldsymbol{B}_u$ is a vector of bequest to their children $(B_{u_1}, \ldots, B_{u_{N-1}})$ and $\boldsymbol{a}_u(\boldsymbol{B}_u)$ is a vector $(a_{u_1}(B_{u_1}), \ldots, a_{u_{N-1}}(B_{u_{N-1}}))$.

In addition to the above mentioned positive effect of bequest on attention (equations (3)), this model gives us the implications on the attention providing of the married child. In fact, the spousal parents will also elicit more attention from the couple in exchange of more bequest. Then, with the negative dependence of the maximum amount on a_m^s, we have that the spousal bequest have a negative impact on the attention of the married child to the parents of the married child,

$$\frac{\partial a_m}{\partial B_m^s} < 0. \tag{5}$$

That is, if the spousal parents leave more bequest to the spouse of the married child, then the parents of the married child can elicit less amount of attention from the married child with other things the same.

In the following sections, we empirically analyze wether or not the above equations (3) and (5) are supported as well as their links to the number of siblings as following.

Bernheim et al. [1] argued that it must be satisfied that the parents have at least two children in order for the threat of disinheritance to be credible. Hence, $N \geq 2$ is required for our first equations (3) that the parents elicit more attention from the child in exchange of more bequest. Since the number of spouse's siblings N^s must be two or more for the spousal parents to elicit more attention from the spouse in exchange of bequest, $N^s \geq 2$ is needed for our second equation (5) that the parents elicit less attention from their child when the spousal parents of the child leave more bequest to the spouse of the child, while if $N^s = 1$, then we do not have the equation.

3 The Data

3.1 The Data Source

We use micro data from the 1993, 1994, 1997, and 2003 administrations of the "Japanese Panel Survey of Consumers," which were provided by the Institute for Research on Household Economics. This survey was started in October 1993 and has been conducted in every year since then. In these panel data, a stratified two-stage random sample from throughout Japan was surveyed, using the drop–off, pick–up method. In the 1993 administration, 1,500 women between 24 and 34 years of ages as of October 1993 were surveyed. In the 1994 administration, 1,422 individuals out of the above 1,500 individuals were continually surveyed. In the 1997 administration, 500 women between 24 and 27 years of ages as of October 1997 were surveyed, and in the 2003 administration, 836 women between 24 and 29 years of ages as of October 2003 were surveyed. These surveys asked whether or not the individuals (intend to) live with their own parents or their husband's parents respectively, and especially, the 1994, 1997, and 2003 administrations asked whether or not the individuals expect to receive financial assets and real assets from their own and husband's parents as both intervivos and bequest, and the amount of the expected bequest.

3.2 Sample Selection

The sample we use is as follows: respondent women (i) who were married, and (ii) whose at least one of their own parents and at least one of their husbands' were alive[4] In addition, we exclude all respondents for which all the other necessary information was not provided. Of the 2,758 respondents, 1,557 were married and 1,201 were singles. Restricting the sample to respondents whose at least one of their own parents and at least one of their spouses' were alive reduces the number of respondents from 1,557 to 1,555, restricting the sample to respondents who did not answer "to extract childcare from their parents" reduces the number of respondents from 1,555 to 1519, and restricting the sample to respondents for whom all of the other necessary information was available reduces the number further to 1,017. Out of them, 776 respondents answered the amount of the bequest of husband's parents and 782 respondents answered those of wife's parents.

3.3 Sample Selection

The sample we use is as follows: respondent women (i) who answered both 1993 and 1994 administrations, (ii) who were married, and (iii) whose at least one of their own parents and at least one of their husbands' were alive[5] In addition, we exclude all respondents for which all the other necessary information was not provided. Of the 2,758 respondents, 1,557 were married and 1,201 were singles. Restricting the sample to respondents whose at least one of their own parents and at least one of their spouses' were alive reduces

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4 Estimation Model and Estimation Method

In this section, we describe two estimation models: One is based on the Bernheim, et al. [1]'s strategic bequest model, and the other is on our strategic bequest model which considers explicitly both own parents and spousal parents.

