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Motives for Inter Vivos Transfers in Japan

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Abstract

Japanese parents' motives for inter vivos gifts to their children are investigated in this paper. Firstly, the frequency of gift receipts is examined to obtain information in order to make conjectures about the motives. For instance, if respondents receive gifts annually, this provides reason to think that the motive is to reduce inheritance taxes; conversely, if respondents receive gifts only rarely, other motives are likely to be more important. Since the results of this paper indicate that gift receipts are not frequent, it seems that few parents make gifts on a regular basis to save inheritance tax. Finally, an estimation of the effects of life events and recipients' characteristics on gift receipts and their amounts is given. The regression results suggest that the motive for gifts stems from a parental desire to ease children's liquidity constraints, since respondents tend to have received gifts when they were young, and when there was a major life event involving large expenditures.

Keywords: Inter vivos gifts; Altruism; Exchange motive; Liquidity constraints; Japan

JEL Classification Codes: D64, D14, D31

1. Introduction

What motivates people to make intergenerational asset transfers is an important aspect to consider when devising gift and inheritance taxation systems. In Japan, factors such as the flattening of the wage curve and the increase in non-regular employment are thought to have led to a decrease in younger people's incomes and to act as a drag on consumption. In addition, with parents living longer, children inherit at a later age, making it more difficult for the working generation to build up assets. Against this background, the Japanese government has, in recent years, increased the taxation on inheritances while at the same time introducing tax exemptions up to a certain amount for inter vivos gifts for education-related expenses and the like.

However, whether tax reductions help to promote inter vivos transfers from parents to their children and, if they do, whether this spurs consumption and asset formation by children depends on parents' motives for inter vivos transfers. For example, if parents make transfers to their children to relieve liquidity constraints and such transfers increase as a result of a reduction in taxes on inter vivos gifts, consumption may increase through the relieving of liquidity constraints, but such transfers are unlikely to lead to asset formation (investment). Moreover, if parents do not have a bequest motive (i.e., if they plan to use up all their wealth themselves), gifts are unlikely to increase much despite the reduction in associated taxes. On the other hand, if parents, based on altruistic motives, give gifts to children that are less well off (than their siblings), such gifts are likely to help

with children's consumption and asset formation.

Against this background, the aim of this study is to examine parental gift giving in Japan using microdata from the Japanese Panel Survey of Consumers by the Panel Data Research Center (PDRC) at Keio University in order to determine the motives underlying inter vivos transfers.¹ Specifically, the issue will be examined from the following three perspectives. First, the proportion of households receiving inter vivos transfers in any given year is examined. Second, the frequency with which households received such transfers over a 22-year period and at what age they typically did so are examined. Third and finally, regression analysis is used to examine the effect of life events on the receipt and the amounts of gifts as well as the characteristics of those that were particularly likely to receive inter vivos transfers.

The results can be summarized as follows. First, the frequency of receiving gifts is low, and about 67 percent of respondents received gifts only in three or fewer years during the 22-year period examined in this study. Second, survey respondents (or their spouses) received transfers when they were relatively young and the probability of receiving transfers gradually declined with age. Third, the regression results indicate that parents make inter vivos gifts mainly during life events involving large expenditures such as purchasing a home or marriage. In terms of individuals' characteristics, the regression results suggest that those in less stable employment and those with lower incomes tended to be more likely to receive transfers, and the amounts they received also tended to be larger. Fourth and finally, the regression results also indicate that, contrary to the exchange-related motive, past financial help from parents is not closely tied with the provision of any kind of informal care to their elderly parents.

The results obtained in this study provide clues regarding the motives underlying inter vivos transfers. Parents may make transfers to ease a child's liquidity constraints, since transfers tend to be made when children are relatively young or during a life event involving substantial expenditures. The finding that the probability of receiving transfers and the amounts received vary greatly depending on children's stability of employment or amount of income (in a particular year) suggests that parents also make transfers to help children make ends meet.

The contribution of this study is to use long-term panel data which allows accounting for time-invariant unobserved heterogeneity (i.e., fixed effects) in regression analyses and tracking of the receipt of inter vivos gifts by the same individual over a long observation period. Although Hamaaki (2020) has also analyzed the receipt of inter vivos gifts based on panel data (Japan Household Panel Survey by the PDRC), which is different from the data used in this study, the present study differs from this previous one in the following three aspects. First, while Hamaaki (2020) focused on the birth of children, change in marital status and the purchase of a home as life events, this study considers a much broader range of events, including deterioration of the recipient's physical and mental health, being involved in an accident or disaster, etc. Second, while Hamaaki (2020) did not take into account the difference in the receipt of gifts due to the difference in the recipient's sibling structure, this study considers this difference (in the analyses by OLS and random effect models) in order to elucidate the role of traditional family values in the distribution of intergenerational transfers. Third, while Hamaaki (2020) focused on the contemporary relationship between transfers from parents and child-provided assistance, this study conducts an analysis considering the possibility that the receipt of gifts and recipients' assistance to their parent(s) occur many years apart.

The remainder of this study is organized as follows. Section 2 provides an overview of the related literature, while Section 3 presents an outline of the data used for the analysis and provides

¹ Until 2017, the Japanese Panel Survey of Consumers was conducted by the Institute for Research on Household Economics, but in 2018 the data were transferred to the Panel Data Research Center at Keio University.

a definition of inter vivos gifts. Sections 4 and 5 then present the descriptive and regression analyses, respectively, using these variables and provides a discussion of the results. Finally, Section 6 concludes the paper.

2. Literature review

This section provides an overview of previous research examining the motives for intergenerational asset transfers, focusing not only on inter vivos transfers but also on bequests. Specifically, Section 2.1 presents studies regarding other countries (primarily the United States), for which there is much more research on this issue than on Japan, while Section 2.2 discusses research on Japan.

2.1. Studies on other countries

A large number of studies – many of them focusing on the United States – have examined the bequest motives of decedents by looking at the division of bequests. If bequests are divided unequally among children, it may be possible to elicit parents' bequest motives by analyzing the characteristics of children receiving bequests. Such studies have been conducted by, for example, Menchik (1980, 1988), Wilhelm (1996), McGarry (1999), Behrman and Rosenzweig (2004), Light and McGarry (2004), Norton and Van Houtven (2006), and Groneck (2017) for the United States, Arrondel et al. (1997) for France, and Ohlsson (2007) for Sweden. These studies show that, in these countries, bequests are divided equally among children in at least 60 percent and up to more than 90 percent of cases.

The fact that bequests tend to be divided equally among siblings even though they differ in terms of a variety of characteristics (such as their innate ability, economic situation, relationship with their parents, etc.) is difficult to reconcile with explanations that focus on parental altruism, the strategic bequest motive (where parents reward their children for looking after them in old age), or an evolutionary motive (where parents prefer their own children to adopted children). Therefore, the finding that inheritances are divided equally among children has been called the “equal division puzzle.”

On the other hand, since it has become clear that inter vivos transfers tend to be divided unequally ² (see, e.g., Dunn and Phillips, 1997; McGarry, 1999; and Hochguertel and Ohlsson, 2009), it may be possible to discover the motives for parental transfers by examining the characteristics of offspring that tend to receive more transfers. Previous studies on inter vivos transfers can be broadly divided into those examining the link with providing care for parents and those examining the link with children's economic situation.

Studies on the link between caregiving and transfers have produced conflicting results. While some found a positive link between transfer receipts and caregiving at the same point in time (Norton and Van Houtven, 2006; Norton et al., 2013; Nivakoski, 2019), others found no (or even a negative) relationship (e.g., McGarry and Schoeni, 1997; Jiménez-Martín and Prieto, 2015). Studies have also focused on the possibility that the receipt of transfers and caregiving do not necessarily occur at the same time. Henretta et al. (1997) and Ciani and Deiana (2018), for instance, examined the link between inter vivos transfers in the past and caregiving at the time of the survey and found a positive relationship between the two.

² The fact that inter vivos transfers are divided unequally also means that the equal division of bequests cannot be explained by the motive that parents want to treat their children equally. If parents wanted to treat their children equally, inter vivos gifts should also be divided equally among children.

Turning to the link between transfers and children's economic situation, a large number of studies have shown that offspring with lower income were more likely to receive inter vivos gifts and/or were likely to receive larger gifts (Dunn and Phillips, 1997; McGarry and Schoeni, 1995 and 1997; McGarry, 1999; Hochguertel and Ohlsson, 2009). Moreover, Olivera (2017) reports that greater income inequality among children made it significantly more likely that parents would make unequal inter vivos gifts to their children.

While many of these studies examine the link between children's income at the time of the survey and transfer receipts (within the year preceding the survey),³ McGarry (2016) examined the relationship between the two over the preceding 17 years, using nine waves of the Health and Retirement Study. She found that not only low income at the time of the survey but also adverse life events such as unemployment or a divorce increased the probability and size of transfer receipts. These results suggest that even over a long-term horizon parents do not try to equalize inter vivos gifts across children.

