
Social Stratification, Family Support and the Timing of First Time Home ownership in Japan

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This paper investigates how socioeconomic status and intergenerational relationships affect housing tenure. Although the home serves as a focal point in people's everyday lives and is a key asset of those who dwell there, home ownership has been a neglected area of social stratification research. This study employs a discrete-time logit model to estimate the transition to first time home ownership for the Japanese Panel Survey of Consumers (JPSC), a nationally representative longitudinal survey of 1,500 young women. The study found that : (1) As personal savings increase so does the likelihood of achieving home ownership. (2) While the occupation of the respondents' husband have only a minimal impact, those married to professionals gain an advantage in becoming a home owner. (3) Those living with their parents and/or who receive gifts or inheritances from their parents have better access to home ownership than those who do not. These findings are consistent with Esping-Andersen's welfare state regime theory.

1 Introduction

Housing is a universally significant issue and an essential basis of daily life (Iwata & Murakami 2006). Impoverished living environments can negatively impact health and well-being (Takegawa 1996, etc.). A person's home is deeply connected to their life opportunities as well. For instance, housing costs affect household living standards due to their dominating presence in household budgets. Location affects leisure activities and employment opportunities (Takegawa 1996, Iwata & Murakami 2006). Housing is a key material asset. A higher status in the labor market generally enables the acquisition of better housing. However, the opposite does not necessarily apply. The possession of quality housing does not imply high status in the labor market. One reason is that home ownership can be transferred from parent to child through gifting or inheritance (Kurz & Blossfeld 2004). This study considers the relevance and impact of social stratification and family on home ownership.¹

Approaches to research on home ownership have conventionally included welfare, public policy, and economics. In contrast, Kurz and Blossfeld (2004) point out that stratification studies, focusing mainly on individual status in the labor market, have rarely addressed home ownership, and they argue for its significance. This tendency applies to Japan as well. Hirayama (2006) also queries the almost complete absence of research focusing on home ownership in stratification studies, given that growth of the home owner sector is a compelling factor in forming middle-class consciousness. In recent years, Japanese housing policy has emphasized the market mechanism to an increasing extent.

Bourdieu (2000–2006) analyzed the interaction between various factors in home ownership such as individual and family socioeconomic characteristics, housing policy, housing industries, etc., within the sphere of the housing market, arguing that the role of the state is especially significant. Beyond the individual or family efforts of acquiring housing is the significance of home ownership in society. In other words, society influences the positioning of housing policy within policy overall. According to Esping-Andersen, policy is an official system of social risk management, and risk management is the foundation of the welfare state regime (Esping-Andersen 1999–2000). Therefore, home ownership needs examination with attention to the current Japanese context, the welfare state regime.

According to Esping-Andersen, Japan's welfare state regime is characterized by familial elements, emphasizing the family role with more liberal elements. The premise of this paper is that Japan's welfare state regime includes both liberal and familial elements. However, previous analyses of home ownership using microdata have not clarified these elements. By elucidating the influence of social stratification and family on home ownership, this paper

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aims to provide a foothold on the consideration of Japan's welfare state regime through home ownership.

2 Housing policy in postwar Japan

An examination of housing policy in Japan after World War II is a pre-requisite of any analysis. In short, it has been a policy of home ownership. That said, housing is considered a private matter with little subsidy compared to European countries. The responsibility of national and local governments is fostering housing industries and indirect housing supply rather than direct housing supply. In sum, the Japanese policy functions on self-help efforts and market principles (Hayakawa & Yokota 1996; Wada 1996, etc.).

However, Hirayama (2006) asserts that this does not mean the state has no interest in home ownership. He points to the state's policy of building a system where the middle class and home ownership reinforce one another, develop the economy, and advance social integration. The result is home ownership bolsters the status and attitude of the owner and their membership in mainstream society. Home ownership is also highly significant for corporations. According to Omoto (1996), the system of home ownership promotion is one part of corporate labor management.

Due to these mechanisms and high economic growth, many households achieved home ownership after the war. Currently, more housing stock exists than there are households, with sufficient supply that solved the considerable housing shortage. Figure 1 shows trends in the home ownership rate after the war, based on the Housing and Land Survey (Statistics Bureau of Japan) results.² Ever since the 1960s, the home ownership rate has hovered around 60%. The drop in home ownership from the late 1950s through the early 1960s is thought to be due to the population influx into urban areas from the provinces and the increase in new households. According to the Housing and Land Survey of 2003, out of 47.08 million ordinary households nationwide, owners occupying their own homes comprised 28.67 million, or 60.9% of ordinary households (homeowning household rate).