4.1 Bernheim, et al. [1]'s Strategic Bequest Model

First, we use the following equation in order to discuss the strategic bequest motive of Bernheim et al. [1] in Japan,

$$\begin{aligned} attention^* &= \alpha_0 + \alpha_1 bequest + \alpha_c X_c + \alpha_p X_p + \epsilon, \\ attention &= \begin{cases} 1 & \text{if } attention^* > 0, \\ 0 & \text{otherwise,} \end{cases} \end{aligned}$$

where Bernheim et al. [1]'s model predicts that the attention provision from a respondent, denoted by *attention* is induced by the her own parents using their bequest, *bequest*. The precise definition of variables are in the next section. The same for the following other variables. X_c and X_p are variables representing the attribute of the respondent and her husband and that of respondent's own parents. The coefficients of *bequest* is expected to be positive.

We also conduct another estimation of Bernheim et al. [1]'s model, where *attention* is the attention provision from the husband of the respondent and *bequest* is the expected

bequest from her husband's parents. Correspondingly, parental attribute X_p changes to the attributes of her husband.

We assume that ϵ is normally distributed, and thus, we use a probit model with robust standard errors.

4.2 Strategic Bequest Model with Own parents and Spousal Parents

Next, in our theoretical model, the attention to own parents is affected not only by the bequest from the own parents but also by the spousal bequest. Hence, we add the variable representing expected bequests from spousal parents of respondent's husband, *bequest_spouse*. Hence, the above equations become,

$$\begin{aligned} attention^* &= \beta_0 + \beta_1 bequest + \beta_2 bequest\_spouse + \beta_c X_c + \beta_p X_p + \beta_s X_s + \eta, \\ attention &= \begin{cases} 1 & \text{if } attention^* > 0, \\ 0 & \text{otherwise,} \end{cases} \end{aligned} \tag{6}$$

with X_s is variables representing attributes of spousal parents of the respondent. Note that the equation include both X_p and X_s. As the previous subsection, we conduct another estimation of the attention provision to the parents of respondent's husband rather than the parents of the respondents. In this estimation, *bequest* is the expected bequest from her spousal parents, while *bequest_spouse* is that from her own parents. We assume that η is normally distributed. And thus, we use a probit model with robust standard errors.

Our theoretical model also predicts that if expected bequest from own parents increases, then the attention to the parents increases. Then we expect β_1 is positive. Next, our main interest is in the sign of the coefficient β_2, that is, the attention to own parents decreases if the expected bequest from the spousal parents increases. Hence, β_2 is negative.

Next, we estimate our model using a multinomial logit model: Let *attention* be a

choice variable of respondent and her husband that equals N if the respondent and her husband live with neither own parents nor her spousal parents, O if they lives with her own parents, S if they live with her spousal parents, and B if they lives with both own and spousal parents. When we define the utility attainable for each couple from choosing alternative $j \in \{N, O, S, B\}$ as $attention_j^*$, the decision of the respondent's couple is,

$$\begin{aligned} attention_j^* &= \gamma_{0j} + \gamma_{1j} bequest + \gamma_{2j} bequest\_spouse + \gamma_j X + \theta, \quad (7) \\ attention &= \text{argmax}_{j=N,O,S,B}\, attention_j^*. \end{aligned}$$

This specification leads to the multinominal logit model where the probability that each couple chooses alternative j is given by

$$P_j = \frac{\exp(RHS_j)}{\sum_j \exp(RHS_j)}, \quad (8)$$

where RHS_j is the right hand side of equation (7) without θ.

5 Variable Definitions

Families have been the most basic part of care for elderly parents, and thus, coresidence is an important way for the children to provide attention to their parents. Hence, we regard whether the respondents live together with their own parents or their spousal parents as a proxy for attention provision.

In the survey we use, there are two questionnaire entries related to the residential condition of the respondents. The first one (a) asked which category the respondent apply to with respect to her own parents or her husband's parents who live the closest to the respondent. The answer is (1) the respondent lives in the same house as parents and earns a livelihood with them, (2) the respondent lives in the same house as parents and earn a livelihood separately from them, (3) the respondent lives in a separate house on the same proportion as parents, (4) the respondent lives in the same town or in less than

1 kilometer to the residence of the parents, (5) (if the respondent lives in 13 designated cities) the respondent lives in the same ward, (6) (if the respondent lives in the city other than 13 designated cities) the respondent lives in the same municipality, (7) the respondent lives in the same prefecture, (8) parents do not live in aforementioned (1)–(7) distances. The second one (b) asked which parents live closer to the respondent. The answer is (1) wife's parents, (2) husband's parents, (3) both wife's and husband's parents. Note that there is no respondent who answers both (1)–(3) in question (a)[6] and (3) in question (b). That is, there is no respondent who live with both own parents and spouse's parents.