2.2. Studies on Japan

Studies in Japan examining bequest motives have relied mainly on questionnaire surveys, and to date there have been hardly any attempts to investigate the motives for intergenerational asset transfers based on the actual division of bequests and inter vivos gifts following the approach used in other countries. The notable exception is a study by Horioka (2002). Using the Survey on the Financial Asset Choice of Households (*Kakei ni okeru Kinyu Shisan Sentaku ni kan suru Chosa*) by the Postal Services Research Institute, Horioka (2002) examined how respondents and their siblings divided the assets inherited from their parents and found that only about 30 percent of them divided inheritances equally among themselves.⁴ This figure is in line with the results of various surveys conducted by Japanese think tanks and other research institutes indicating that the share in Japan is only around 30 percent. The findings thus suggest that the share of bequests that are divided equally among children is considerably lower in Japan than in other countries, where, as mentioned above, bequests are divided equally among children in at least about 60 percent of cases.

The only study examining bequest motives based on data showing who received bequests and how much they received is that by Hamaaki et al. (2019). The authors examined how the different pattern observed in Japan can be explained. The starting point of the discussion is the assumption that, for a variety of reasons, parents would like to divide their assets unequally but do not want their children to know this. Asset transfers can be divided into those that are difficult for siblings to observe and those that are easy to observe. Under these circumstances, parents are likely to choose transfers that are difficult to observe for the unequal division of assets and divide assets equally when transfers are easy to observe.

Since in Japan there are few ways to make (a large amount[s] of) intergenerational asset transfers prior to death, intergenerational asset transfers are mainly carried out through inheritances. This means that if parents want to divide their assets unequally, this is more likely to be reflected in

³ That said, of the studies mentioned in the preceding paragraph, Hochguertel and Ohlsson (2009) examine the link between inter vivos transfers and children's income based on estimated permanent income, not income at the time of the survey.

⁴ Meanwhile, in a later study, Horioka (2014) attempted to reveal the bequest motives of the Japanese using a survey asking respondents about "the strength of bequest motives," "the stated bequest motives," and "bequest division plans," although he did not use data on the actual division of bequests. As for the question asking respondents how they were planning to divide their assets among their children, 72.7 percent of respondents answered that they were planning to divide their assets equally among their children. This share is more than twice as large as that reported in Horioka (2002), suggesting that decedents' intentions and actual bequest divisions may differ substantially.

the division of bequests than in the United States.⁵

Examining bequest motives using Japanese household microdata on the division of bequests, Hamaaki et al. (2019) found that the unequal division of bequests in Japan was consistent with traditional Japanese family values, according to which the heir to the family line receives a larger inheritance share, as well as the strategic bequest motive, while they did not find any evidence for altruistic motives, where parents bequeath more to economically disadvantaged children. However, this result does not necessarily mean that parents are not altruistic, since intergenerational asset transfers based on altruistic motives may be carried out in the form of inter vivos gifts. Since in the case of inter vivos gifts, unlike in the case of bequests, parents can freely choose the timing of transfers, parents may make such transfers (for example, in the form of providing support with living expenses) when a child is economically distressed.

Studies on the motives for inter vivos gifts in Japan initially focused on gifts to help with purchasing a home (Idee, 2006; Zhou, 2007; Yukutake et al., 2015). Idee (2006), for example, showed that those that received such a gift were more likely to be able to obtain a housing loan from financial institutions (in other words, their liquidity constraints were eased). Meanwhile, Zhou (2007) found when first-time home buyers struggled with the down payment for a home (i.e., were liquidity constrained), financial help from parents meant that children would purchase a home at a younger age and/or would buy a more expensive home. Finally, Yukutake et al. (2015) similarly found that, when restricting the analysis to home buyers under the age of 35, those receiving help from their parents in the form of a gift tended to buy significantly more expensive homes. These findings suggest that receiving an inter vivos gift from parents to help with home-buying eased children's liquidity constraints.

Idee's (2006) study further suggests that in cases where parents started to live with a child after the child's house had been rebuilt, extended, or structurally altered, such children were significantly more likely to receive gifts than children where this was not the case. Meanwhile, Zhou (2007) showed that the higher the frequency of contact with parents, the higher was the probability that children received gifts and the larger was the gift amount received. Both studies therefore conclude that parents giving gifts to their children to help with purchasing a home provides evidence for the exchange motive. On the other hand, Yukutake et al. (2015) showed that parents tend to give gifts based on the exchange motive in the case of children aged 35 or above, but no such tendency was found for children below that age.

The studies considered thus far focus on gifts to help with home purchases. Studies that examine the underlying motives for a much broader range of inter vivos gifts using Japanese data are Zhou (2006) and two recent studies by the author (Hamaaki 2018 and 2020). Zhou (2006) empirically examines the impact of children's and parents' characteristics on the probability of two types of inter vivos gifts – gifts for buying a home and gifts to help with living expenses – to find that the higher the child's income, the smaller is the probability of receiving either of the two types of gifts. Based on this finding, she concludes that parents give gifts based on the altruistic motive. Hamaaki (2018) examines the link between inter vivos transfers, on the one hand, and co-resident parents or caregiving, on the other, and shows that transfer receipts were positively correlated with co-resident

⁵ In the United States, as will substitutes and inter vivos gifts such as the transfer of trust assets and life insurance claims provide tax advantages over traditional bequests, there are incentives to conduct intergenerational asset transfers through these means to the greatest extent possible. Since will substitutes and gifts can be regarded as unobservable to others, asset transfers through these means are more likely to be unequal among children. On the other hand, many of the previous studies on the United States have used data on traditional bequests and have examined what kind of bequest division is instructed in wills. Since such bequests are observable to others, it is not surprising that the bequests through this route are divided more equally.

parents and caregiving. Further, Hamaaki (2020) investigates the determinants of the receipt of inter vivos gifts in order to identify the parental motives for intergenerational transfers. In this paper, it is shown that parents tend to make inter vivos gifts when their children face major expenditures such as when buying a home, getting married, or raising children. Overall, the results of Hamaaki (2018 and 2020) indicate that parents transfer their assets while they are alive in order to receive care from their children and/or to ease liquidity constraints of their children.

3. Data sources

This section starts by providing an outline of the Japanese Panel Survey of Consumers, which is used for the analysis in this study. It then provides definitions of the variables related to inter vivos transfer receipts by survey respondents (or their spouses), and finally presents descriptive statistics of the data.

3.1. *The Japanese Panel Survey of Consumers*

The Japanese Panel Survey of Consumers (JPSC) is a survey of women and their families. It is a panel survey that tracks the consumption, saving, employment situation, family circumstances, etc., of the same households once a year in October. Survey participants are chosen based on a nationwide two-stage stratified random sampling process. When it began in 1993, the survey covered 1,500 women aged 24-34 from across Japan. To make up for attrition over the years, several hundred survey participants aged 24 to 29 were added in each of the fifth year of the survey (1997), the 11th year (in 2003), the 16th year (in 2008), and the 21st year (in 2013). For the analysis in this study, data from 1993 to 2015 are used. The advantage of this dataset for analyzing inter vivos gifts is that each year the survey in principle asked respondents about the receipt of inter vivos gifts within the preceding year. This means that the information on inter vivos gifts should be much more accurate than in the case of surveys where respondents are asked to remember receipts in the past.

3.2. *Variables representing the receipt of inter vivos gifts*

The JPSC contains numerous questions concerning the receipt of inter vivos gifts from respondents' and their spouses' parents. For instance, regarding assistance from parents, such as for living expenses, the survey has asked respondents since the initial survey whether at the time of the survey their parents paid any of the following (multiple answers allowed): Housing loan repayments, rent, living expenses, and/or expenses for children (educational expenses, clothing, other costs). These will be summarily referred to as "assistance with living expenses" hereafter. Moreover, the survey asks whether respondents received assistance from parents when buying a home and/or to pay for wedding expenses.^{6,7} In addition, the survey provides information on whether respondents received assistance with the costs of giving birth and assistance with medical expenses if they had been ill.

Since the 11th survey, the survey also contains questions asking whether respondents had

⁶ Wedding expenses include expenses for engagement souvenirs; engagement-related expenses; the wedding ceremony and reception; a thank-you gift to the matchmaker; the honeymoon; furniture, electrical goods, kitchen utensils, etc.; a kimono, clothes, ornaments; a residence (if newly rented); and others.

⁷ The questions asking respondents whether they received assistance from parents when getting married has been asked of respondents that got married in the preceding year in the surveys from 1995 onward. Moreover, those who were married at the start of the survey in 1993 and those who got married between 1993 and 1994 were asked retrospectively in the 1994 survey. In addition, those who were added to the survey in 1997 were asked about the year in which they got married and about their wedding expenses. However, since those who were added in later surveys and were married at the time were not asked about wedding expenses and who paid for them, these observations are not used in the analysis.

received financial or real assets as inter vivos gifts from their parents in the preceding year and, if they had, what the value of those assets were at the time of the survey. However, it seems that respondents believe that this question does not include assistance from parents, such as help with living expenses as inter vivos gifts, and thus the number of respondents who replied to this question that they had received inter vivos gifts is limited to only 20 to 30 respondents a year. I therefore do not use these questions in the analysis of this paper.

