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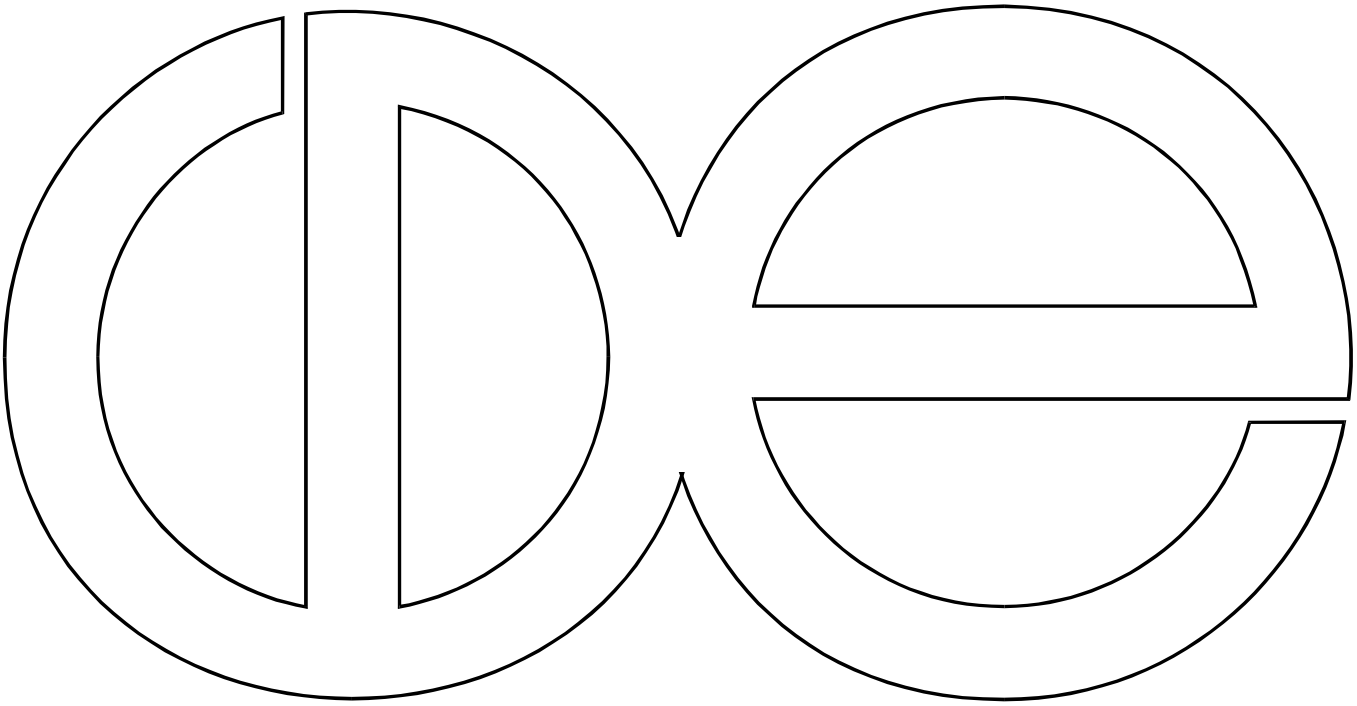

Coresidence with Parents, the "Comforts of Home", and the Transition to Marriage among Japanese Women[*]

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Abstract

Unlike their counterparts in most industrialized societies, Japanese women are spending an increasingly longer proportion of their young adult years unmarried and living with parents. In this paper, we develop hypotheses linking the "comforts of home" to later marriage in Japan. To evaluate these hypotheses, we use six waves of data from a panel survey of young women to estimate hazard models for the transition from the parental home to first marriage. Results suggest that freedom from domestic responsibilities is associated with later marriage among coresident women who face the most difficulty in balancing family and career whereas material comforts of the parental home are associated with later marriage among women whose potential husbands have the most tenuous economic prospects.