Then, we consider a respondent to live with her own parents when she answers (1)–(3) in question (a) and (1) in question (b) and not to live with them otherwise. And we consider a respondent to live with parents of her husband when she answers (1)–(3) in question (a) and (2) in question (b) and not to live with them otherwise.[7]

According to the strategic bequest model, it is important to consider whether or not individuals expect to receive bequest or intervivos transfer from their parents. The variable *bequest* is defined as a dummy variable that equals one if the respondent expects to receive from her own parents bequests or intervivos transfer of financial assets or real assets, and zero otherwise, while the variable *bequest_spouse* is an equivalent with respect to her spousal parents. We also use the variables *amt_bequest* and *amt_bequest_spouse* as the amounts of the bequests or intervivos transfer from her own and spousal parents, respectively. The unit is yen.

We include the variables which represent the opportunity cost of couples. *full_time* is a dummy variable for respondents who are full-time workers. *part_time* is a dummy

[6]Category (1) is denoted

[7]From these questions, we cannot know the distance between the respondents and farther parents. That is why we do not use the information on the distance between respondents and their parents as dependent variable.

variable for respondents who are part-time workers. The base category of these variables comprises respondents who are full-time housewives. We also include *c_kids*, which is the dummy variable that equals one if respondents have at least one child whose age is under thirteen years old and zero otherwise, *age*, which is the average age of respondent and her husband, *educ* (the average educational attainment of respondents and her husband (in years), *income*, which is the total annual income of respondents and her husband. We expect that the coefficient of all the variables are negative and significant, because wives who are working, those who have many children, those who have high educational attainment, those who have high income have many higher opportunity cost for taking care of their parents.

We also include the variables pertaining to the economic background of couple and their parents: *c_eldest_son* (a dummy variable for husbands who are the eldest son), *c_rural* (a dummy variables for couples who live in rural area (village or local city)), *p_age_i* (the average age of parents i), *p_educ_i* (the average educational attainment of parents i (in years)), and *p_single_i* (a dummy variable that equals one if the parents i are divorced or widowed).

6 Descriptive Statistics

Table 2 provides sample means for all continuous variables and percentages for discrete variables which we used in our analysis. First, the percentage of respondents who live with their own parents is much lower than those who live with their husbands' parents (7.89% and 25.08%). This characteristic is not specific to our data. Actually, Kureishi and Wakabayashi [**?**] and Wakabayashi and Horioka [**?**] point out that in Japan the proportion of elderly parents living with their sons is much higher than that of elderly parents living with daughters. Second, the percentages of respondents who expect to receive be-

quest or intervivos transfer from their own parents and their spouses' parents are not so high (12.1% and 19.7%, respectively), and the average amounts of bequest or intervivos transfer from their own parents and their spouses' parents are not so high (1.59 million yen and 3.25 million yen), though the amounts become higher if we restrict our sample to the individuals who do expect to receive bequest or intervivos transfers (more than 26 millions yen and 33 millions yen, respectively). Third, we should note that the average ages of respondents, their spouses, their own parents, and their spouses' parents are relatively younger compared to respondents of previous studies which we presented in the Introduction.

7 Estimation Results

The estimation results of the benchmark model are shown in Tables 3. The coefficient of *bequest_husband* is positive and significant in the first column and that of *bequest_wife* is positive and marginally significant in the second column (its p-value is 12.4%). If we change to the amount of expected bequest wealth, the coefficient of *amt_bequest_husband* is positive and significant, whereas that of *bequest_amt_wife* is not significant. That is, in three results out of four, the more child couples expect to receive bequest or intervivo transfers from their parents, the more they are likely to live with the parents, which is consistent with Bernheim et al. [1]'s strategic bequest motive model, suggesting that

Next, we look at the significant coefficients other than that of bequest and intervivos transfer. First, respondents who are full-time workers are more likely to live with parents. Second, respondents whose parents are divorced or widowed are more likely to live with the parents. In addition, the motivations of coresidence with parents are different between wifes and husbands in some aspects: first, if husbands are eldest sons, they are less likely to live with wives' parents and more likely to live with husbands' parents. Second,

respondents who live in rural areas and whose ages are older are more likely to live with husbands' parents. Third, respondents whose parents are less educated are more likely to live with husbands' parents.