To consider whether the results of this study are comparable to those obtained in previous studies, it is useful to take a brief look at the definition of inter vivos gifts in the Health and Retirement Study (HRS) used in many studies focusing on the United States. First of all, it should be noted that the HRS does not ask whether respondents received inter vivos gifts from their parents; instead, respondent couples were asked if they had given financial assistance of US\$500 or more to their children in the past 12 months. Specifically, financial assistance consists of giving cash and covering expenses such as medical expenses, insurance fees, educational expenses, helping with the deposit when buying a home, and rent. For example, McGarry (2016), using such data, calculates the share of (respondents') children aged 18 or above and living separately from their parents that received financial assistance (inter vivos gifts). Thus, since inter vivos gifts (financial assistance) in the HRS include various kinds of financial exchange, the variables in this study are constructed in a similar manner taking the various kinds of inter vivos gifts mentioned above into account to make them comparable with the inter vivos gifts (financial assistance) in the HRS.

3.3. Descriptive statistics

Table 1 presents descriptive statistics for the years 1995, 2000, 2005, 2010 and 2015 of respondents included in the initial survey in 1993. The average age in 1995 was 30.9 years, and since then it has risen by about five years every five years. Turning to respondents' educational attainment, 83 percent are high school graduates or have a technical or junior college degree, while only about 12 percent have a university degree.⁸ The share of married respondents rose from 75 to 82 percent from 1995 to 2000, but then declined. This may be due to married participants dropping out of the survey over time as they were too busy with child-rearing. The average number of children is about two. Household income for married households is the respondent's annual income, the spouse's annual income, or the sum of the two. This value has increased with the rise in respondents' age from around ¥6.4 million in 1995 to about ¥8 million in 2010, while it declines slightly during the period between 2010 and 2015. For unmarried respondents, household income is the annual income of respondents, and the average ranges from around ¥2.9 million to around ¥3.3 million during the investigation period, with no clear trend. The number of observations decreased by more than 50 percent from 1995 to 2015 due to attrition; however, looking at changes in respondents' age and educational attainment, no particular bias suggesting that those of a specific age or with a particular level of educational attainment were more likely to drop out can be observed.

4. Descriptive analysis

This section presents the results of the descriptive analysis. Specifically, Section 4.1 shows patterns of inter vivos gift receipts from parents for the years 1995, 2000, 2005, 2010, and 2015. Section 4.2 then shows findings regarding the frequency and timing of inter vivos gift receipts.

⁸ This reflects the fact that the respondents are women, who, in Japan, are less likely than men to obtain a university degree.

4.1. Patterns of inter vivos gift receipts

This section examines basic patterns in inter vivos gift receipts. As mentioned in Section 3, the JPSC regularly adds participants to the survey; however, in order to avoid discontinuous changes in the age composition of the sample, the sample in this section is limited to participants of the initial survey to look at patterns in inter vivos gift receipts over the years. Further, I do not use respondents those who have already lost both parents for the analysis of this section (except for Table 1 and Figure 1).

Table 2 shows the share of households that received inter vivos gifts in 1995, 2000, 2005, 2010, and 2015 as well as the average amount received. Part A of the table shows the share of households that received financial assistance from parents, such as help with living expenses. The results indicate that the share of respondents that received such assistance from their parents is around 7 to 11 percent, while the share of spouses that received assistance from their parents is around 6 to 16 percent. Finally, the proportion of households that received assistance from at least one set of parents is 14 to 22 percent. The pattern that emerges is that a larger share of households receive assistance from the spouse's parents than from the respondent's parents and that the share of households receiving inter vivos gifts decreases over time (as respondents' age increases). The latter pattern probably reflects the fact that younger households are more likely to be liquidity constrained and therefore may need more assistance from their parents.

Next, part B of the table shows the share of respondents reporting that they (or their spouse) received financial assistance from parents when buying a home among all respondents that bought a home in the preceding year. The figures indicate that between 6 and 19 percent of respondents that bought a home received help from their own parents, while between 9 and 23 percent of spouses received help with purchasing a home from their spouses' parents. Finally, part C of the table shows the share of respondents reporting that they (or their spouse) received assistance with wedding

Table 1. Descriptive statistics

Survey year	1995	2000	2005	2010	2015
	Mean	Mean	Mean	Mean	Mean
Age	30.9 (3.2)	35.9 (3.2)	41.0 (3.2)	45.9 (3.2)	50.9 (3.2)
Educational attainment					
Junior high school	0.051	0.049	0.050	0.051	0.047
High school, junior college, technical college	0.829	0.836	0.836	0.829	0.833
University	0.120	0.115	0.114	0.120	0.120
Married	0.745	0.820	0.805	0.779	0.746
Number of children (>0)	1.9 (0.7)	2.1 (0.8)	2.2 (0.8)	2.1 (0.8)	2.1 (0.8)
Total annual household income (million yen, married)	6.4 (4.0)	6.9 (3.3)	7.8 (3.9)	8.0 (3.8)	7.6 (3.6)
Respondent's total annual income (million yen, unmarried)	2.9 (1.4)	3.2 (2.2)	3.3 (4.0)	3.2 (2.0)	3.1 (3.0)
No. of observations	1342	1102	904	778	676
No. of observations (for total annual household income of married respondents)	791	849	682	560	476
No. of observations (for total annual income of unmarried respondents)	339	194	174	169	171

Notes: Standard deviations are shown in parentheses. In order to avoid discontinuous changes in the average age of respondents due to the addition of new survey participants affecting the receipt of inter vivos gifts, the sample is limited to respondents taking part from the first survey onward. Total annual household income and respondents' total annual income are converted to 2015 prices.

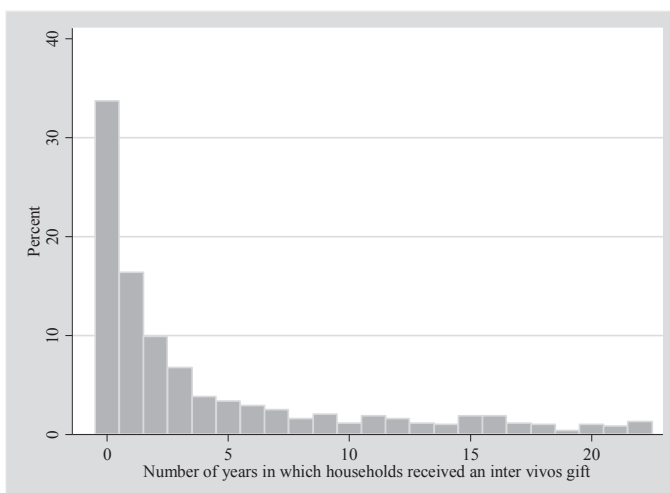


Figure 1. Histogram of the frequency of inter vivos gift receipts

Table 2. Share of households that received inter vivos gifts and amounts received

Survey year	1995	2000	2005	2010	2015
A. Monthly assistance with living expenses and the like					
From respondent's parents					
Share	0.084	0.073	0.108	0.089	0.083
Amount (>0, 1,000 yen)	N.A.	48.5	46.1	49.1	48.9
From spouse's parents					
Share	0.166	0.122	0.117	0.081	0.060
Amount (>0, 1,000 yen)	N.A.	59.4	53.3	53.2	50.7
From respondent's or spouse's parents					
Share	0.224	0.185	0.208	0.160	0.135
Amount (>0, 1,000 yen)	N.A.	62.9	57.6	56.2	57.7
B. Received help with the purchase of a home (among those who purchased a home in the preceding year)					
From respondent's parents					
Share	0.179	0.154	0.170	0.189	0.061
From spouse's parents					
Share	0.207	0.120	0.093	0.231	0.114
C. Received help with wedding expenses from respondent's or spouse's parents (among those who married in the preceding year)					
From respondent's parents					
Share	0.706	0.412	0.571	0.420	0.480
Amount (>0, 1,000 yen)	1638.7	544.9	628.3	682.9	607.8
From spouse's parents					
Share	0.451	0.324	0.500	0.360	0.300
Amount (>0, 1,000 yen)	678.3	340.8	626.2	375.2	411.7

Notes: In parts A and B, the sample is restricted to respondents that participated from the first survey onward in order to avoid discontinuous changes in the average age of respondents due to the addition of new survey participants affecting the receipt of inter vivos gifts. In all parts, the amounts of inter vivos gifts are converted to 2015 prices. N.A. indicates that data were not available.

expenses among those that got married in the preceding year. The table also shows the average amounts received. The share of respondents that received assistance with their wedding expenses varies quite substantially over the years, ranging from around 30 to 71 percent. These shares,

Table 3. Share of households without co-resident parents that received inter vivos gifts and amounts received

Survey year	1995	2000	2005	2010	2015
From respondent's parents					
Share	0.083	0.048	0.050	0.044	0.033
Amount (>0, 1,000 yen)	N.A.	38.3	36.7	28.4	30.4
From spouse's parents					
Share	0.084	0.035	0.032	0.025	0.010
Amount (>0, 1,000 yen)	N.A.	51.4	37.0	55.3	64.3
From respondent's or spouse's parents					
Share	0.133	0.077	0.071	0.060	0.042
Amount (>0, 1,000 yen)	N.A.	59.2	39.5	61.0	64.3

Notes: The sample is restricted to respondents that participated from the first survey onward in order to avoid discontinuous changes in the average age of respondents due to the addition of new survey participants affecting the receipt of inter vivos gifts. In all parts, the amount of inter vivos gifts is converted to 2015 prices.

however, are substantially larger than for those who received assistance with buying a home. While gifts (financial assistance) for the purchase of a home beyond a certain threshold are subject to gift tax, gifts to cover wedding expenses are generally exempt from tax, which may explain this difference.