Key Words: marriage, living arrangements, coresidence, Japan

Introduction

Unlike their counterparts in most industrialized societies, Japanese men and women are spending an increasingly longer proportion of their young adult years unmarried and living with parents. This trend reflects a combination of steady increases in age at first marriage over the past twenty-five years in conjunction and very little growth in the prevalence of cohabitation and independent living prior to marriage. This is particularly true for women. Despite a three-year increase in mean age at first marriage from 24.7 in 1975 to 27.4 in 2002 (National Institute for Population and Social Security Research – NIPSSR hereafter – 2004), recent data indicate that roughly three-quarters of unmarried women live with their parents (Raymo 2003a) and less than ten percent have ever cohabited (NIPSSR 2003). In contrast to most other low-fertility, late-marriage societies where the prevalence of independent living and cohabitation prior to marriage has grown rapidly (van de Kaa 1987), marriage remains the modal destination out of the parental home for women in Japan. This pattern of nestleaving is difficult to reconcile with emphases on increasing individual autonomy and self-fulfillment that form the core of theoretical discussions of family change associated with the second demographic transition (Lesthaeghe 1995). This difficulty is compounded by the fact that other aspects of family formation such as very low fertility and very late marriage place Japan at the forefront of the second demographic transition (Lesthaeghe & Moors 2000).

How then should we interpret the very high levels of premarital coresidence among women in Japan? If we assume that independent living is preferred, on average, to living with parents, one compelling explanation may be found in the structural and normative forces that limit the availability of alternatives to marriage for young women in Japan. The very high cost of establishing a temporary independent residence, relatively low wages at young ages, high

consumption aspirations, and lingering social stigma against cohabitation and independent living all contribute to limit non-marital alternatives to coresidence with parents. This focus on institutional forces suggests that unmarried Japanese women remain in the parental home primarily because they are unwilling or unable to pay the financial and social costs of independent living or cohabiting prior to marriage. It is important to reiterate, however, that this explanation rests upon the assumption that unmarried women would generally prefer independent living to coresidence with parents. This assumption is probably a reasonable one in the U.S. where expectations of financial and residential independence following the completion of school are strong among both children and their parents (Goldscheider, Thornton, & Yang 2001) but may be less appropriate in the Japan where the ethos of intergenerational independence is not as strong (Iwakami & Miyamoto 2003; Miyamoto, Iwakami, & Yamada 1997). Because the Japanese context is characterized by a relatively limited desire for independence (among adult children as well as their parents) and significant social and economic barriers to independent living, it is clear that a more comprehensive explanation for high levels of premarital coresidence must focus on the attractiveness of marriage relative to extended coresidence with parents.

The complementary explanation we develop and evaluate in this paper suggests that, in the context of limited non-marital alternatives to coresidence, social and economic changes have combined to make extended coresidence in the parental home an increasingly attractive alternative to early marriage for some Japanese women. Just as Morgan & Hirosima (1983) sought to explain the continued prevalence of postmarital coresidence in Japan by emphasizing that "societies have long adapted existing institutions to accommodate family change in a way that requires the least social reorganization," we present a framework for understanding extended

premarital coresidence with parents as a strategic adaptation of an existing family arrangement to changing social and economic circumstances. In developing this framework, we focus on ways in which increasing economic uncertainty faced by young men and incompatibility of the wife-mother role with women's growing career opportunities have contributed to changes in the desirability and feasibility of early marriage. Specifically, we hypothesize that the "comforts of home" make extended coresidence with parents a strategic adaptation to (a) changes in the desirability of early marriage for women who have benefited most from expanding educational and economic opportunities and (b) changes in the feasibility of early marriage for women whose potential husbands have been most adversely affected by the economic recession of the 1990s. After first summarizing trends in women's living arrangements and further describing the social and economic forces limiting non-family alternatives to marriage at young ages, we proceed to develop these hypotheses in greater detail.

Premarital living arrangements and marriage in Japan

Trends in the prevalence of premarital coresidence with parents in Japan are described in Table 1. The first two columns indicate that the age-specific proportions of unmarried women coresiding with parents changed very little between 1975 and 2000. In both years, roughly three-fourths of unmarried women age 20-29 were living with their parents. Among unmarried women in their early thirties, the proportions coresiding with parents are only slightly lower. Corresponding figures for men (not shown) describe a very similar trend although the prevalence of coresidence is substantially lower than for women (Raymo 2003a).