Let us look at Tables 4, where our model with wives' parents and husbands' parents are analyzed with probit model. In the case of the coresidence with husbands' parents (that is, $i = husband$), in column 2 the coefficient of *bequest_husband* is positive and significant and that of *bequest_wife* is negative and significant. Moreover, in column 4 the coefficient of *amt_bequest_husband* is positive and significant and *amt_bequest_wife* is negative and significant. In the case of the coresidence with wives' parents (that is, $i = wife$), in column 1 the coefficient of *bequest_wife* is positive and significant and that of *bequest_husband* is negative and significant, whereas in column 3 the coefficient of *amt_bequest_wife* is positive but not significant and *amt_bequest_husband* is negative and marginally significant (its p-value is 12.0%). That is, four out of three results are consistent with our expectations, suggesting that the more couples expect bequest or intervivo transfers from husbands' parents, the more they are likely to live with husbands' parents, and the less they are likely to live with wives parents and vice versa. Finally, note that the estimation results of coefficients of control variables are similar to those of results in Table 3.

Furthermore, let us look at Tables 5 and 6, where our model with wives' parents and husbands' parents are analyzed with multinomial logit model. Note that there is no respondents who live with both husbands' parents and wives' parents. With respect to coresidence with wives' parents, the coefficient of *bequest_wife* is positive and marginally and significant (its p-value is 13.1%) and that of *bequest_husband* is negative and significant, and with respect to coresidence with husbands' parents, the coefficient of *bequest_husband* is positive and significant and that of *bequest_wife* is negative and significant. The marginal effect of *bequest_wife* suggests that the couples who expect be-

quest or intervivos transfer from their wives' parents have the lower probability of living with their husbands' parents by 21 percentage points and higher probability of living with wives' parents by 5 percentage points. By the same token, the marginal effect of *bequest_husband* suggests that the couples that who expect bequest or intervivos transfer from their husbands' parents have a higher probability of living with their husbands' parents by 17 percentage points and have a lower probability of living with wives' parents and living with neither parents by 5 percentage points and 12 percentage points respectively. If we change the explanatory variables from *bequest_wife* and *bequest_husband* to *amt_bequest_wife* and *amt_bequest_husband*, estimation results in Table 5 are similar to those in Table 4. That is, these results suggest that the more couples expect bequest or intervivos transfer from one's own parents, the more they are likely to live with their own parents, and the less they are likely to live with the other parents, which is consistent with our theoretical model.

8 Conclusion

In this paper, we analyze the strategic bequest motives considering two pairs of parents– husband's parents and wife's parents using Japanese micro data: the 1993 and 1994 administrations of the "Japanese Panel Survey of Consumers," which were provided by the Institute for Research on Household Economics. We consider a strategic bequest model in which husband's parents and wife's parents influences the attention providing decisions of their child couple using their asset. We estimate this model with a probit model and multinomial logit model and find that whether the couples live with their parents or not are affected not only by the expectation of husbands' parents' bequest or intervivo transfers but also by the expectation of wives'. The more couples expect bequest or intervivo transfers from parents, the more they are likely to live with the parents, and

the less they are likely to live with the other parents.