If a respondent's household includes a(n elderly) parent (or parents), it is possible that the parent(s) give(s) money to the child (i.e., the respondent or her spouse) to pay for their own living expenses (or rent). In this case, such transactions may look like inter vivos gifts in the data, but it cannot really be said that these are inter vivos gifts. Therefore, in order to exclude exchanges of money between parents and children resulting from cohabitation, it is useful to examine inter vivos gift receipts by restricting the sample to households where parents do not cohabit with the respondent. Households without co-resident parents are households that in the JPSC are not classified as "co-resident households" or "quasi co-resident households."⁹ Meanwhile, households where all parents have died are not included in households that have no co-resident parents.

Table 3 shows gift receipts for households without co-resident parents. The share of households that received assistance with living expenses in the preceding year is less than half of that in Table 2, except for the figure of monthly assistance from respondents' parents in 1995, although the average amounts are not much smaller. The figures suggest that in households where parents, especially the spouse's parents, live with their children, exchange of money is quite common, and what is picked up as "assistance with living expenses" in the survey often consists of parents paying their share of household expenditures.

Thus far, the analysis has focused on the share of households receiving a particular kind of inter vivos gift and the average amount. Next, let us examine the share of households that received any inter vivos gift in the preceding year, regardless of the kind of gift. To do so, gifts taken into account also include assistance with expenses related to childbirth and assistance with medical treatment expenses for family members other than the respondent, which were not considered in Tables 2 and 3. Part A of Table 4 shows the share of households that received inter vivos gifts in the preceding year for all households, including households with co-resident parents. As also already seen in Table

⁹ "Co-resident households" are households in which parents live in the same building and household finances are shared, while "quasi co-resident households" are households in which parents live in the same building but household finances are separate or in which parents live in a different building on the same plot of land.

Table 4. Share of households that received inter vivos gifts (all households vs. households without co-resident parents)

Survey year	1995	2000	2005	2010	2015
A. Received inter vivos gifts of any kind in the preceding year (all households)	0.256	0.194	0.218	0.176	0.139
B. Received inter vivos gifts of any kind in the preceding year (households without co-resident parents)	0.179	0.087	0.092	0.080	0.053

Note: The sample is restricted to respondents that participated from the first survey onward in order to avoid discontinuous changes in the average age of respondents due to the addition of new survey participants affecting the receipt of inter vivos gifts.

2, the share of households receiving inter vivos gifts in some form tends to decrease over time (as respondents' age increases) from 25.6 percent to 13.9 percent for all households.

Finally, to compare inter vivos gifts in Japan with those in the United States, part B of Table 4 shows the share of households that received gifts focusing only on households without co-resident parents. This is more or less comparable with the situation examined by McGarry (2016), who analyzed gift receipts by children over the age of 18 who live separately from their parents. Specifically, the mean age (30.9 years old) of the recipients of her survey (the 1992 HRS survey) is exactly the same as the 1995 JPSC survey. The results in part B of Table 4 indicate that although the share in 1995 is considerably large, from 2000 onward the share of respondents reporting that they (or their spouse) received inter vivos gifts from their parents in the preceding year make up slightly less than 10 percent. McGarry (2016) found that about 12 to 15 percent of children received gifts from their parents in the preceding year, regardless of the year surveyed. The values obtained in this study are somewhat larger than these values in McGarry (2016) only when recipients are relatively young, decrease with recipients' age, and eventually become lower than the values in the U.S.¹⁰

4.2. The frequency and timing of inter vivos gift receipts

This section examines the frequency and timing of inter vivos gift receipts. Discovering whether gifts are given more or less annually or, alternatively, are given only rarely can potentially provide important information from which we may make conjectures about the motives underlying such gifts. For instance, if respondents receive gifts more or less annually, this provides reason to think that the motive is to reduce inheritance taxes; conversely, if respondents receive gifts only rarely, other motives (exchange or altruistic motives, including the desire to ease liquidity constraints) are more likely. For the analysis here, inter vivos gifts include all kinds of the abovementioned assistance from parents. Since questions about some types of assistance have been included in the survey only since 1994, the analysis here regarding gift receipts focuses on the 22-year period from 1994 to 2015.

To examine the frequency of inter vivos transfers, Figure 1 shows a histogram of the number of years in which respondents (or their spouses) received a gift over the 22-year period. Of the 1,500 respondents included in the initial survey, the 676 respondents that did not drop out during the observation period (1993 to 2015) were used for this analysis. Those who never received a gift from their parents during the 22-year period make up the largest share (33.7 percent), while those who received a gift in fewer than three of the 22 years (including those that never received a gift) total

¹⁰ Since HRS only looks at the inter vivos gifts (financial assistance) of US\$500 or more, the share of children who received gifts from their parents in the preceding year should become higher if it includes gifts of smaller amounts. In other words, the actual difference in the share between Japan and the U.S. may be more substantial.

Table 5. Share of households that received gifts in the two preceding years
(a). All households

Receipt in year t	Receipt in year $t-1$		
	Did not receive	Received	Total
Did not receive	23,575 (71.3%)	2,562 (7.7%)	26,137 (79.1%)
Received	2,230 (6.7%)	4,692 (14.2%)	6,922 (20.9%)
Total	25,805 (78.1%)	7,254 (21.9%)	33,059 (100.0%)

(b). Households without co-resident parents

Receipt in year t	Receipt in year $t-1$		
	Did not receive	Received	Total
Did not receive	15,244 (82.7%)	1,253 (6.8%)	16,497 (89.5%)
Received	841 (4.6%)	1,092 (5.9%)	1,933 (10.5%)
Total	16,085 (87.3%)	2,345 (12.7%)	18,430 (100.0%)

66.9 percent. Since it is possible that some of the “gifts” received may include money received from parents toward their own living expenses in the case of co-resident parents, the frequency of actual gift receipts from parents is probably even lower if these monetary exchanges are excluded. Therefore, it could be said that, for many people, the receipt of inter vivos gifts from their parents is a very rare occurrence.

Next, Table 5 shows the number of observations and the share of respondents (including their spouses) that received gifts for two years in a row, with panel (a) presenting the results for all respondents and panel (b) the results for respondents without co-resident parents. Table 5(a) for all respondents suggests that the share that received gifts in two consecutive years is only 14.2 percent. If respondents with co-resident parents in years t and $t-1$ are excluded – i.e., hence focusing on respondents without co-resident parents only –, the share of respondents (including their spouses) that received gifts for two years in a row decreases to 5.9 percent. Since these results suggest that gift receipts (especially among households without a co-resident parent) are rare, it seems that there are few parents that make gifts on a more or less regular basis to save inheritance tax.

Next, to look at the timing of gifts from parents to children, the age of respondents at the time they (or their spouse) received a gift from their parents is examined. If a clear pattern emerges, this might help to narrow down parents’ motives for giving gifts. For instance, in the case of the exchange motive, where parents give gifts to ensure that children take care of them in their old age, they should wait as long as possible in order to elicit the greatest effort – otherwise, children might not look after their parents in old age if gifts are given too early.¹¹ On the other hand, if parents are altruistic and give gifts for the purpose of easing income disparities among their children, one would

¹¹ In fact, in the case of intergenerational asset transfers based on the strategic motive, it is generally thought that the optimal strategy is to make such transfers through a bequest to maximize children’s efforts. However, it could also make sense for parents to partly “pay” for such efforts in advance, so that children believe that they will receive assets in return for looking after their parents in old age (see, e.g., Norton and Van Houtven, 2006, p.161).

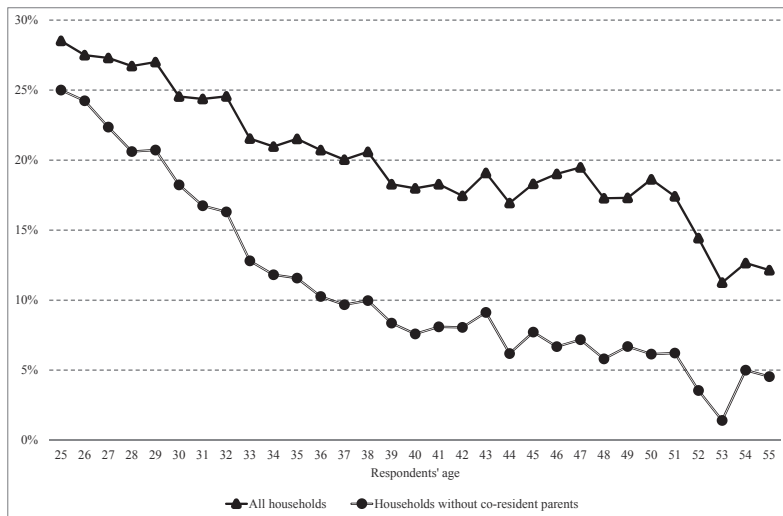


Figure 2. Share of households that received an inter vivos gift in the preceding year by age

expect that gifts are not given when offspring are relatively young but rather when they are older and disparities have become clear. Meanwhile, if the purpose of gifts is to relieve liquidity constraints, one would expect that recipients would be younger people with relatively low incomes that make it difficult to pay for wedding expenses or buy a home, and so on.