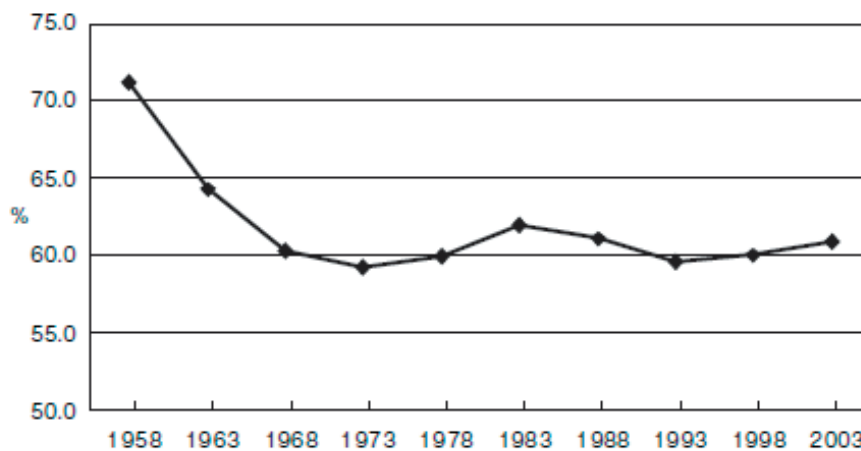


Figure 1 Trends in postwar Japan home ownership rate

Compiled from the Statistics Bureau of Japan's Housing and Land Survey (formerly Housing Statistics Survey). Okinawa omitted before 1973.

In recent years, due to budgetary shortfalls on the part of national and local governments, the Urban Renaissance Agency (formerly Japan Housing Corporation) withdrew from the supply of housing for sale or rent, and the Housing Loan Corporation (HLC) partially altered its duties, among other changes. The change in HLC's business model resulted in a larger role for private-sector finance (Kishi 1996; Izumi et al. 2006). Furthermore, some corporations are calling for withdrawal from housing-related welfare (Nishikubo 2007). In sum, the existing trend of marketization is likely to be further enhanced, possibly reinforcing the influence of social stratification on housing acquisition. However, there are indications that home inheritance is rising due to changes in family structure, specifically fewer siblings (Iwata & Murakami 2006). The relationships among housing acquisition, social stratification, and family are expected to change in the future.

3 Social stratification, family, and home ownership

3.1 Social stratification and home ownership

Known as “the biggest commodity in life,” home ownership requires a large amount of money. If social class, socioeconomic status, or head of the household occupation is high, income will also be high and stable, making it easy to receive credit and obtain housing. In the collection of articles edited by Kurz and Blossfeld (2004), twelve countries are compared. Various nations, notably West Germany, France, and Italy, showed a tendency for housing to be more easily acquired by white-collar workers and less so by their blue-collar counterparts (Kurz 2004; Meron & Courgeau 2004; Bernardi & Poggio 2004, etc.).

The Institute for Research on Household Economics conducted a survey (IRHE ed. 2006) on the percentage of land and buildings owned by household members in owner-occupied dwellings. They found that when the wife had a high career status, she also had a degree of ownership (Murakami 2006a). The results also revealed that for the self-employed, including self-employed farmers, housing is part of the means of production, and therefore the tendency toward home ownership is more pronounced (Bourdieu 2000–2006; Kurz 2004, etc.). Kanomata (2001), who analyzed data from a 1995 survey on social stratification and social mobility throughout Japan, showed that self-employment increases real estate value.³

Along with occupation, workplace type is also important. According to Zhou (2007), a civil servant status promotes home ownership. Historically, working at a major corporation has been advantageous for home ownership. The Local Housing Corporation Act targeted large corporations by establishing a high rate of company savings plans directed at home ownership (Omoto 1996). However, upon examining the connection between home ownership, occupational status, and company size, Kanomata (2001) discloses that company size was a relatively insignificant factor.

Regarding educational background, which is closely related to occupational status, higher education levels correlate with home ownership in Belgium, Norway, Britain, and other countries (Geurts & Goossens 2004; Gulbrandson 2004; Ermisch & Halpin 2004). In Japan, the wife’s equity and individual ownership of land or buildings are also influenced by her educational background (Murakami 2006). However, according to Bourdieu (2000–2006), who focused on the combination of economic and cultural capital with regards to the reproduction of class in France, the class dependent on economic capital, for example, managerial or executive, has high home ownership rates, while the rates are lower for the class with high cultural capital, such as teachers.

The influence of parents’ social class is also noted in West Germany, the Netherlands, Italy, Britain, etc. (Kurz 2004; Mulder 2004; Bernardi & Poggio 2004; Ermisch & Halpin 2004). In general, higher parental occupational status increases the likelihood that the children will be home owners.

Other research indicates the importance of income and savings. Kanomata (2001) noted that higher positive effects were more often associated with husbands’ high yearly income than career status. Similarly, the Housing and Land Survey shows that higher yearly income leads to higher home ownership rates. Moriizumi (2004) showed that an increase in savings and income advances the timing of housing purchase. We aim to clarify which is the most critical factor in home ownership among occupation, educational background, and income and savings in terms of direct purchase power.