While the likelihood that unmarried women coreside with parents has remained constant, the trend toward later marriage (described in the third and fourth columns of Table 1) has led to a substantial increase in the proportion of young Japanese women who are both unmarried and

living with parents. A comparison of the fifth and sixth columns shows change in the age-specific proportions of women who have never married and are living with parents. These figures are the product of the values for the corresponding years in columns 1-4. The age-specific proportions unmarried and living with parents increased sharply between 1975 and 2000, especially for women in their late twenties and early thirties. The proportion of 25-29 year old women unmarried and living with parents increased from .16 in 1975 to .42 in 2000. The corresponding proportions for 30-34 year old women are .05 and .19. These figures are substantially higher than in most western countries but similar to the patterns observed in Southern European countries (Aassve, Billari, Mazucco, Ongaro 2001; Fernandez Cordon 1997).

[Table 1 about here]

Limited alternatives to coresidence with parents and marriage

Any explanation for the very high prevalence of premarital coresidence with parents must recognize the limited availability of alternative living arrangements. In contrast to their counterparts in the U.S. and most other industrialized countries, young Japanese women (and men) face important structural barriers to establishing a temporary independent residence or cohabiting relationship. The high cost of housing is of obvious importance. Housing costs have been linked to later nestleaving in the U.S. (Haurin, Hendershott, & Kim 1993; Whittington & Peters 1996) and it is clear that unmarried Japanese individuals or couples looking for a comfortable temporary residence face far more limited options than their counterparts in the U.S. Affordable apartments are small, are not furnished with major appliances, and typically require a substantial deposit (*shikikin* and *reikin*), much of which is non-refundable. The high cost of temporary housing, in conjunction with high consumption aspirations (Yamada 1999) and

relatively low wages at young ages, presumably makes independent living or cohabitation prohibitively expensive for many young Japanese.

Lingering normative disapproval is another barrier to independent living among unmarried Japanese women. Research on the lives of Japanese women published not so long ago describes the marriage-market premium attached to domesticity (e.g., Lebra 1984) and the paternalistic attitudes of employers toward their unmarried female employees (Brinton 1993). Many companies have been reluctant to hire unmarried women not living with their parents, viewing such women as less suitable potential wives for their male employees (Brinton 1993). Women's marriage market prospects as well as their labor market prospects have thus been closely associated with their living arrangements. In this context, it is not surprising that cohabiting relationships have been even less common than independent living among young Japanese women. Despite evidence from attitudinal surveys indicating a decline in the normative disapproval of premarital sex and cohabitation (Atoh 2001; Iwasawa 1999), the normative barriers to independent living and cohabitation for women in Japan remain far higher than in the U.S.

Extended coresidence as adaptive strategy

Just as postmarital extended family living has been viewed as an adaptation of an "old" family arrangement to suit the needs of contemporary couples and their families (Morgan & Hirosima 1983), it is possible that the continued prevalence of premarital coresidence into adulthood may reflect the adaptation of another "old" family form to suit the realities of late marriage in contemporary Japan. One key finding from recent research on marriage timing is that Japan is one of the few industrialized countries in which indicators of women's economic resources (e.g., educational attainment and earnings) are negatively related to the risk of marriage (Ono 2003,

Raymo 2003b; Tsuya & Mason 1995). One plausible interpretation of this finding suggests that structural and normative forces perpetuating a "breadwinner-homemaker" division of labor among spouses make it very difficult for women to combine career and family (e.g., Blossfeld 1995). The opportunity costs of early marriage are thus thought to be particularly high for women with high earnings potential and working in rewarding jobs (Ōsawa & Komamura 1994).