Thus, to examine the pattern in recipients' age, Figure 2 shows the percentage of households (respondents or their spouses) that received a gift (vertical axis) by respondents' age group (horizontal axis). The figure shows the percentage calculated for all households and for households without co-resident parents. In both cases, the share is relatively high in young households and then decreases with age until households in which respondents were in their 40s, when the share starts to move sideways. This pattern likely reflects the idea that the share of households that receive gifts to help with wedding expenses and/or buying a home decreases with age until around the age of 40, while the share of households receiving gifts for other purposes remains more or less unchanged.¹² The results therefore suggest that parents give gifts mainly for the purpose of easing liquidity constraints faced by children who need to pay wedding expenses or buy a home. When parents do so, they can avoid taxes if the gifts do not exceed a certain threshold and/or gifts are for specific purposes, such as for wedding expenses, educational expenses, and so on. This kind of tax advantage helps parents make intergenerational transfers that involve smaller tax payments while their children are still young.

¹² To examine this issue in more detail, the author examined separately the share of households by age group that received gifts for each of the three types of gifts shown in Table 2 – that is, gifts to help with buying a home, to help with wedding expenses, and to help with living expenses –. When doing so, gifts for help with living expenses were divided into help with housing loan repayments, rent, living expenses, expenses for children, and others, and the share by age group for each of these was calculated. The results show that the share of households that received gifts to help with housing loan repayments and rent decreased slightly among those in their 40s, the share that received gifts to help with buying a home and help with expenses for children remained more or less unchanged, and the share that received help with wedding expenses and gifts to help with other items (i.e., housing loan repayments, rent, living expenses, and others) decreased. Taken together, the patterns for the different gift categories result in the flattening of the share, seen in the figure, for households in which respondents are in their 40s.

5. Regression analysis

This section presents the results of the regression analysis. Specifically, Section 5.1 describes the econometric approach used to examine the determinants of the receipt of inter vivos gifts. Section 5.2 and 5.3 explain the results of the regression analysis, which attempts to elucidate the parental motive for inter vivos gifts. Section 5.4 examines whether parental transfers for home purchase are associated with the child(ren)'s subsequent provision of in-kind and/or financial help to their elderly parents. The purpose of this analysis is to examine whether these transfers are caused, at least partly, by a parental exchange motive.

5.1. Econometric approach

This paper examines the link between life events involving major expenditures and respondents' characteristics, on the one hand, and the probability of receiving inter vivos gifts and the amount of received, on the other, using regression analysis. To do so, I estimate the following equation:

$$Gifts_{it} = \alpha + LifeEvents'_{it}\beta + X'_{it}\gamma + year_t + u_i \quad (1)$$

where i indicates a respondent couple or a respondent (or her husband). $Gifts_{it}$ indicates the probability of receiving gifts or the size of transfer receipts. $LifeEvents_{it}$ and X_{it} represents a vector of dummies for life events in the preceding year and that of respondent (or respondent couple) i 's characteristics, respectively. u_i is an error term that is assumed to be independently and normally distributed. I analyze the determinants of the probability of receiving gifts by specifying the equation (1) as a Linear Probability Model. On the other hand, when the dependent variable is the size of transfer receipts, which is bounded below by 0, I estimate the equation with Tobit and other panel regression models (i.e., pooled OLS and random and fixed effect models). The sample is limited to participants whose parent(s) is/are alive at the survey date in the regression analyses.

Possible answers in the survey regarding life events in the preceding year include the following: gave birth, had a serious illness requiring surgery or long-term care, had mental problems such as depression, had "consumer trouble" (falling victim to loan- and credit card-related scams, phishing attacks, etc.), was involved in an accident or disaster, nothing out of the ordinary happened, got married, and bought a home.¹³ A dummy is constructed for each of these and used as an explanatory variable. It should be noted that "bought a home" implies that the home ownership status changed from rented housing to owner-occupied housing, so this variable does not include respondents that already owned a home and bought a new one.

Variables for respondents' characteristics include their age, sibling structure, educational attainment, marital status, number of children, a dummy variable for households without co-resident parents, dummies for their employment status, household income (in logarithms), and household financial assets.¹⁴ The coefficient on respondents' age is expected to be negative if the older respondents become the less likely it is that they will receive gifts from parent(s) as seen in Figure 2.

¹³ The JPSC contains a question that asks, "Have you experienced the following events in the preceding year?" There are about 15 possible answers of this question, including "had a serious illness requiring surgery or long-term care," "had mental problems such as depression," "had consumer trouble," "was involved in an accident or disaster," etc. The choice of "nothing out of the ordinary happened" is also included in the possible answers to this question. On the other hand, the dummies for "gave birth," "got married" and "bought a home" are constructed from other questions in the JPSC.

¹⁴ Because a large number of households had zero household financial assets, the level is used rather than the log.

To represent the sibling structure, I use the following three variables: (1) a dummy variable that takes one if the respondent (her spouse) is not an only child, (2) a dummy variable that takes one if the respondent (or her spouse) has a sibling/siblings of the other sex, and (3) a dummy variable that takes one if the respondent (or her spouse) is the first-born daughter (or son). To gauge the gender effect relative to respondents with siblings of the same sex only, I intersect the first dummy variable with the second one (referred to as “gender dummy” below). Since all the respondents (her spouses) in our survey are female (male), the coefficient of this intersected variable can be interpreted as the gender effect. Similarly, the intersection term of the first dummy variable and the third one also indicates the first-born daughter (son) effect. The coefficient on the gender dummy is expected to be negative if women are treated unfavorably. The coefficient on the first-born dummy (intersected with the dummy for having one or more siblings) is also expected to be positive if, for some reason, gifts are distributed disproportionately to the first-born daughter (son).

The coefficient on the dummies for educational attainment is expected to be negative if educational investment is a sort of prepayment of inter vivos gifts and they are mutually substitutable. On the other hand, if the educational attainment represents the amount of a respondent’s permanent income and parents are transferring their wealth altruistically, I also expect the coefficient on those dummies to be negative, since those who are better educated are likely to earn more over their lifetimes.

To consider the economic needs related to household structure, I add the dummy variable for marital status, number of children, and the dummy variable for households without co-resident parents. If parents want their family line to be maintained, they would transfer more wealth to the child(ren) who is/are married and have many children than those who are single and/or do not have any children. On the other hand, altruistic parents would try to ease liquidity constraints faced by those with many children to help with child-rearing and education expenses. Thus, I expect the coefficient on the marital status dummy and the number of children to be positive. I add the dummy variable for households without co-resident parents to control for a potential difference in the probability of receiving gifts and the amounts received between households with and without co-resident parents, as shown in Figure 2.

I also control for the respondents’ financial strength in order to elucidate the role of parental altruism. If parental altruism matters for an allocation of transfers among offspring, gifts would be disproportionately distributed toward economically disadvantaged children. To represent respondents’ employment status, a dummy for regular employees and one for non-regular employees are used, meaning that those not in employment are the reference group. Household income is respondents’ annual income or the combined income of the respondent and her husband if the respondent is married, excluding other income (remittances and spending money from parents, child support, etc.). The reason for excluding other income is that it may include inter vivos gifts from parents. Household financial assets are financial assets owned by respondents, spouses, and their children, and do not include financial assets owned by co-resident parents.

5.2. Determinants of the probability of receiving gifts

This subsection presents regression analyses to examine the link between life events and gift receipts as well as the kind of respondent characteristics that make the receipt of inter vivos gifts more likely. I start with a specification whose dependent variable is the dummy variable that indicates whether a respondent (or her spouse) received an inter vivos gift in the preceding year (i.e., the variable whose mean value is shown in Table 4). The variables related to sibling structure are not present in this specification, since the dependent variable does not focus only on a gift from the respondent’s parents or a gift from her husband’s parents, thus making it difficult to estimate the effect of the

Table 6. Determinants of inter vivos gift receipts

Dependent variable	Dummy for receipt of inter vivos gift in the preceding year		
	(a)	(b)	(c)
Estimation method	OLS	Random effect	Fixed effect
Independent variables	Coeff.	Coeff.	Coeff.
Life event in the preceding year			
Gave birth	0.034 *** (0.011)	0.034 *** (0.010)	0.036 *** (0.010)
Had a serious illness that required surgery or long-term medical treatment	0.035 ** (0.016)	0.031 * (0.016)	0.032 * (0.017)
Had mental health problems such as depression	0.071 *** (0.017)	0.049 *** (0.016)	0.044 *** (0.017)
Had consumer problems	0.096 *** (0.035)	0.065 ** (0.030)	0.061 ** (0.030)
Was involved in an accident or disaster	0.023 * (0.014)	0.008 (0.012)	0.004 (0.012)
Nothing out of the ordinary happened	-0.014 *** (0.005)	0.001 (0.004)	0.004 (0.004)
Got married	0.455 *** (0.020)	0.450 *** (0.021)	0.446 *** (0.022)
Bought a home (renter → homeowner)	0.142 *** (0.016)	0.157 *** (0.016)	0.164 *** (0.016)
Respondent's characteristics			
Age	-0.007 *** (0.000)	-0.008 *** (0.001)	-0.004 *** (0.001)
Educational attainment (reference group: junior high school)			
High school, junior college, technical college	0.063 *** (0.010)	0.075 *** (0.021)	- -
University	0.100 *** (0.012)	0.111 *** (0.024)	- -
Married	0.203 *** (0.008)	0.176 *** (0.015)	0.159 *** (0.019)
No. of children	0.029 *** (0.002)	0.018 *** (0.005)	0.009 (0.007)
Household without co-resident parents	-0.275 *** (0.005)	-0.199 *** (0.012)	-0.153 *** (0.015)
Employment status (reference group: not in employment)			
Regular employee	-0.037 *** (0.006)	-0.050 *** (0.009)	-0.050 *** (0.010)
Non-regular employee	-0.002 (0.006)	-0.023 *** (0.007)	-0.024 *** (0.008)
Household income (log)	-0.072 *** (0.005)	-0.062 *** (0.007)	-0.052 *** (0.009)
Household financial assets	0.000004 (0.000003)	-0.000009 * (0.000005)	-0.000013 ** (0.000006)
R ² : within	-	0.085	0.087
between	-	0.207	0.129
overall	0.166	0.156	0.120
Model selection test		Breusch-Pagan	Hausman
		22210.35 ***	245.82 ***
No. of observations	31,237	31,237	31,237