3.2 Family and home ownership

Home ownership is impacted by social stratification, income, and familial factors, such as direct transfer between generations via inheritance or gift. According to Kanomata (2001), inheritance or parental gifting increases a child’s real estate holdings and is more significant in this regard than the child’s occupation. Furthermore, inheritance and *inter vivos* gifts have been shown to promote housing purchases in the child’s generation (Moriizumi & Naoi 2007), pushing up the timing of housing purchase and increasing purchase amounts or down payments (Zhou 2007).

In general, children with affluent parents are more likely to receive financial support. In West Germany, Denmark, etc., children with homeownership parents tend to acquire their own homes (Kurz 2004; Leth-Sørensen 2004).

Another important factor is the household type (household, defined here, as people living together and sharing a single budget). In Japan, where the rate of children living with parents is high, the oldest son tends to live with his parents and care for them, eventually inheriting the house. While living with parents does not automatically imply home ownership, the two are often correlated. A rough calculation based on the 2003 Housing and Land Survey indicates that while 68.7% of nuclear families (households composed of couples with children, etc.) own their homes, 92.1% of multigenerational households (couples living with their parents, etc.) do. The intergenerational transfer of home ownership can be called a gift.

Life stage and number of children are other significant factors in home ownership in West Germany, France, etc. (Kurz 2004; Meron & Courgeau 2004). In Japan, a comparison of the number of residential rooms and surface area per dwelling (2003 Housing and Land Survey) shows that owner-occupied houses have more of both than rental housing, and that renovation of rental housing is more difficult. In these cases, the birth or growth of children often provides the impetus for home ownership. This paper will consider these elements as well.

3.3 Relationship between home ownership and social stratification/family due to differences in welfare state regimes

Prior research indicates that social stratification and family factors are also notable. The book edited by Kurz and Blossfeld (2004) contributes to the study on the impacts of social stratification and family (specifically regarding transfers between generations) based on national differences. The book maintains a consistent awareness of the issues raised by the differences in welfare state regimes and which the home ownership rates are compared by country, given the influence of state aid and taxation on home ownership.

Esping-Andersen's welfare state regime theory proposes three models based on the interaction between the labor market, the family, and the welfare state (i.e., the liberal regime of the U.S., etc., the social democratic regime of Scandinavia, and the conservative regime of Germany, Italy, etc.). The central responsibility for welfare is placed on the market by liberal regimes, on the state by social democratic regimes, and on the family by conservative regimes (Esping-Andersen 1999=2000).

Using Esping-Andersen's theory as a base, Kurz and Blossfeld (2004) add southern European regimes as the fourth model. According to their classification, this last model may apply to Japan, although no analysis of Japan is presented in their book. Esping-Andersen also considers the southern European regimes as a subcategory of conservative regimes and, while pointing out the major role of the family in Japan, classifies Japan as a mixed model of multiple regimes. Japan's housing policy includes liberal elements with elements of conservative regimes, in the sense that family plays a significant role in welfare. This paper relies on Esping-Andersen's view of Japan as having both liberal and strongly familial elements and does not classify it as southern European.

Returning to the discussion of Kurz and Blossfeld (2004), in liberal regimes, the most desirable form of ownership is private ownership, followed by private renting. However, in social democratic regimes, renting and shared housing are not necessarily the most desirable format, nor is the private ownership sector always small. The difference from liberal regimes is that the public renting sector is wide open to society. In other words, social democratic regimes are characterized by the absence of stigma or neglect of the public renting sector due to its association with low-income residents. In conservative regimes as well, it is not clear what type of tenure is the most desirable. In France and Germany, lower-income people build their own houses without resorting to the aid of contractors because family, neighbors and the community play major roles. In southern European regimes, public renting and housing finance systems are inadequate, calling on the extended family to play a major role, with high rates of private ownership and private renting.

Based on these discussions, Kurz and Blossfeld deduce the following hypotheses. (1) Depending on household socioeconomic status and income, the degree of home ownership will differ according to the welfare state regime. The connection is strongest in liberal regimes and weakest in social democratic regimes, with conservative regimes occupying a middle ground. The impact of gaps in socioeconomic status in southern European regimes is far-reaching. (2) The effect of transfers between familial generations (*inter vivos* gifts, inheritance, ownership transfers) also varies according to the welfare state regime. Transfers of this kind are most influential in southern European

regimes and least influential in social democratic regimes. (3) Regardless of country, the self-employed, including self-employed farmers, are likely to be homeowners. Blue-collar workers, who are at high risk of unemployment, acquire housing later than others. In regions where land and building prices are low, housing acquisition is easier. This hypothesis is common across all regimes. This paper also uses city scale as a control variable in its analysis, as discussed below.

Interestingly, in southern European regimes, in addition to transfer between family generations, with the strong impact of socio-demographic characteristics, the influence of socioeconomic status, with the strong impact of status attainment, is also notable. According to the results for each country in Kurz and Blossfeld (2004), occupational status determines home ownership overall, regardless of the regime. Some countries also show the influence of parents' status on home ownership. Unfortunately, Asian countries are absent from Kurz and Blossfeld's book. While the data and methods used in this paper have limitations, this article aims to contribute to future international comparisons through its analysis of the Japanese case.

