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## **Do Bequests Increase or Decrease Wealth Inequalities?**

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## **Do Bequests Increase or Decrease Wealth Inequalities?\***

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### Abstract

This paper finds that individuals in Japan do not leave very significant bequests, that parents often require a quid pro quo for bequests to their children, and that wealthier individuals leave *less* bequests, meaning that bequests ameliorate wealth inequalities.

*JEL* classification codes: D12, D91, E21

Keywords: Bequests, Inheritances, Intergenerational transfers, Wealth inequalities, Life cycle wealth

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## 1. Introduction

The increasing inequality of income, wealth, employment opportunities, etc., is a topic of deep concern not only to economists but also to policymakers and to the public at large in all countries, and bequests and other intergenerational transfers have been suggested as one cause of increasing inequalities. If individuals leave substantial bequests and other intergenerational transfers, if bequests are unrequited (involving no *quid pro quo*), and if wealthier individuals leave more bequests, bequests will increase the inequality of the wealth distribution and cause wealth inequalities to be passed on from generation to generation. The purpose of this paper is to test each of these three premises in turn.

## 2. The Data Source

The data I use in this paper are taken from the “Setai-nai Bunpai to Sedai-kan Iten ni kansuru Kenkyuu Chousa (Survey of Intra-household Distribution and Intergenerational Transfers),” which was conducted in Japan during the October 6-December 8, 2006, period by the Institute for Research on Household Economics (Zaidan Houjin Kakei Keizai Kenkyuusho). This survey surveyed married women between the ages of 20 and 59 from throughout Japan using a paper questionnaire that was dropped off, then picked up later. 4200 households were selected and surveyed using a two-stage sampling procedure, resulting in 2814 observations (a response rate of 67.00%). This survey collects detailed information on bequests including information on bequests received, bequest motives, bequest division, etc., and thus is ideally suited to an analysis of bequests (see Sakamoto (2008) for more details on this survey).

The number of observations in the aforementioned survey is 2,814, but only 1,778 observations remained after deleting observations with missing information on bequests received, holdings of financial assets and real assets, and loans outstanding.

All monetary variables except for holdings of real assets are in category form

and thus were converted to continuous form as follows: households that selected categories other than the lowest and highest categories were assigned the midpoint of the lower bound and the upper bound of the category they selected. Households that selected the lowest category were assigned a value equal to 0.8 times the upper bound of the lowest category. Finally, households that selected the highest category were asked the actual value of their holdings of the asset or liability in question, and if they answered this question, they were assigned the actual value of their holdings. If they did not answer this question, they were assigned a value equal to 1.25 times the lower bound of the highest category.

### 3. Do Individuals Leave Substantial Bequests?

The data source we use is unusual in collecting data on the value of bequests (financial assets such as bank and postal deposits, negotiable securities, etc., as well as real assets such as land, housing, etc.) received from already deceased parents and/or parents-in-law. As Table 1 shows, respondents receiving bequests from already deceased parents and/or parents-in-law received an average of 14.334 million yen (or 143,340 U.S. dollars assuming an exchange rate of 100 yen per dollar). However, since only 23.96 percent of respondents had received bequests from already deceased parents and/or parents-in-law, the average bequest received of all households was only 3.434 million yen (or 34,340 dollars).

The total wealth (net worth) of respondents can be calculated by subtracting debt outstanding (housing debt and non-housing debt outstanding) from the sum of financial assets (bank and postal deposits, negotiable securities, life insurance, etc.) and real assets (land, housing, etc.). The average wealth (net worth) of respondents thus calculated was 22.627 million yen (or 226,270 dollars), so the average bequest received of respondents receiving bequests from their parents and/or parents-in-law was a full 63.35% of average net worth but the average bequest received of all households was only 15.18% of their average net worth.

Finally, it is possible to calculate life cycle wealth by subtracting bequests

received from total wealth (net worth), and if this is done, life cycle wealth amounts to 19,193 million yen (or 191,930 dollars). This implies that the average bequest received of all households was only 17.89% of life cycle wealth, meaning that the wealth of respondents increased by only 17.89% as a result of receiving bequests from their parents and/or parents-in-law.