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Table 1: Summary statistics

Variable (Continuous Var.)	**Mean**	**Std. Dev.**	**N=989**
Variable (Discrete Var.)	**Num.of Obs.**	**Percentage**	
coresidence_wife	88	8.65	
coresidence_husband	266	26.16	
bequest_wife	123	12.09	
bequest_husband	203	19.96	
wife_fulltime	180	17.70	
wife_parttime	265	26.06	
baseline is housewife	572	56.24	
c_kids	771	75.81	
c_eldestson	676	66.47	
c_urban	238	23.40	
c_city	583	57.33	
baseline is living in rural area	196	18.27	
pwife_single	136	13.37	
phusband_single	165	16.22	

Table 2: Summary statistics

Variable	**Mean**	**Std. Dev.**	**N**
c_age	30.872	3.699	1017
wife_income	0.824	1.282	1017
husband_income	4.73	2.189	1017
wife_educ	13.426	1.467	1017
husband_educ	13.777	2.129	1017
pwife_income	5.601	3.862	1017
phusband_income	5.523	3.956	1017
pwife_age	58.122	5.317	1017
phusband_age	60.986	6.517	1017
expected_bequest_wife_amount (zero included)	1.585	8.795	782
expected_bequest_husband_amount (zero included)	3.267	13.474	776
expected_bequest_wife_amount (zero excluded)	25.298	25.421	49
expected_bequest_husband_amount (zero excluded)	31.694	29.473	80

Table 3: Bernheim Model

	Coresidence with Parents of i			
i = ...	wife	husband	wife	husband
bequest_i	0.042+	0.153***		
	(0.033)	(0.061)		
amt_bequest_i			0.001	0.003*
			(0.80)	(0.001)
only_child_i	0.246***	-0.011	0.258***	-0.027
	(0.067)	(0.069)	(0.069)	(0.068)
three_sibling_i	-0.020	-0.056	-0.015	-0.070*
	(0.015)	(0.039)	(0.016)	(0.040)
four_sibling_i	-0.039	-0.118*	-0.041	-0.130*
	(0.038)	(0.062)	(0.015)	(0.062)
wife_fulltime	0.114***	0.113**	0.118***	0.140**
	(0.024)	(0.055)	(0.040)	(0.058)
wife_parttime	0.033	0.070	0.030	0.062
	(0.018)	(0.046)	(0.024)	(0.047)
c_kids	0.002	0.077*	0.001	0.073
	(0.002)	(0.042)	(0.019)	(0.043)
c_age	0.002	0.014*	0.002	0.017*
	(0.89)	(0.008)	(0.003)	(0.008)
c_income	-.003	-.009	-0.004	-0.016
	(0.003)	(0.008)	(0.003)	(0.009)
c_educ	-0.002	-0.001	-0.002	0.001
	(0.003)	(0.007)	(0.003)	(0.007)
c_eldestson	-0.093***	0.274***	-0.087***	0.274***
	(0.023)**	(0.034)	(0.023)	(0.035)
c_urban	-0.036	-0.207***	-0.031	-0.216***
	(0.015)	(0.042)	(0.017)	(0.043)
c_city	-0.007	-0.211***	0.001	-0.215***
	(0.018)	(0.045)	(0.019)	(0.047)
p_educ_i	0.001	-0.034***	0.001	-0.034***
	(0.004)	(0.011)	(0.004)	(0.011)
p_age_i	0.000	0.005	0.001	0.004
	(0.002)	(0.004)	(0.002)	(0.005)
p_single_i	0.079***	0.087*	0.087***	0.077
	(0.033)	(0.055)	(0.035)	(0.056)
Observations	707	707	680	680
Prob > Chi2	0.000	0.000	0.000	0.000
Pseudo R2	0.245	0.149	0.240	0.147

Robust z statistics in parentheses.
* significant at 10%; ** significant at 5%, *** significant at 1%. +: 12.4%