4 Analysis

4.1 Hypotheses

Before the description of the data, method, and variables, the hypotheses are presented here.

Hypothesis 1 In Japan, which has liberal characteristics, socioeconomic status influences the probability of housing acquisition.

Hypothesis 1-1 Regarding the position in the labor market, company savings plans for home ownership are well established and credit is easy to obtain, increasing the probability of white-collar home ownership for those employed by large companies.

Hypothesis 1-2 The self-employed, for whom housing is the basis of their professional lives, have a high probability of the transition to home ownership.

Hypothesis 1-3 Higher household financial assets, such as savings and income, increase the probability of the transition to home ownership.

Hypothesis 1-4 Because of increased income and savings, wives who work increase the probability of the transition to home ownership.

Hypothesis 2 In Japan, which has familistic characteristics, family influences the probability of the transition to home ownership.

Hypothesis 2-1 Inheritance or *inter vivos* gifts from family increases the probability of the transition to home ownership.

Hypothesis 2-2 Coresidence with parents increases the probability of the transition to home ownership.

The analysis continues without a specific hypothesis on the impact of socioeconomic status and family.

4.2 Data

The analysis uses data from the Panel Survey on Consumption by the Institute for Research on Household Economics in 1993. This study randomly selected women between the ages of 24 to 34 throughout Japan (stratified two-stage sampling with arbitrary probability) in 1993 (Cohort A) and conducted a survey every October via the drop-off/pick-up method. Although women in their 20s were added as a new sample in 1997 and 2003, this paper uses data from Cohort A, the longest survey period, from wave 1 (1993) through wave 14 (2006). The collection rate for wave 1 of Cohort A was 41.4%, but it rose to around 95% in wave 2. The respondents were limited to women, but their responses also provided information on other household members, parents, children, and (if married) husbands, as well as families in other households. For the survey details, see Institute for Research on Household Economics ed. (2007). This paper selected married women for analysis, following the practice of Ermisch and Halpin (2004), who conducted a discrete-time event history analysis of data from the British Household Panel Survey (BHPS).

In an event history analysis, if the period is limited to post-marriage, where the risk period (marriage) begins earlier than the observation period (survey period), respondents may omit some information (late entry/left truncation), potentially causing estimation bias (Yamaguchi 1991; Singer & Willet 2003 et al.). To resolve this issue, retrospective information may be used, but the explanatory variables in the analysis will be severely restricted. In other words, the abundant time-dependent covariant information, which is the strong point of panel surveys, cannot be effectively used.

Methods to correct the bias have also been proposed (Singer & Willet 2003, Cleves et al. 2004). However, they all assume application to a continuous-time model, thus potentially creating new biases, and have not been applied in this study. It's important to note that the data contains potential biases of this kind.

To further clarify causal relationships, some explanatory variables use values from the previous time point. Consequently, the respondents already owning homes as of wave 1 were excluded. Furthermore, cases where it was clear that housing acquisition during the observation period was a case of existing home owners buying new homes, not first-time home ownership, have also been excluded.

4.3 Methods

The study used the discrete-time logit model of event history analysis. The method enabled estimation with consideration of truncation (respondents who did not acquire housing by the end of the observation period or left the survey without acquiring housing). We selected the discrete-time model for three reasons: 1) with the annual Panel Survey on Consumption, the measurement intervals were discrete, 2) the use of a continuous-time model can create bias when events frequently occur at the same time (ties) (Allison 1984; Yamaguchi 1991), and 3) due to the convenience of estimation via a logistic regression analysis with person-period data.

This paper applied a one-way transition model—a model representing unrepeated events—to first-time housing transition. Indeed, some households acquire housing twice or more, but as the respondents for analysis were relatively young and few acquired their second homes during the survey, this model was chosen. Most of the results in Kurz and Blossfeld (2004) focused on the first-time transition to home ownership.

In the discrete-time model, the hazard (rate) is the probability that the respondents exposed to risk at a given point in time (risk set), or the respondents to which an event (the transition to home ownership) has not yet happened, will experience the event at a given point in time. The hazard rate differs by survey time point, but if each point is evident across all respondents, it can be obtained by dividing the total number of events at a given point by the number of respondents in the risk set.