To a large extent, the difficulty of balancing work and family reflects the fact that Japanese wives continue to perform the vast majority of domestic labor. Japanese husbands' participation in housework and childcare is substantially lower than that of their counterparts in most other industrialized countries (Tsuya & Mason 1995), with half of married men doing no housework at all (Tsuya 2000). Furthermore, the limited availability of quality day care (Miura 2001), men's long work hours and relatively inflexible work schedules (Ogasawara 2001), a strong belief in the value of maternal care provision for preschool age children (Hirao 2001), and heavy parental involvement in children's education (Tsuya & Choe 2004), all limit women's ability to continue working full-time after marriage and childbirth. Unmarried Japanese women are clearly aware of these barriers to continued employment. In a 1997 survey, only 27% of unmarried women considered balancing work and family to be an ideal life course and only one-fourth of these women felt that they would be able to achieve this ideal. Most unmarried women who would like to combine work and family expect to drop out of the labor force following marriage or childbirth (NIPSSR 1999). It is in this context that Tsuya and Mason (1995:162) argue that delayed marriage may reflect women's growing desire to enjoy "a period of relative autonomy and freedom from domestic burdens during which they can seek higher education and work for pay."

If women are indeed postponing marriage and the associated increase in domestic responsibilities in order to invest in education and career, extended coresidence with parents may be a particularly attractive environment in which to do so. Recent surveys indicate that unmarried women living with parents do very little housework while their mothers do nearly all of the cooking and cleaning (Iwakami & Miyamoto 2003; Miyamoto, Iwakami, & Yamada 1997). This division of labor presumably reflects the relatively strong domestic focus of Japanese mothers. Relative to their counterparts in the U.S. and most other industrialized countries, current cohorts of middle-age women in Japan are less likely to have developed a strong attachment to the labor force and more likely to be completely out of the labor force (Brinton 1993). Freedom from domestic responsibilities presumably makes extended coresidence with parents an attractive alternative to early marriage for women in general (Ōta & Sakaguchi 2004), but we expect this to be particularly true among women for whom the opportunity costs of entering the "onerous status of the Japanese wife and mother" (Tsuya & Mason 1995:156) are highest.

Hypothesis 1: We therefore hypothesize that, among women coresiding with parents, the negative relationship between limited domestic responsibilities and the risk of marriage is strongest for those with the highest levels of human capital (e.g., higher education, higher status jobs, higher earnings).

This hypothesis does not imply that all economically independent Japanese women are reluctant to take on the increased domestic responsibilities associated with marriage. Indeed, there is little evidence that highly educated women are rejecting a primarily domestic role for themselves (Tsuya & Mason 1995) and there are surely many highly educated women with relatively high earnings who are eager to marry, quit their jobs, and become stay-at-home

mothers. On average, however, we expect that the link between freedom from domestic responsibilities and delayed marriage will be stronger for coresident women with relatively high earnings potential than for otherwise similar women for whom the opportunity costs of substantially increasing domestic responsibilities are lower.

Like much recent research on trends in Japanese marriage, Hypothesis 1 focuses on changes in the marriage behavior of women with relatively high levels of human capital. It is important to recognize, however, that marriage rates have declined steadily across the socioeconomic spectrum (Raymo 2003a) and that changes in the marriage behavior of women with limited earnings potential may reflect a very different set of social and economic forces. As in the U.S. (Oppenheimer 2000; Oppenheimer & Lewin 1999), it may be that the declining economic prospects of young men with lower levels of education are particularly important for understanding changes in the marital behavior of the women who are most likely to marry them. The extended recession in Japan during the 1990s has been characterized by substantial increases in unemployment and contingent employment at young ages. Census data indicate that male unemployment rates in 2000 were 9.1% among 20-24 year olds and 5.8% among 25-29 year olds (up from 3.8% and 2.8%, respectively, in 1990). The proportion of young men employed temporarily or part-time on fixed term contracts (popularly referred to as "*freeters*") also increased sharply during the 1990s (Kosugi 2004). Importantly, there is a strong educational gradient in employment, with the unemployed and *freeters* heavily concentrated among those with less education (Kosugi 2004). The declining economic prospects of young men with lower levels of education may be a particularly important reason for delayed marriage among less educated women in Japan given the strength of assortative mating with respect to educational attainment (Raymo 2000; Suzuki 1991), the continued importance of men's earnings potential as

a key criterion by which women evaluate potential spouses (NIPSSR 1999), and the fact that, unlike the U.S., there is little evidence that gender asymmetry in spouse selection criteria has diminished in recent years (Raymo & Iwasawa 2004).