Table 4: Main Model

	Coresidence with Parents of i			
$i = ...$	wife	husband	wife	husband
bequest_wife	0.052**	-0.205***		
	(0.035)	(0.043)		
bequest_husband	-0.047***	0.183***		
	(0.010)	(0.065)		
amt_bequest_wife			0.000	-0.012**
			(0.000)	(0.005)
amt_bequest_husband			-0.002+	0.003**
			(0.004)	(0.001)
only_child_wife	0.233***	-0.132*	0.041***	-0.132*
	(0.067)	(0.065)	(0.075)	(0.067)
three_sibling_wife	-0.014	0.030	-0.001	0.026
	(0.012)	(0.041)	(0.002)	(0.041)
four_sibling_wife	-0.030	0.125*	-0.001	0.114
	(0.012)	(0.076)	(0.004)	(0.075)
only_child_husband	-0.022	-0.005	-0.001	-0.025
	(0.015)	(0.069)	(0.003)	(0.067)
three_sibling_husband	0.001	-0.065	-0.000	-0.078*
	(0.014)	(0.040)	(0.001)	(0.039)
four_sibling_husband	-0.004	-0.112	-0.000	-0.131*
	(0.014)	(0.060)	(0.001)	(0.059)
wife_fulltime	0.109*	0.120**	0.011***	0.149***
	(0.036)	(0.056)	(0.024)	(0.059)
wife_parttime	0.036	0.063	0.002*	0.057
	(0.023)	(0.047)	(0.006)	(0.048)
c_kids	-0.002	0.083*	0.000	0.075
	(0.002)	(0.041)	(0.001)	(0.043)
c_age	0.006	0.018**	0.000	0.019**
	(0.014)	(0.009)	(0.001)	(0.008)
c_income	0.003	-0.009	-0.000	-0.014
	(0.029)	(0.008)	(0.000)	(0.001)
c_educ	-0.000	0.004	-0.000	0.007
	(0.002)	(0.007)	(0.000)	(0.007)
c_eldestson	-0.081***	0.259***	-0.006***	0.261***
	(0.025)	(0.035)	(0.014)	(0.036)
c_urban	-0.027*	-0.199***	-0.001*	-0.206***
	(0.013)	(0.042)	(0.004)	(0.042)
c_city	0.001	-0.213***	0.000	-0.210***
	(0.015)	(0.046)	(0.001)	(0.047)
p_educ_wife	0.000	-0.004	0.000	-0.013
	(0.003)	(0.004)	(0.000)	(0.011)
p_educ_husband	-0.004	0.004	-0.000	-0.032***
	(0.004)	(0.004)	(0.000)	(0.011)
p_age_wife	0.000	-0.010	0.000	-0.004
	(0.001)	(0.011)	(0.000)	(0.004)
p_age_husband	-0.001	-0.032***	-0.000	0.004
	(0.001)	(0.011)	(0.000)	(0.004)
p_single_wife	0.066***	-0.046	0.005***	-0.034
	(0.030)	(0.047)	(0.013)	(0.049)
p_single_husband	0.025	0.079	0.002	0.063
	(0.024)	(0.054)	(0.006)	(0.054)
Observations	707	707	680	680
Prob > Chi2	0.000	0.000	0.000	0.000
Pseudo R2	0.288	0.178	0.288	0.175

Robust z statistics in parentheses.
* significant at 10%; ** significant at 5%, *** significant at 1%

Table 5: Multinomial Logit (Coefficients (Standard errors in Parentheses)