Table 1 Changes in home ownership (virtual examples/wide data format)

Age	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
id=1 (initially 24)	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent	Rent			
id=2 (initially 26)			Rent	Rent	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own	
id=3 (initially 30)							Rent	Rent	Rent	Rent	Out	Out	Out	Out	Out	Out	Out

Table 2 Changes in home ownership
(virtual examples/long data format/person-period data)

id	tenure	age
1	Rent	24
1	Rent	25
1	Rent	26
1	Rent	27
1	Rent	28
1	Rent	29
1	Rent	30
1	Rent	31
1	Rent	32
1	Rent	33
1	Rent	34
1	Rent	35
1	Rent	36
1	Rent	37
2	Rent	26
2	Rent	27
2	Own	28
3	Rent	30
3	Rent	31
3	Rent	32
3	Rent	33

The probability at time t that an event will happen to the risk set, that is, the hazard (rate) is set as $P(t)$, with the explanatory variable not changing with time set as x_1 and the explanatory variable changing with time as $x_2(t)$. $P(t)$ is a probability and is logarithmically transformed so that its value falls within the range of 0 to 1 as per the formula below.

$$\log(P(t)/1-P(t)) = a + b_1x_1 + b_2x_2(t)$$

Here, the coefficients b_1 and b_2 show a change in the logarithmic odds when x_1 and x_2 are increased by one unit (Allison 1984).

The person-period data used in this paper was obtained as follows. First, the panel data collected yearly, organized by age, yielded the results in Table 1. This is called the wide data format (in the actual analysis, a wide data format is not necessarily required).

Next, the data in Table 2 was obtained. This is called the long data format. For yearly surveys, the annual data may be presented vertically (for retrospective data, the blanks must be filled in). Thereafter, according to the state of home ownership and censoring (survey fallout), the subsequent records (number of cases) are cut.

The dataset included variables showing whether an event had or had not happened to the risk set in each yearly survey, as well as explanatory variables such as age. Each record in the dataset contained the data for one respondent in one year. Each respondent's information was included in the dataset until they acquired housing, fell out of the survey, or reached the end of the survey (although time-dependent covariance values varied). For example, id=1 (age 24 in wave 1) continued renting for 14 years and stayed in the survey with 14 records in the dataset. id=2 (age 26 in wave 1) became a homeowner in wave 3, with records from wave 4 thus excluded. The one-way transition model employed in this paper used the first housing acquisition as a dependent variable so that respondents fell out of the risk set once they acquired housing. Even if they returned to rental housing for some reason after becoming a homeowner, they were not included among analysis respondents. id=3 (age 30 in wave 1) continued to live in rental housing through wave 4 and left the survey from wave 5 on, with information up through wave 4 included. The dataset was created in this way⁴. Furthermore, although the Panel Survey on Consumption has continued since 2007,

the data used for this paper were up through 2006, so observation ended in some cases.

4.4 Variables

The dependent variable was whether the respondent households owned their homes at the time of the survey (owning = 1, renting = 0)⁵. Home ownership applied if the husband or parents living with the female respondent owned all or part of the land or buildings, even if the respondent herself did not, which was the same definition used by the Housing and Land Survey. Home ownership applied whether in a single-family house with both land and building owned, an apartment with part of the land owned, or a single-family home or apartment on borrowed land. As noted in section 4.2, second home purchases were excluded. Cases in which it was not clear whether this situation applied were considered first acquisitions. Unlike the previous economic research, which focused on the influence of housing purchase on household budgets (liquidity restriction) (Moriizumi 2004; Moriizumi & Naoi 2007; Zhou 2007), the definition was not limited to purchased homes.

For the explanatory variables, we mainly used the demographic and socioeconomic characteristics of the husband, which have higher impacts than those of the wife. The value of year $t-1$ was used for some variables to clarify causal relationships. There was a negative relationship between year t savings and home ownership, but a positive one when the year $t-1$ value was used. The negative effect was probably caused by reduced savings due to paying the down payment in the previous year.

The husband's age (year t) and the square of his age were used as explanatory variables. The effect of age has also been pointed out in the 2003 Housing and Land Survey and by Kanomata (2001). According to the 2003 Housing and Land Survey, the rate of homeownership households rises sharply between the ages of 35 and 39. For the husband's birth cohort, 1960–1964 was set as the reference category, with dummy variables for 1954 or earlier, 1955–1959, and 1965 or later.

Table 3 Descriptive statistical of variables

		Mean	Standard deviation	Min.	Max.
Home ownership dummy (year t , owning = 1)		0.08	0.28	0.00	1.00
Husband's age (age/year t)		36.18	5.97	23.00	61.00
Husband's age squared (age/year t)		1344.71	452.45	529.00	3721.00
Husband's birth cohort (year t)	Before 1955	0.07	0.25	0.00	1.00
	1955–1959	0.22	0.42	0.00	1.00
	1960–1964 (reference)	0.36	—	0.00	0.00
	1965 or later	0.35	0.48	0.00	1.00
Household savings (million yen/year $t-1$)		2.53	3.06	0.00	1537.70
Household income (million yen/year $t-1$)		6.10	2.32	0.00	13.48
Husband's occupation (year $t-1$)	Self-employed	0.11	0.31	0.00	15.38
	Professional	0.15	0.35	0.00	1.00
	Management/clerical, large company	0.21	0.41	0.00	1.00
	Management/clerical, small/medium company	0.06	0.24	0.00	1.00
	Sales/service, large company	0.05	0.21	0.00	1.00
	Sales/service, small/medium company	0.07	0.25	0.00	1.00
	Skilled, large company	0.15	0.36	0.00	1.00
	Skilled, small/medium co. (reference)	0.20	—	0.00	0.00
Wife's employment dummy (year $t-1$)		0.38	0.48	0.00	1.00
Children dummy (year $t-1$)		0.86	0.35	0.00	1.00
Coresidence with parents dummy (year t)		0.04	0.21	0.00	1.00
Receiving inheritance/ gifts from parents dummy (year $t-1$)		0.09	0.28	0.00	1.00
Location dummy (year t /three major urbanizations = 1)		0.61	0.49	0.00	1.00