The general importance of economic barriers to marriage is clear from recent survey data. Among men and women who have a romantic partner and would like to marry in the near future, a substantial proportion cite insufficient economic resources and the lack of adequate housing as important reasons for remaining single (NIPSSR 1999:44). Furthermore, several surveys indicate that many single Japanese men and women believe their standard of living would decline if they were to marry (Atoh et al. 1994; Tsuya, Mason, & Bumpass 2004; Miyamoto, Iwakami, & Yamada 1997). The fact that coresident singles are particularly likely to feel this way (Tsuya, Mason, & Bumpass 2004; Yamada 1999) points to the importance of extended coresidence as a means for maintaining accustomed standards of living. In the context of economic uncertainty at young ages, the material comforts of the parental home presumably make extended coresidence with parents an attractive alternative to early marriage for women in general (Ōta & Sakaguchi 2004). However, we expect this to be particularly true among women whose potential husbands have been most adversely affected by Japan's prolonged recession.

Hypothesis 2: We therefore hypothesize that, among women coresiding with parents, the negative relationship between material comforts of the parental home and the risk of marriage is strongest for those with the lowest levels of achieved socioeconomic status (e.g., lower education, unstable employment, lower earnings).

It is important to emphasize that this hypothesis is based on evidence of a strong tendency for Japanese marriages to be assortative with respect to indicators of achieved socioeconomic status. Because we do not have data providing direct information on the

characteristics of potential mates (e.g., boyfriends, fiancés), we assume that the socioeconomic characteristics of respondents are positively correlated with those of the men they are most likely to marry. Hypothesis 2 thus reflects an expectation that, on average, marriage is most likely to result in a reduced standard of living for women characterized by both relatively low levels of achieved socioeconomic status and relatively comfortable parental home environments.

Our emphasis on potential relationships between the benefits of extended coresidence in the parental home and the trend toward later marriage in Japan is not a new one. Several scholars have discussed potential linkages between high levels of premarital coresidence with parents, changes in the nature of parent-child coresidence, and the trend toward later marriage (e.g., Iwakami & Miyamoto 2003; Miyamoto, Iwakami, & Yamada 1997; Ōta & Sakaguchi 2004; Raymo 2003a; Yamada 1996, 1999). In much of this literature, the "comforts of home" (e.g., free room and board and little or no responsibility for cooking and cleaning) are suggested as reasons for delayed marriage. This explanation for later marriage, and the associated discussion of "parasite singles," has received a great deal of media attention (see Butler 1998 and Orenstein 2001 for related accounts in the U.S. popular press), but empirical studies have found very little evidence that transition from parental home to marriage is slowest among those for whom the comforts of home are the greatest. Indeed, one recent study suggests that the transition from the parental home to marriage is, on average, slower among those women least likely to enjoy a comfortable "parasitic" existence (Raymo 2003a).

The theoretical framework presented in this paper departs from previous literature on relationships between the comforts and home and delayed marriage in two important ways. The first is our emphasis on the adaptive nature of premarital coresidence and the second is our explicit focus on how the benefits of extended coresidence may depend fundamentally upon

women's own socioeconomic resources. Because the freedom from domestic responsibilities afforded by coresidence with parents may play a particularly important role in facilitating career investment, we expect limited participation in housework to be negatively associated with the risk of marriage among coresident women with the highest earnings potential. Because the material comforts of the parental home may provide a substantially higher standard of living than attainable through marriage at relatively young ages, we expect greater material comforts to be negatively associated with the risk of marriage among coresident women with lower levels of achieved socioeconomic status (i.e., women whose potential mates have been most adversely affected by changing economic circumstances).