Notes: Figures in parentheses are heteroskedasticity-robust standard errors. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level, respectively. Coefficients on regional and year dummies are not shown to conserve space.

sibling structure clearly. The estimation results are shown in Table 6. Based on the results of the Breusch-Pagan and Hausman tests for model selection, the fixed effect model is selected, and thus the interpretation of the coefficient estimates here is based on the results shown in column (c).¹⁵ Starting with the dummy variables representing life events in the preceding year, all dummies except for “was involved in an accident or disaster” and “nothing out of the ordinary happened” have significant coefficients. Especially when there is a wedding or a purchase of a new home, the probability of receiving a gift is substantially higher. In addition, respondents were also more likely to receive inter vivos transfers if they had health problems, including depression or childbirth. These findings suggest that the purpose of such gifts is to ease liquidity constraints, as also discussed in Section 4.2.

Turning to respondents’ characteristics, the probability of receiving gifts tends to decrease with age. This is consistent with the pattern in Figure 2 indicating that the share of households receiving gifts declines with age. While married respondents are likely to receive inter vivos gifts, no such pattern is observed for those in the data who have many children when fixed effects are controlled for. Meanwhile, households where parents were not co-resident were significantly less likely to receive gifts than those with co-resident parents. This finding likely reflects the following two effects. The first is that, in the case of households with co-resident parents, if parents hand over money to cover their living expenses to the child, this is considered in the data as a gift. The second is the effect that households with co-resident parents receive gifts from parents in return for providing care to parents or allowing them to cohabit. However, if parents are transferring their assets strategically, they should try to delay the transfers as much as possible (e.g., until their own death) to draw maximum care efforts from the offspring. Therefore, the first effect seems to dominate the second effect.

Looking at the coefficients on the variables regarding the respondents’ financial strength, the probability of receiving gifts was significantly lower for those who were working than for those who were not working, and among those who were working it was significantly lower for those in regular than those in non-regular employment. Next, higher household income (excluding remittances and spending money from parents) was associated with a significantly lower probability of receiving gifts from parents. Finally, respondents with abundant financial assets were less likely to receive gifts from parents. These results are consistent with the expectation from the altruism model. Moreover, since the fixed effect model estimates coefficients exploiting the variation within individuals (around the individual mean of those variables), the negative coefficients signify that parents decide whether or not to give gifts according to short-term fluctuations in their children’s financial strength.

Table 7 (Table 8) reports the estimation results for the specification whose dependent variable is the dummy that indicates whether a respondent (or her spouse) received assistance with living expenses in the preceding year from the respondent’s (or her spouse’s) parents. When employing this specification, I add the variables regarding respondents’ (or spouses’) sibling structure to the vector of explanatory variables. Looking at the results for the assistance from respondents’ parents, the coefficient of the gender dummy is significantly negative, implying that women are treated unfavorably when gifts are allocated among siblings.¹⁶ On the other hand, as for gifts from the

¹⁵ While the dummies for educational attainment are dropped in the fixed effect model, contrary to what one might expect, they are estimated to be significantly positive by the OLS and random effect models. This result may suggest that the unobserved parents’ affluence included in the error term is positively correlated with the respondent’s educational attainment.

¹⁶ Since the sibling structure is time-invariant and, therefore, dropped from the fixed effect model, I focus on the results from the random effect model when interpreting the coefficients on the sibling structure variables.

Table 7. Determinants of the receipts of assistance with living expenses from respondents' parents

Dependent variable	Dummy for receipt of monthly assistance with living expenses and the like in the preceding year		
	(a) OLS	(b) Random effect	(c) Fixed effect
Estimation method			
Independent variables	Coeff.	Coeff.	Coeff.
Life event in the preceding year			
Gave birth	0.006 (0.009)	0.004 (0.007)	0.005 (0.008)
Had a serious illness that required surgery or long-term medical treatment	0.003 (0.013)	0.007 (0.013)	0.010 (0.013)
Had mental health problems such as depression	0.043 *** (0.015)	0.025 * (0.014)	0.019 (0.014)
Had consumer problems	0.096 *** (0.032)	0.057 ** (0.026)	0.052 * (0.027)
Was involved in an accident or disaster	0.012 (0.012)	-0.002 (0.010)	-0.003 (0.010)
Nothing out of the ordinary happened	-0.013 *** (0.004)	-0.004 (0.003)	-0.002 (0.003)
Got married	-0.025 ** (0.011)	-0.040 *** (0.012)	-0.045 *** (0.013)
Bought a home (renter → homeowner)	0.005 (0.011)	0.009 (0.010)	0.013 (0.010)
Respondent's characteristics			
Age	-0.006 *** (0.000)	-0.009 *** (0.001)	-0.010 (0.007)
Sibling structure			
Those with sibling(s)	-0.068 *** (0.009)	-0.079 *** (0.020)	-
Those with sibling(s) × Those with sibling(s) of the opposite sex	-0.034 *** (0.004)	-0.021 ** (0.009)	-
Those with sibling(s) × The first daughter	0.005 (0.004)	0.004 (0.010)	-
Educational attainment (reference group: junior high school)			
High school, junior college, technical college	0.044 *** (0.008)	0.048 *** (0.017)	-
University	0.058 *** (0.009)	0.066 *** (0.020)	-
Married	0.039 *** (0.007)	0.039 *** (0.013)	0.036 ** (0.015)
No. of children	0.012 *** (0.002)	0.006 (0.004)	0.007 (0.005)
Household without co-resident parents	-0.113 *** (0.004)	-0.082 *** (0.009)	-0.061 *** (0.011)
Employment status (reference group: not in employment)			
Regular employee	-0.022 *** (0.005)	-0.031 *** (0.007)	-0.030 *** (0.008)
Non-regular employee	0.002 (0.005)	-0.005 (0.006)	-0.004 (0.006)
Household income (log)	-0.053 *** (0.004)	-0.043 *** (0.006)	-0.036 *** (0.007)
Household financial assets	-0.000002 (0.000002)	-0.000006 (0.000004)	-0.000007 (0.000004)
R ² : within	-	0.020	0.021
between	-	0.164	0.114
overall	0.084	0.075	0.049
Model selection test		Breusch-Pagan	Hausman
		26678.95 ***	134.38 ***
No. of observations	31,180	31,180	31,180

Notes: Figures in parentheses are heteroskedasticity-robust standard errors. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level, respectively. Coefficients on regional and year dummies are not shown to conserve space.

Table 8. Determinants of the receipts of assistance with living expenses from spouses' parents

Dependent variable	Dummy for receipt of monthly assistance with living expenses and the like in the preceding year		
	(a)	(b)	(c)
Estimation method	OLS	Random effect	Fixed effect
Independent variables	Coeff.	Coeff.	Coeff.
Life event in the preceding year			
Gave birth	0.011 (0.009)	0.013 (0.008)	0.014 * (0.008)
Had a serious illness that required surgery or long-term medical treatment	0.054 *** (0.020)	0.032 ** (0.016)	0.030 * (0.016)
Had mental health problems such as depression	0.058 *** (0.022)	0.030 (0.021)	0.025 (0.022)
Had consumer problems	0.017 (0.036)	0.019 (0.029)	0.017 (0.030)
Was involved in an accident or disaster	0.017 (0.016)	0.013 (0.012)	0.010 (0.012)
Nothing out of the ordinary happened	-0.016 *** (0.005)	-0.000 (0.004)	0.002 (0.004)
Got married	-0.007 (0.012)	-0.006 (0.011)	-0.008 (0.012)
Bought a home (renter → homeowner)	-0.008 (0.012)	0.004 (0.010)	0.006 (0.010)
Spouse's characteristics			
Age	-0.002 *** (0.000)	-0.003 *** (0.001)	-0.015 * (0.008)
Sibling structure			
Those with sibling(s)	-0.160 *** (0.011)	-0.112 *** (0.024)	- -
Those with sibling(s) × Those with sibling(s) of the opposite sex	-0.006 (0.005)	0.001 (0.011)	- -
Those with sibling(s) × The first son	0.060 *** (0.005)	0.062 *** (0.011)	- -
Educational attainment (reference group: junior high school)			
High school, junior college, technical college	0.028 *** (0.008)	0.039 ** (0.018)	- -
University	0.063 *** (0.009)	0.061 *** (0.019)	- -
No. of children	0.016 *** (0.002)	0.011 ** (0.004)	0.002 (0.006)
Household without co-resident parents	-0.253 *** (0.006)	-0.205 *** (0.016)	-0.172 *** (0.022)
Employment status (reference group: not in employment)			
Regular employee	-0.026 ** (0.010)	-0.022 * (0.012)	-0.020 (0.013)
Non-regular employee	-0.007 (0.015)	-0.010 (0.016)	-0.005 (0.017)
Household income (log)	-0.088 *** (0.006)	-0.059 *** (0.009)	-0.046 *** (0.010)
Household financial assets	0.000010 *** (0.000002)	0.000000 (0.000004)	-0.000002 (0.000005)
R ² : within			
between	-	0.045	0.047
overall	-	0.226	0.045
Model selection test			
		Breusch-Pagan	Hausman
		25946.12 ***	125.16 ***
No. of observations	21,285	21,285	21,285