Total case number: 2405

Of the socioeconomic variables, household savings (year $t-1$) and household income (year $t-1$) were used to represent the household economic status. Both excluded values higher than the average +3 standard deviations as outliers and were substantiated with the consumer price index. For the husband's occupation (year $t-1$), dummy

variables were created with company scale: self-employed/family business dummy (agriculture, forestry, fishing, or commercial businesses of 9 employees or fewer), technical professional dummy (including doctors with their clinics, lawyers, and other self-employed professionals), management/clerical work at a large company dummy (100 or more employees, including government agencies), management/clerical work at small or medium company dummy (fewer than 100 employees), sales/service work at large company dummy, sales/service work at small or medium company dummy, and skilled/task-based work at large company dummy. The reference category was skilled/task-based work at a small or medium company. Due to the data limitations, it was not possible to create occupational categories with the combination of economic and cultural capital, as Bourdieu accomplished. For the wife's career (year $t-1$), the dummy variable used the values of employed = 1 and unemployed = 0. The values assigned to the husband's and husband's parents' educational background were junior high school graduate (or below) = 9, high school graduate = 12, junior college/ technical college graduate = 14, and university/graduate school graduate = 16.

Family variables included the presence or absence of children in the year preceding the survey (yes = 1, no = 0), a dummy variable on living with parents or not (year t) (yes = 1, no = 0), and the receiving of inheritance or *inter vivos* gifts

. Living with parents included living in separate buildings within the same site. Receiving inheritance or *inter vivos* gifts (until year $t-1$) was assigned as 1 for the reception of financial or material assets from the husband's or wife's parents, regardless of whether the household was shared or the size of the amount, and 0 otherwise.⁶

For the location, city size (t) was used as a control variable, with attention to the categories of the Ministry of Land, Infrastructure, Transport and Tourism, and commuter areas, 1 was assigned to the three major urban areas (capital areas including Ibaraki, Saitama, Chiba, Tokyo, and Kanagawa Prefectures, Chubu area including Gifu, Shizuoka, Aichi, and Mie Prefectures, and Kinki area including Shiga, Kyoto, Osaka, Hyogo, and Nara Prefectures), and 0 elsewhere. The descriptive statistical amounts are shown in Table 3. The dummy variable mean was the ratio of the reference category occupying all person-period numbers. Standard deviation was omitted as the reference category value was originally 0.

4.5 Results

The results are shown in Table 4. First, the goodness-of-fit test for the model, while the determination coefficient is by no means high, shows its appropriateness for the data.

Next, regarding the parameters estimated, the statistical test showed that significant variables were the previous year's savings, some occupational variables, the living with parents dummy variable, and the receiving of inheritance or *inter vivos* gifts from parents dummy variable⁷. The husband's age, birth cohort, household income, wife's employment status, children dummy, and location city size were not significant. The significant effect of savings was probably due to the need to save a large sum of capital for homebuying. However, unlike previous research, income was not significant⁸. Large savings are more important for home ownership than the amount of temporary income. When looking at the odds ratio for the husband's occupational dummy variable, those for self-employed and professionals (statistically significant), management/clerical work at large company, and skilled work at a large company was over 1. Conversely, those under 1 were management/clerical work at small to medium-sized companies and sales/service work at large companies (statistically significant). Overall trends were values over 1 for self-employed and white-collar work, in contrast to 1 or below for blue-collar work. However, within white-collar work, management/clerical work at a small/medium-sized company was under 1, while within blue-collar work, skilled work at a large company was over 1. Most of the occupational dummy variables were not significant, and even the significant ones were at the 10% significance level. The effects of being self-employed were not significant. Because self-employed doctors and lawyers were categorized as professionals, given the questionnaire restrictions, self-employed workers may not have been precisely distinguished. Furthermore, self-employed workers and freelancers comprised only a small portion of the data.