Many researchers have attempted to measure the share of bequests and other intergenerational transfers in total household wealth, the best-known attempt being that of Kotlikoff and Summers (1981), who obtained the surprising finding that intergenerational transfers account for about 80 percent of total household wealth in the United States. By contrast, Modigliani (1988) obtained the diametrically opposed finding that intergenerational transfers account for only about 20 percent of total household wealth in the United States (see also Kotlikoff (1988)).

A number of researchers have done a similar calculation for Japan, including Hayashi (1986), who found that intergenerational transfers account for at least 9.6% of total household wealth, Dekle (1989), who obtained figures of 3-27% and at most 48.7%, depending on the calculation method used, Campbell (1997), who obtained figures of at most 28.1% and at most 23.4%, depending on the calculation method used, Barthold and Ito (1992), who obtained a range of 27.8-41.4%, and Horioka, et al. (2002), who obtained a figure of 23.9%. Thus, the results for Japan are closer to Modigliani's (1988) figure than to Kotlikoff and Summers' (1981) figure, and the 15.18% figure obtained in the current study is no exception.<sup>1</sup> It thus appears that individuals do not leave substantial bequests in Japan.

#### 4. Are Bequests Unrequited?

The survey we used in our analysis also asked respondents about whether they plan to leave a bequest to their children and how they plan to divide their bequest among their children, and according to the results of the survey, 48.16% of respondents with two or more children plan to divide their bequest equally, 29.90% do not plan to leave a bequest, and 21.94% plan to divide their bequest unequally, with the vast

majority of those in the third group planning to leave more to the child who lives with or near them, who provides help with housework, who provides nursing care, who provides financial assistance, and/or who takes over the family name or the family business. Thus, more than half (51.84%) of respondents either do not plan to leave a bequest or plan to leave more to the child who provides some sort of *quid pro quo*, most commonly some sort of assistance during old age (see Horioka (2008) for more details). Thus, it seems that more than half of Japanese are selfishly motivated, either not leaving any bequest at all or requiring a *quid pro quo* such as assistance during old age. Moreover, other surveys have asked similar questions and obtained broadly consistent results (see, for example, Horioka, et al. (2000) and Horioka (2002), and see also Horioka (1993), Hayashi (1995), and Wakabayashi and Horioka (2008) for other types of evidence on this issue).

#### 5. Are Wealthier Individuals More Likely to Receive Bequests?

If wealthier individuals are more likely to receive bequests, bequests will contribute to exacerbating wealth inequalities, but our results show that the correlation between bequests received and life cycle wealth is -0.170, meaning that wealthier individuals leave *less* bequests than less wealthy individuals, implying that bequests actually ameliorate wealth inequalities.<sup>2</sup>

The coefficient of variation of life cycle wealth and total household wealth are 1.54 and 1.34, respectively, meaning that the coefficient of variation decreases by 0.20 when bequests received are included in household wealth. This finding is consistent with our aforementioned finding that wealthier individuals leave less bequests and that bequests ameliorate wealth inequalities.

#### 6. Conclusion

I analyzed data from a new and unique Japanese household survey and obtained the following findings: individuals in Japan do not appear to leave very significant

bequests, with bequests received accounting for only about 15 percent of total household wealth, and parents often require a *quid pro quo* (such as some sort of assistance during old age) for bequests left to their children, meaning that *net* transfers from parents to children (net of transfers in the other direction such as financial and in-kind assistance from children to parents during old age) are even less important than the above figure suggests. Furthermore, even if bequests were quantitatively important, wealthier individuals leave *less* bequests than less wealthy individuals, meaning that bequests ameliorate wealth inequalities rather than exacerbating them and do not cause wealth inequalities to be passed on from generation to generation. Thus, it does not appear necessary to alleviate the adverse impact of bequests on wealth inequalities by raising inheritance taxes or using other means.

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<sup>1</sup> It is low even compared to other studies for Japan, and one possible reason is that it does not include *inter vivos* transfers.

<sup>2</sup> If the relative importance of *inter vivos* transfers increases with wealth due to tax considerations, etc., the correlation between bequests received and life cycle wealth might overstate the correlation between all intergenerational transfers and life cycle wealth. Unfortunately, we cannot confirm this point because the data set used in this paper does not collect information on *inter vivos* transfers. I am indebted to Kazuyasu Sakamoto for this point.