Data

To evaluate these hypotheses, we use data from the Japanese Panel Study of Consumer Life (JPSCL), an annual survey of a nationally representative sample of young women conducted by the Institute for Research on Household Economics. The original sample was stratified by marital status, with 1,002 married women and 498 unmarried women aged 24-34 surveyed in the first wave in 1993. We use the first six waves of data (1993-1998) and limit our analyses to the 419 never married women who were living with their parents at wave 1. Of the 498 respondents who were unmarried at wave 1, we eliminated 42 (8%) who had been previously married and eliminated another 37 (7%) who were not coresiding with their parents. Coresidence with parents is defined based on household rosters, with those reporting at least one parent in the household classified as coresident. After these restrictions, our final sample consists of 1,384 person-years of data.

The yearly reports of marital status, living arrangements, and characteristics of the parental home environment available in the JPSCL are essential for understanding the

relationship between home environment and the transition to marriage. In previous studies based on cross-sectional data (e.g., Raymo 2003a), it has been both necessary to assume that living arrangements are stable prior to marriage and impossible to include direct measures of the home environment. The age range of the JPSCL respondents also makes these data appropriate for analyses of extended coresidence with parents and the transition to marriage. Because initial observation follows the completion of higher education (the youngest respondents were 24 years old at initial observation), we avoid complications introduced by residential mobility associated with schooling (Suzuki 2001). These advantages do not come without a price, however. The most important limitation is the small sample size. With only 37 unmarried respondents living outside of the parental home at the first wave, it is not feasible to estimate and compare parallel models for the transition from independent living to marriage. With only 419 coresident unmarried women in our sample, it is also necessary to operationalize variables and specify models as parsimoniously as possible. Two further limitations are the censoring of marriages prior to age 24 and the relatively high degree of panel attrition. These limitations make it important to recognize that our results are not generalizable to all Japanese women. Specifically, our results describe relationships between home environment, achieved socioeconomic characteristics, and the transition to first marriage among Japanese women who remained unmarried until at least age 24 and were living with their parents in 1993. Although the proportion of the population possessing these characteristics cannot be calculated directly from Census data, it is clearly a majority. According to the 1995 census, 71% of 24 year old women had never married and 78% of unmarried 25-29 year old women were coresiding with parents.

Variables

The dependent variable in our analyses is marital status transition between years j (j = 1993, 1994, 1995, 1996, 1997) and j+1. This dichotomous indicator is equal to one for women who are unmarried at survey year j and married at survey year j+1 and equal to zero for women who remain unmarried at year j+1. Between 1993 and 1998, 156 (37%) of the women in our sample married, 145 (35%) remained single, 32 (8%) left home to live independently, and 86 (21%) were lost to follow-up.

The independent variables of primary interest describe the socioeconomic characteristics of respondents and the characteristics of their parental home environments. The former set of variables consists of educational attainment, occupation, and income, three of the most commonly used indicators of achieved socioeconomic status (Hauser & Warren 1997). The latter set consists of parental income, time spent on housework, financial contributions to the household, and presence of other coresident siblings. As noted above, the small sample size requires us to represent these key constructs as parsimoniously as possible. Because most variables are either categorical (e.g., educational attainment, parental income) or have a very high proportion of zero values (e.g., time spent on housework, financial contributions to the household), we represent all variables dichotomously. For each of the three measures of respondents' socioeconomic status, we construct two 0-1 variables that classify respondents into higher and lower status categories. For each of the four characteristics of the parental home environment, we construct a single dichotomous measure classifying respondents' home environments as more or less comfortable. Imputation of missing data was conducted in a two-step process. First, we replaced missing values with the most temporally proximate valid response. If data were missing at all waves, we imputed values using the sample mean or mode.