Table 4 Results for the transition to first-time home ownership

		Odds ratio	Coefficient	Standard deviation	Standardized coefficient
Husband's age (age/year t)		1.081	0.078	0.168	0.198
Husband's age squared (age/year t)		0.998	-0.002	0.002	-0.291
Husband's birth cohort (year t)	Before 1955	1.119	0.112	0.481	0.012
	1955-1959	1.071	0.069	0.239	0.012
	1960-1964 (reference)	—	—	—	—
	1965 or later	1.106	0.101	0.225	0.021
Household savings (million yen/year $t-1$)		1.092	0.088	0.024	0.001 ***
Household income (million yen/year $t-1$)		1.031	0.031	0.041	0.000
Husband's occupation (year $t-1$)	Self-employed	1.091	0.087	0.325	0.012
	Professional	1.595	0.467	0.280	0.070 +
	Management/clerical, large company	1.506	0.410	0.266	0.072
	Management/clerical, small/medium company	0.873	-0.136	0.382	-0.014
	Sales/service, large company	0.653	-0.427	0.510	-0.038
	Sales/service, small/medium company	0.464	-0.768	0.460	-0.081 +
	Skilled, large company	1.100	0.095	0.289	0.015
	Skilled, small/medium co. (reference)	—	—	—	—
Wife's employment dummy (year $t-1$)		0.942	-0.060	0.192	-0.012
Children dummy (year $t-1$)		1.366	0.312	0.249	0.046
Coresidence with parents dummy (year t)		18.685	2.928	0.233	0.257 ***
Receiving inheritance/gifts from parents dummy (year $t-1$)		1.722	0.543	0.252	0.065 **
Location dummy (year t /three major urbanizations = 1)		1.019	0.019	0.170	0.004
Constant		—	-4.471	3.137	—
Person-period number					2405
Case number					512
Event experience number (rental = 1)					202
Compatibility test (chi square/freedom)					2408.3/2384 n.s.
LR test (chi square/freedom)					185.81/19 ***
Pseudo-determination coefficient					0.13
Logarithmic likelihood					-600.73

Note: Significance referent ***0.1%, **1%, *5%, +10%

The wife's employment status was not significant. Due to the time between housing loan applications to actually acquiring the house and moving in, the wife's employment status a year prior did not seem to affect credit. Also, more than half the wives were employed within one to three years before housing acquisition (Murakami 2007), and in many cases, the wife's employment may have been supplementary to the husband's.

The variables with the highest odds ratio were coresidence with parents and receiving inheritance or *inter vivos* gifts from parents. However, the effects of living with parents must be interpreted carefully, as the definition of the dependent variable, that is, living with parents in a house they own, was generally considered to be living in a house owned by the parents. The effects of inheritance and *inter vivos* gifts, as in previous research, showed that these factors increased the probability of the transition to home ownership⁹.

The odds ratios were particularly high for living with parents and receiving parental inheritance or *inter vivos* gifts. Furthermore, among occupational dummy variables, those for professional or management/clerical work at a large company, as well as the children dummy, were higher than the household savings odds ratio.

The standardized coefficient was high for the living with parents variable as well. However, for some career dummy variables, it was approximately the same as for the inheritance or *inter vivos* gifts from parents dummy variable. The standardized coefficient for the husband's age variable was also high.

To briefly summarize the above results, in contrast to the limited influence of careers, significant effects were determined by savings, living with parents, and receiving inheritance or *inter vivos* gifts from parents. Regarding the influence of occupation and parents—a particular focus of this paper—the difference of respondents' ages range by country. While occasional omitted standardized coefficients present difficulties, a simple comparison can be made

with some of the countries described in Kurz and Blossfeld ed. (2004). The tendency for white-collar workers to acquire housing more easily is also found in the conservative West German and Italian regimes and the liberal UK regime. In contrast, in the social democratic regime of Norway, such occupational influence is not present. However, on the whole, being a white-collar worker is advantageous for home ownership. In Norway, *inter vivos* gifts from parents promote the transition to home ownership, but the effect disappears when limited to the younger generation. This result is in contrast to that of Japan. When comparing the effects of individual occupation and of parents being home owners, the former is larger in West Germany. In the social democratic regime of Denmark, the numbers show a larger effect of parents being home owners. However, Leth-Sørensen argues that this effect is not very significant (Kurtz 2004; Bernardi & Poggio 2004; Ermisch & Halpin 2004; Gulbrandsen 2004; Leth-Sørensen 2004). Compared to other countries, an important characteristic of Japan is its combination of strongly familial (conservative) elements along with liberal ones, which has been demonstrated in this study.

5 The roles of social stratification and family

The analysis clarified that, in addition to occupation, socioeconomic status and family are important factors influencing the transition to home ownership. Comparing the two, the role of the family is arguably more significant. Given that familial elements are strong and liberal elements are also present, the Japanese housing system seems to be consistent with Esping-Andersen's categories as well.

Within socioeconomic status, when limited to the effects of savings, Hypothesis 1 is supported. Tendencies such as those noted in Hypothesis 1 appear with regard to occupational impact, but they are limited overall. On the other hand, the strong influence of family validates Hypothesis 2 as well. The lesser influence of occupational status is consistent with the results of Kanomata (2001) for various possible reasons.

First, the dependent variable in this paper was not limited to the *purchase* of owned homes. Housing purchases require large amounts of capital and it is easier for those with higher occupational status to receive credit. Therefore, if the analysis had been limited to purchases, the influence of occupation would have been stronger. However, this limitation was not applied, as it would have concealed the aspect of home ownership through living with parents or inheritance¹⁰.