Notes: Figures in parentheses are heteroskedasticity-robust standard errors. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level, respectively. Coefficients on regional and year dummies are not shown to conserve space.

spouse's parents, in Table 8, while the estimated coefficient of the gender dummy is not significantly different from zero, that for the first son dummy is significantly positive, implying that the first son is more likely to receive gifts from their parents than other siblings. There are at least two possible explanations for this result: (1) parents try to exchange gifts for future in-kind and financial transfers from their offspring, and (2) parents try to offset the costs borne by those who take over the family line (e.g., holding memorial services, maintaining the family grave, etc.). Meanwhile, several coefficients of the dummy variables for life events and other respondent (spouse) characteristics do not have statistical significance. Since assistance with living expenses from parents does not consider help from parents with the purchase of a home as well as wedding expenses, the coefficients of "got married" and "bought a home" may not be significantly positive.¹⁷

5.3 Determinants of the gift amount received

This subsection elucidates the determinants of the amounts of gifts by the same analytical framework as Section 5.2, except that the dependent variable is not a dummy variable, but a continuous one. Although the amount is available for assistance with living expenses and help with wedding expenses, the focus here is on the former type of gifts.¹⁸ The estimation results for the amount of assistance from respondents' parents are shown in Table 9. As far as can be judged from the result of the fixed effect model, the amount of assistance significantly decreases in the year where nothing out of the ordinary happened and the respondent got married. Turning to respondent characteristics, the same variables are significant, as in the case of Table 7, except that the marital status dummy is insignificant. Table 10 reports the estimation results for the amount of assistance from spouses' parents. All dummies for life events have insignificant coefficients, suggesting that spouses' parents do not necessarily alter the amount of assistance with living expenses so as to immediately compensate for positive shocks to expenditure (or negative shocks to income) associated with various life course events. On the other hand, the effects of age, the co-resident dummy and the household income are negatively significant. This finding is similar to (i.e., not qualitatively different from) the results discovered in Tables 6 to 8. Taken together, not only the probability of receiving gifts but also their amounts seem to vary consistently with the parental motive to alleviate liquidity constraints of children.

5.4 Past assistance with buying a home and subsequent provision of in-kind and financial help

The estimation results thus far appear to be more consistent with parental altruism than some kind of exchange or self-interest. However, the exchange motive still cannot be completely rejected. For example, inter vivos gifts from parents may be closely tied with subsequent provision of informal care from their offspring. In fact, Ciani and Deiana (2018) point out that upstream and downstream intergenerational transfers occur many years apart. To confirm this possibility, whether past transfers from parents to children leads to subsequent in-kind and/or financial help from children to their elderly parents is examined.

I use the following three dummy variables as a dependent variable: (1) the respondent couple currently provide informal care for a/their parent(s) or will provide it at some point in the future, (2) the respondent couple currently live with a parent(s) or will live with them at some point in the

¹⁷ While the coefficient on "got married" is significantly *positive* in Table 6, it is significantly *negative* in Table 7. This is probably because respondents' parents are likely to give a large amount of help with wedding expenses to respondents in the year of marriage, which may therefore crowd out other types of gifts.

¹⁸ Since information about the amount of assistance with living expenses is available only after the 6th survey, the number of observations decreases slightly compared to those of Tables 7 and 8.

Table 9. Determinants of the amount of assistance with living expenses from respondents' parents

Dependent variable	Amount of monthly assistance with living expenses and the like in the preceding year			
	(a)	(b)	(c)	(d)
Estimation method	Tobit	OLS	Random effect	Fixed effect
Independent variables	Marg. eff.	Coeff.	Coeff.	Coeff.
Life event in the preceding year				
Gave birth	0.044 * (0.026)	0.040 (0.035)	0.030 (0.028)	0.034 (0.029)
Had a serious illness that required surgery or long-term medical treatment	-0.014 (0.034)	-0.051 (0.052)	-0.037 (0.047)	-0.030 (0.048)
Had mental health problems such as depression	0.080 ** (0.036)	0.120 * (0.063)	0.040 (0.049)	0.001 (0.049)
Had consumer problems	0.246 ** (0.105)	0.345 ** (0.162)	0.195 (0.137)	0.167 (0.135)
Was involved in an accident or disaster	0.067 ** (0.033)	0.097 * (0.050)	0.027 (0.042)	0.017 (0.043)
Nothing out of the ordinary happened	-0.036 *** (0.011)	-0.047 *** (0.016)	-0.026 ** (0.013)	-0.022 * (0.013)
Got married	-0.037 (0.035)	-0.033 (0.041)	-0.068 * (0.041)	-0.081 * (0.043)
Bought a home (renter → homeowner)	0.007 (0.030)	0.024 (0.043)	0.050 (0.040)	0.065 (0.040)
Respondent's characteristics				
Age	-0.012 *** (0.001)	-0.008 *** (0.001)	-0.015 *** (0.003)	-0.024 (0.027)
Sibling structure				
Those with sibling(s)	-0.165 *** (0.028)	-0.234 *** (0.041)	-0.325 *** (0.097)	-
Those with sibling(s) × Those with sibling(s) of the opposite sex	-0.099 *** (0.012)	-0.166 *** (0.017)	-0.136 *** (0.041)	-
Those with sibling(s) × The first daughter	0.015 (0.012)	0.037 ** (0.016)	0.054 (0.038)	-
Educational attainment (reference group: junior high school)				
High school, junior college, technical college	0.135 *** (0.021)	0.133 *** (0.027)	0.132 ** (0.060)	-
University	0.241 *** (0.051)	0.156 *** (0.033)	0.183 ** (0.072)	-
Married	0.050 *** (0.017)	0.045 * (0.027)	0.057 (0.049)	0.068 (0.058)
No. of children	0.033 *** (0.006)	0.033 *** (0.008)	0.015 (0.014)	0.012 (0.019)
Household without co-resident parents	-0.340 *** (0.016)	-0.464 *** (0.019)	-0.363 *** (0.039)	-0.289 *** (0.046)
Employment status (reference group: not in employment)				
Regular employee	-0.045 *** (0.014)	-0.038 * (0.022)	-0.087 *** (0.027)	-0.087 *** (0.029)
Non-regular employee	0.004 (0.013)	0.015 (0.018)	-0.030 (0.024)	-0.030 (0.025)
Household income (log)	-0.095 *** (0.009)	-0.106 *** (0.018)	-0.113 *** (0.029)	-0.101 *** (0.033)
Household financial assets	-0.00003 *** (0.000010)	-0.00002 *** (0.000007)	-0.00002 (0.000012)	-0.00002 (0.000014)
(Pseudo) R ² : within				
between	-	-	0.014	0.015
overall	0.073	0.061	0.112	0.066
Model selection test				
			Breusch-Pagan	Hausman
			24612.21 ***	101.82 ***
No. of observations	26,541	26,541	26,541	26,541

Notes: Figures in parentheses are standard errors for Column (a) and heteroskedasticity-robust standard errors for Columns (b), (c) and (d). ***, **, and * denote statistical significance at the 1, 5, and 10 percent level, respectively. Coefficients on regional and year dummies are not shown to conserve space. Marginal effects are calculated as $\beta_k \times \Phi(X\beta/\sigma)$ at the mean of covariates.