	Coresidence with Parents of i			
$i =$	wife	husband	wife	husband
bequest_wife	0.688+	-1.326***		
	(0.456)	(0.445)		
bequest_husband	-2.564**	0.696**		
	(1.140)	(0.295)		
amt_bequest_wife			0.016	-0.069**
			(0.022)	(0.035)
amt_bequest_husband			-0.764	0.014*
			(0.537)	(0.008)
only_child_wife	2.291***	-0.303	2.499***	-0.208
	(0.435)	(0.507)	(0.457)	(0.518)
three_sibling_wife	-0.322	0.109	-0.150	0.108
	(0.399)	(0.206)	(0.398)	(0.210)
four_sibling_wife	-1.467	0.526	-1.441	0.469
	(1.173)	(0.341)	(1.168)	(0.341)
only_child_husband	-0.738	-0.061	-0.860	-0.183
	(0.725)	(0.367)	(0.732)	(0.371)
three_sibling_husband	-0.197	-0.354*	-0.260	-0.435**
	(0.381)	(0.214)	(0.388)	(0.218)
four_sibling_husband	-0.221	-0.643	-0.228	-0.767*
	(0.640)	(0.401)	(0.660)	(0.434)
wife_fulltime	1.936***	0.832***	2.026***	1.009***
	(0.382)	(0.267)	(0.399)	(0.284)
wife_parttime	0.760*	0.355	0.751*	0.331
	(0.434)	(0.231)	(0.454)	(0.237)
c_kids	0.223	0.451*	0.294	0.391
	(0.392)	(0.239)	(0.407)	(0.243)
c_age	0.121	0.102**	0.135	0.106**
	(0.082)	(0.045)	(0.840)	(0.046)
c_income	-0.001	-0.001	-0.001	-0.001*
	(0.001)	(0.000)	(0.001)	(0.001)
c_educ	0.010	0.014	0.008	0.029
	(0.620)	(0.038)	(0.065)	(0.039)
c_eldestson	-1.145***	1.412***	-1.042***	1.432***
	(0.385)	(0.276)	(0.390)	(0.279)
c_urban	-1.312***	-1.329***	-1.322**	-1.368***
	(0.501)	(0.302)	(0.517)	(0.309)
c_city	-0.458	-1.155***	-0.402	-1.134***
	(0.405)	(0.235)	(0.420)	(0.241)
p_educ_wife	-0.021	-0.055	-0.031	-0.069
	(0.091)	(0.059)	(0.092)	(0.059)
p_educ_husband	-0.151	-0.171***	-0.105	-0.171***
	(0.108)	(0.057)	(0.113)	(0.059)
p_age_wife	-0.005	-0.023	0.007	-0.016
	(0.041)	(0.022)	(0.042)	(0.023)
p_age_husband	-0.032	0.020	-0.045	0.019
	(0.041)	(0.022)	(0.044)	(0.023)
p_single_wife	1.048***	-0.117	1.093***	-0.023
	(0.378)	(0.255)	(0.377)	(0.264)
p_single_husband	0.515	0.430*	0.655	0.354
	(0.499)	(0.257)	(0.507)	(0.260)
Constant	-1.722	-2.202	-2.538	-2.650
	(3.187)	(0.609)	(3.340)	(1.667)
Observations	707		680	
Prof > Chi2	0.000		0.000	
Pseudo R2	0.214		0.216	

Couple lives with both parents is the base outcome
* significant at 10%, **significant at 5%, *** significant at 1%, and +=13.1%

Table 6: Average of Marginal Effects (bequest)

	Change in Prob. of Coresidence with Parents of i		
$i =$	wife	husband	neither
bequest_wife	0.050	-0.208	0.159
bequest_husband	-0.048	0.171	-0.123
only_child_wife	0.225	-0.112	-0.112
four_sibling_wife	-0.033	0.127	-0.094
three_sibling_husband	-0.003	-0.068	0.072
four_sibling_husband	-0.002	-0.113	0.115
wife_fulltime	0.100	0.138	-0.238
wife_parttime	0.027	0.065	-0.091
c_kids†	0.003	0.085	-0.088
c_age†	0.003	0.020	-0.023
c_eldestson	-0.074	0.256	-0.183
c_urban	-0.028	-0.219	0.246
c_city	-0.003	-0.234	0.238
p_educ_husband†	-0.004	-0.033	0.037
p_single_wife	0.056	-0.039	-0.017
p_single_husband	0.015	0.086	-0.101

Only significant results in Table 4 is presented.
† is continous variable.
dy/dx is for discrete change of dummy variable from 0 to 1.

Table 7: Average of Marginal Effects (amt_bequest)

	Change in Prob. of Coresidence with Parents of i		
$i =$	wife	husband	neither
amt_bequest_wife (a million yen)†	0.000	-0.014	0.014
amt_bequest_husband (a million yen)†	-0.003	0.004	-0.001
only_child_wife	0.040	-0.052	0.012
three_sibling_husband	-0.001	-0.087	0.088
four_sibling_husband	0.000	-0.135	0.135
wife_fulltime	0.013	0.224	-0.237
wife_parttime	0.003	0.070	-0.073
c_kids	0.001	0.077	-0.078
c_age†	0.000	0.022	-0.022
c_eldestson	-0.008	0.256	-0.248
c_urban	-0.003	-0.236	0.239
c_city	0.000	-0.238	0.238
p_educ_husband†	0.000	-0.035	0.036
p_single_wife	0.007	-0.007	0.000
p_single_husband	0.003	0.076	-0.078

Only significant results in Table 4 is presented.
† is continous variable.
dy/dx is for discrete change of dummy variable from 0 to 1.