For educational attainment, *low education* equals one for vocational and high school graduates and zero for those with tertiary education whereas *high education* equals one for university graduates and zero for everyone else. Junior college graduates are excluded from both categories. For occupation, *low occupational status* equals one for those working part-time and zero for everyone else whereas *high occupational status* equals one for those who are in professional and managerial occupations and zero for everyone else. For income, *low income* equals 1 for those whose self-reported annual income was in the lowest quintile and zero otherwise whereas *high income* equals 1 for those whose self-reported annual income was in the highest quintile and zero otherwise. Of these variables, income is the only one not measured at survey year j. Because respondents were asked to state their income during the previous year, the reported value at year j+1 is the preferred measure. However, it is clear that many respondents interpreted previous year to mean current calendar year (the survey is conducted in October), thus rendering reported earnings endogenous to marriage behavior. More specifically, income is systematically lower for women who married in a given survey year because many of those who married quit their jobs at marriage. We therefore adjusted reported income for those women who quit their jobs between surveys and also reported that the reason for quitting was to marry. If reported months worked during the past year were zero for these women, we defined income to equal the value reported in the previous wave (i.e., wave j). If reported months worked were greater than zero, we multiplied annual earnings reported in the current wave by (12 ÷ reported months worked). Income quintiles were constructed at each wave based on the values for all respondents remaining at risk of first marriage.

For *parental income*, we collapsed the seven categories of respondents' reports of parents' pre-tax income into two categories, with incomes of less than 7.5 million yen (roughly

$68,000 at an exchange rate of $1=111 yen, the mean monthly rate during 1993-1998) coded as zero and incomes of 7.5 million yen or more coded as one. Because respondents were not asked to provide parental income in the 1995 and 1997 surveys, we assume that parental income category does not change between 1994-1995 and 1996-1997. *Time spent on housework* is based on a question in which respondents were asked to allocate the twenty-four hours of a typical day across several different activities. Separate questions were asked for a typical weekday and a typical weekend day. Because our interest is in the potential conflict between domestic responsibilities and employment, we use the report for time spent on housework on a typical weekday. We code those who reported spending any time on housework as zero and those who spent no time on housework as one. The coding of this and other measures of home environment such that a value of one corresponds to a more comfortable environment is designed to facilitate interpretation of results from the models described below. *Financial contribution to the household* is based on a question asking respondents how much of their previous month's (i.e., September) income they transferred to their parents. We code those who reported transferring no money as one and those who transferred any money as zero. Our decision to treat any non-zero value for contribution to time spent on housework and household finances as an indicator of a "less comfortable" home environment is motivated by the very large proportion of respondents reporting values of zero for both questions. Because many women who do minimal amounts of housework or contribute trivial amounts of money to the household budget are not included in the "more comfortable" category, our coding scheme represents a very conservative characterization of the comforts of home. *Presence of coresident siblings* is equal to one if no other siblings were coresiding with the respondent and parents at year j and equal to zero if at least one other sibling was present.

In all models, we also control for *city size*. This variable is equal to one for respondents living in one of Japan's thirteen largest cities (a commonly used geographical classification that includes Sapporo, Sendai, Chiba, Tokyo, Yokohama, Kawasaki, Nagoya, Kyoto, Osaka, Kōbe, Hiroshima, Kita-Kyūshū, and Fukuoka) and zero otherwise. Inclusion of this variable is motivated by previous studies showing large regional differences in marriage (Raymo 2003a, 2003b). We expect the risk of marriage to be significantly lower for residents of large metropolitan areas, reflecting factors such as high housing costs, more abundant social alternatives to marriage, and lower social and normative pressures to marry.

As discussed above, the opportunity costs of entering a typically gender-inegalitarian marriage are presumably greatest for women with higher education, higher earnings, and employment in higher status jobs. In addition to higher opportunity costs, women in these higher socioeconomic status categories may also hold relatively unfavorable attitudes toward the asymmetric gender division of labor characterizing most Japanese marriages. Hypothesis 1 therefore suggests that the marriage-delaying effect of spending no time on housework will be particularly strong for coresident women with a four-year degree, working in professional and managerial jobs, and in the highest income quintile. In contrast, the uncertain economic prospects of potential mates and the associated potential for a reduction in living standards may be a more important reason for women in lower socioeconomic status groups to delay marriage. Hypothesis 2 therefore suggests that higher parental income, no financial contributions to the household, and no other siblings in the household will be most strongly related to delayed marriage among coresident women without any college education, working in part-time jobs, and in the lowest income quintile.