Table 10. Determinants of the amount of assistance with living expenses from spouses' parents

Dependent variable	Amount of monthly assistance with living expenses and the like in the preceding year			
	(a)	(b)	(c)	(d)
Estimation method	Tobit	OLS	Random effect	Fixed effect
Independent variables	Marg. eff.	Coeff.	Coeff.	Coeff.
Life event in the preceding year				
Gave birth	0.042 * (0.023)	0.000 (0.036)	0.018 (0.029)	0.023 (0.030)
Had a serious illness that required surgery or long-term medical treatment	0.142 ** (0.062)	0.186 ** (0.092)	0.115 (0.076)	0.106 (0.076)
Had mental health problems such as depression	0.032 (0.048)	0.049 (0.085)	-0.003 (0.080)	-0.009 (0.083)
Had consumer problems	0.047 (0.081)	0.040 (0.156)	-0.095 (0.069)	-0.113 (0.071)
Was involved in an accident or disaster	0.020 (0.035)	0.054 (0.073)	0.047 (0.049)	0.039 (0.049)
Nothing out of the ordinary happened	-0.031 *** (0.012)	-0.049 ** (0.020)	-0.004 (0.015)	0.003 (0.015)
Got married	-0.036 (0.032)	-0.038 (0.041)	-0.026 (0.043)	-0.037 (0.047)
Bought a home (renter → homeowner)	-0.024 (0.027)	-0.033 (0.046)	-0.007 (0.038)	0.007 (0.038)
Spouse's characteristics				
Age	-0.006 *** (0.001)	-0.005 *** (0.001)	-0.005 ** (0.003)	-0.051 ** (0.022)
Sibling structure				
Those with sibling(s)	-0.358 *** (0.052)	-0.353 *** (0.046)	-0.214 ** (0.092)	-
Those with sibling(s) × Those with sibling(s) of the opposite sex	-0.013 (0.012)	-0.007 (0.020)	0.036 (0.043)	-
Those with sibling(s) × The first son	0.108 *** (0.012)	0.159 *** (0.019)	0.148 *** (0.045)	-
Educational attainment (reference group: junior high school)				
High school, junior college, technical college	-0.008 (0.020)	-0.047 (0.039)	0.109 (0.079)	-
University	0.065 *** (0.024)	0.082 * (0.042)	0.163 * (0.085)	-
No. of children	0.038 *** (0.006)	0.055 *** (0.009)	0.055 *** (0.017)	0.033 (0.023)
Household without co-resident parents	-0.699 *** (0.028)	-0.830 *** (0.028)	-0.678 *** (0.071)	-0.563 *** (0.095)
Employment status (reference group: not in employment)				
Regular employee	-0.040 * (0.024)	-0.074 * (0.042)	-0.073 (0.050)	-0.056 (0.054)
Non-regular employee	-0.023 (0.027)	-0.065 (0.060)	-0.050 (0.056)	-0.027 (0.058)
Household income (log)	-0.157 *** (0.013)	-0.242 *** (0.026)	-0.159 *** (0.038)	-0.123 *** (0.043)
Household financial assets	0.00001 (0.000010)	0.00002 * (0.000009)	-0.00001 (0.000017)	-0.00002 (0.000021)
(Pseudo) R²: within				
between	-	-	0.027	0.028
overall	0.118	0.118	0.158	0.024
Model selection test				
			Breusch-Pagan 23004.97 ***	Hausman 90.11 ***
No. of observations	17,959	17,959	17,959	17,959

Notes: Figures in parentheses are standard errors for Column (a) and heteroskedasticity-robust standard errors for Columns (b), (c) and (d). ***, **, and * denote statistical significance at the 1, 5, and 10 percent level, respectively. Coefficients on regional and year dummies are not shown to conserve space. Marginal effects are calculated as $\beta_k \times \Phi(X\beta/\sigma)$ at the mean of covariates.

Table 11. Relation between assistance with buying a home and subsequent provision of in-kind and financial help

Estimation method	(a)	(b)	(c)	(d)	(e)	(f)
	Fixed effect					
Dependent variable	Informal care provision for respondent's parents	Co-resident with respondent's parents	Financial assistance for respondent's parents	Informal care provision for spouse's parents	Co-resident with spouse's parents	Financial assistance for spouse's parents
Independent variables	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Assistance from respondent's parents when buying a home	0.001 (0.036)	-0.062 (0.038)	-0.023 (0.035)	-	-	-
Assistance from spouse's parents when buying a home	-	-	-	-0.023 (0.036)	-0.012 (0.027)	-0.040 (0.026)
R ² : within	0.016	0.277	0.037	0.062	0.049	0.026
between	0.048	0.525	0.174	0.076	0.131	0.036
overall	0.039	0.428	0.122	0.057	0.126	0.026
No. of observations	20,758	19,160	20,757	20,281	18,697	20,282

Notes: Figures in parentheses are heteroskedasticity-robust standard errors. Coefficients on regional and year dummies are not shown to conserve space.

future, and (3) the respondent couple currently give financial assistance to a/their parent(s) or will give it at some point in the future. The JPSC allows us to define these dependent variables separately for respondents' and their spouses' parents. As for the explanatory variable, focus is placed on a past experience of receiving financial assistance from parents when buying a home for the following reasons. First, the amount of assistance with buying a home is large enough to be thought of as an intertemporal exchange from parents for subsequent help from children. Although the exact amount is not available from the JPSC, Yukutake et al. (2015) report that of households which received assistance when buying a home the mean value of the assistance reached as high as 10 million yen in Japan. Second, a large fraction of respondent couples receive assistance when buying a home. As shown in Table 2, roughly 10 to 20 percent of couples (among those who purchased a home in the preceding year) received this assistance. Third, it is possible to distinguish between assistance for home purchase from respondents' parents and from their spouses' parents and it is therefore possible to estimate the effect of the assistance on the subsequent in-kind and/or financial help separately for each pair of parents.

Given that the transfer from parents is associated with exchange-related motives, we may expect a positive relation between parental assistance for home purchase and subsequent in-kind and/or financial help from the children. Table 11 reports the coefficient of a dummy variable which takes one if a respondent (or her spouse) received assistance for home purchase from the respondent's parents (or her spouse's parents) in the past. While columns (a) to (c) show the relation between the respondent's receipt of help with home purchase and her in-kind or financial assistance for her parents, columns (d) to (f) show the relation between the spouse's receipt of help with home purchase and his in-kind or financial assistance for his parents. Contrary to the prediction from a model of the exchange motive, no coefficients are statistically different from zero, suggesting that parental assistance with buying a home does not significantly induce the subsequent provision of care from children. Even when focusing on the sample of the first sons among respondents' spouses (i.e., husbands), the estimation results show hardly any change (results not shown to conserve space). This finding implies that the reason why parents are likely to give gifts disproportionately to their first son is not to exchange this for his subsequent in-kind and financial transfers, but to compensate for the costs borne by the first son to maintain the family line. Thus, it does not seem that parents

give gifts to ensure that children take care of them in old age.^{19,20}

6. Conclusion

Using microdata from the Japanese Panel Survey of Consumers provided by the Panel Data Research Center at Keio University, this study attempted to elucidate patterns in inter vivos gift receipts in Japan as well as parents' motives for giving such gifts. Concretely, the share of respondents that received inter vivos gifts in the preceding year, the frequency and timing of gift receipts over the 22-year observation period, and what characteristics affected the likelihood of receiving gifts and the size of transfer receipts were examined.

The results can be summarized as follows. To begin with, it was found that the share of respondents reporting that they (or their spouse) received gifts in any given year declines from 25 to 13 percent with age for all households. Moreover, respondents (or their spouses) tended to receive inter vivos gifts from their parents when they were young and when they experienced major life events involving large expenditures such as buying a home or getting married. Furthermore, the more unstable the respondents' employment and/or the lower their financial strength (i.e., income and assets) was, the more likely they were to receive inter vivos gifts. Therefore, the results suggest that one of the parents' motives for making inter vivos gifts was to ease liquidity constraints when the balance between a child's income and expenditure broke down.

Finally, it is interesting to consider the policy implications of the results obtained in this study. The analysis in this study found that parents make inter vivos gifts to help with buying a home, getting married, or raising children. Therefore, the fact that tax exemptions for inter vivos gifts which have been implemented in recent years are limited to gifts related to education, housing, marriage, and raising children is well aligned with the intentions of those making inter vivos gifts. However, the issue is whether such gifts spur consumption and asset formation: While gifts given to ease liquidity constraints are likely to spur consumption, they are unlikely to aid asset formation, except in the case of gifts to help home purchase. Moreover, since parents helping with expenses related to getting married (in the form of gifts) have always been tax exempt, and gifts for other uses (buying a home or raising children) are already tax exempt up to ¥1,100,000 (per year), the social significance of establishing a new major framework of tax exemptions for inter vivos gifts is not clear. Instead, it is possible that any advantages might be outweighed by the disadvantages, such as growing inequality in education as a result of the rich making large inter vivos gifts for educational purposes (to save taxes) or a decline in tax revenues due to an increase in generation-skipping asset transfers from grandparents to grandchildren. This means that more detailed analyses are required to compare the social benefits and disadvantages of policies to encourage inter vivos gifts through tax reductions.

¹⁹ If parents tend to give gifts to children who are likely to take care of them in old age, the variable regarding gifts to help with home purchase would be endogenous. Since this works to make it easier to find a positive coefficient on the dummy variable for the help with home purchase, the fact that the coefficient is insignificant even with this bias suggests that the actual (not biased) coefficient would be smaller.

²⁰ Respondents of the JPSC are relatively young and may have not yet started providing informal care/financial assistance and may not (yet) be living with their parent(s). Johar et al. (2015) showed by using Japanese data that parent-children co-residence tends to start after one of the parents has lost his or her spouse. Therefore, if more data are accumulated over time, it will be possible to find a relationship in which the receipt of gifts encourages the child(ren) to provide care/assistance and live with the parent(s) subsequently. In fact, Yamada (2006) indicated that past experience of receiving a gift (or inheritance) from parents has a negative impact on distance between the child's residence and that of the parents and has a positive impact on the frequency of contact between the child and his or her parents.

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