Second, while various types of occupational categorization were attempted, the limitations of the questionnaire with pre-coded questions may be partially responsible for the results. Furthermore, because of the young age of the respondents, few were in management positions or self-employed.

Third, the influence of social stratification is also expected to appear in issues of housing quality, such as dwelling area, distance from the workplace, single-family housing versus apartment building, etc.

When we compare the influence of socioeconomic status, the influence of family is stronger. As Kanomata (2001) points out, a direct rather than indirect mechanism of status achievement seems to be operating between generations. The inequity of home ownership, originating in the achieved status of the husband's occupation, can be alleviated by inheritance and *inter vivos* gifts from family, although the family is arguably an ascribed status. As noted in section 2, housing policy in Japan provides little public housing allowance, with individuals and families being expected to look out for themselves. Furthermore, the 2003 tax reforms expanded the non-taxed bracket of the *inter vivos* gifts, increasing family influence. However, not everyone receives an inheritance. Individuals with nothing to receive from their families have no way to inherit. In itself, this compels us to question the family role in the transition to home ownership. Regarding inheritance for the younger generation and parent-child relations, an intergenerational exchange model—where children would expect inheritances in return for supporting their parents in old age, and parents would expect the same reciprocity—has been suggested as a future possibility for Japan (Murakami 2006b). However, a more theoretical and empirical examination is required.

The influence of living arrangement is significant, but further verification of the process of coresidence and home ownership is needed. For example, some people build houses and invite their parents to live with them to help with housework and child-rearing support, while others do the same to support their elderly parents. Conversely, some people may return to the homes owned by their parents to live with them. Analyzing these processes would be

a worthwhile objective for future research. Conversely, the custom of multigenerational living is declining. If housing loan interest remains low, more people may buy a house with their income rather than waiting to inherit from their parents. In this case, because housing will be acquired in a liberal market, the influence of occupation, income, and savings may remain at current levels or increase even more.

Because the data analyzed in this paper targeted young people in the process of accumulating assets, changes are expected to occur as people age. During the period selected for analysis, the housing loan interest outlook and hiring environment lacked transparency, meaning the transition to home ownership may have been postponed overall. In this case, occupational differences regarding home ownership may come to light later on in the context of the advance of marketization. Because the prompt acquisition of housing and loan repayment makes it easier to save money for education and retirement, the timing of the transition to home ownership influences security and various opportunities in mid and later life. Therefore, it is also important to continue examining the influence of occupational status and careers. The remaining issue of improving the model's accuracy can be approached by considering how to handle the heterogeneity of late entries and unobserved individuals. Further analysis will be conducted as future data is gathered.

Remarks

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Notes

- 1) Bourdieu (2000=2006) points out that housing reflects individual values, and that it is inseparable from the family as a long-lasting social group and from the collective project of perpetuating family, with housing thus highly significant material assets for the family.
- 2) The two surveys conducted before 1958 have been omitted due to the differences in survey methods and regions.
- 3) Kanomata (2001) uses the real estate market value of all possessions as the dependent variable, unlike this paper. However, the real estate market value is bound to decrease for those not owning housing. Therefore, Kanomata is cited hereafter as an important reference.
- 4) STATA ver. 9.0 was used to analyze the data.
- 5) Some people may own homes but not currently reside there, for instance, those who have inherited homes in the countryside but live in rental housing in the city. In this case, subjects were classified as tenants, because this paper investigates the ownership status of the housing of current residence.
- 6) Reverse causal effect, whereby people receive inter vivos gifts while their parents are still living after deciding to acquire housing, is also conceivable. However, the inheritance/inter vivos gifts variable used here is not necessarily limited to housing acquisition. The inheritance/inter vivos gifts may be used for other purposes.
- 7) The standardized regression coefficient was calculated based on Menard (1995).
- 8) There was also no large correlation between income and other variables.
- 9) Considering that oldest sons were the most likely to be living with their parents, an analysis was attempted with the addition of the husband's birth order and number of siblings, but no major changes in the effect of the co-residence variable were found. The husband's number of siblings had a significant negative effect, with a higher probability of home ownership with fewer siblings. However, this was not enough to create major changes in

the results shown in Table 4. Thus, the variables were omitted. The husband's and husband's father's years of education were also added to the model, but neither were significant. If anything, they reduced the fit of the model (both results were omitted).

- 10) It was also expected that living with parents would correlate to the area of residence and socioeconomic characteristics. Indeed, the data shows that living with parents is more common outside of greater metropolitan areas. However, land and building prices are cheaper outside of these areas, possibly enabling the transition to home ownership by building a separate house without living with parents (based on this point, living in separate buildings within the same site was also considered as coresidence.) For families with low income, living with parents could constitute home ownership. In consideration of this possibility, the interaction of occupation and coresidence was included in the analysis but produced no significant effects.

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