Methods

To evaluate these hypothesized relationships between characteristics of the home environment, respondents' achieved socioeconomic status, and the transition to first marriage, we estimate a series of discrete-time hazard models. All models assume proportional hazards and are estimated using logistic regression. Censoring occurs at the earliest of the following four events: first marriage, last survey date (1998), leaving home prior to marriage, and loss to follow-up. We thus treat leaving home for marriage and leaving for other reasons as competing risks. We begin by estimating the following baseline model:

$$\ln[p_{it+1}/(1-p_{it+1})] = \alpha_1'A_{it}+\alpha_2 C_{it}+\beta'X_{it}+\gamma'Y_{it}+\varepsilon_{it}, \quad (1)$$

where p_{it+1} is the probability of first marriage for the i^{th} respondent at age t+1 conditional on remaining single through age t (t = 24-38). $\text{Exp}(\alpha_1'A_{it})$ represents the baseline hazard which is specified as a linear spline with a single knot at age 26, C is city size, X is a vector comprised of the six dichotomous indicators of socioeconomic status, and Y is a vector comprised of the four dichotomous measures of parental home environment. β and γ thus represent differences in the log-odds of marriage for respondents with values of one for given X and Y variables and otherwise similar respondents with values of zero for the corresponding X and Y variables. Popular Japanese literature on "parasite singles" (e.g., Yamada 1999) suggests that higher parental income, doing no housework, contributing no money to the household, and absence of other coresident siblings should all be associated with later marriage (i.e., $\gamma < 0$ for each of these characteristics). In contrast, the theoretical framework we have presented suggests that these "comforts of home" may be unrelated, on average, to the risk of marriage because their contribution to later marriage depends fundamentally upon women's own achieved characteristics (i.e., X). To evaluate this possibility, we allow coefficients for measures of home

environment to vary by women's own socioeconomic characteristics by estimating interactions between X and Y,

$$\ln[p_{it+1}/(1- p_{it+1})] = \alpha_1'A_{it}+\alpha_2C_{it} +\beta'X_{it}+\gamma'Y_{it}+\delta'X_{it}*Y_{it}+\varepsilon_{it}. \quad (2)$$

With six measures of women's socioeconomic status and four measures of parental home environment, there are a total of twenty-four interaction coefficients (i.e., δ) to estimate. The small size of our sample necessitates the estimation of separate models to describe each of these interactive relationships.

In Table 2, we summarize the hypothesized direction of the interaction coefficients (δ) for the 12 models directly relevant to Hypotheses 1 and 2. The light gray cells describe the hypothesized interactive relationships between higher socioeconomic status and freedom from domestic responsibilities (Hypothesis 1) and the dark gray cells describe the hypothesized interactive relationships between lower socioeconomic status and the material comforts of the parental home (Hypothesis 2). For example, the hypothesized negative sign for the interaction between high education (row 1) and no housework (column 2) indicates that freedom from domestic responsibilities is expected to reduce the risk of marriage for highly educated women living with parents to a greater degree than for otherwise similar women without a university degree. Similarly, the hypothesized negative sign for the interaction between low education (row 4) and high parental income (column 1) indicates that the material comforts associated with higher parental income are expected to reduce the risk of marriage for less educated women living with parents to a greater degree than for otherwise similar women with at least a two-year college degree. Because our sample is small, we use $p < .10$ as the criterion for assessing statistical significance.

[Table 2 about here]

Results

Table 3 describes the characteristics of the sample at wave 1 and presents the results for Model 1. The descriptive statistics in column 1 indicate that, at wave 1, roughly 20% of the sample had a university education and a similar proportion was working in a professional and managerial job. Roughly half of the women in the sample were high school or vocational school graduates and 9% were part-time employees. The four measures of home environment highlight the potential advantages of extended coresidence with parents. Nearly two out of five women (37%) were living with parents whose annual income was 7.5 million yen or more while roughly half of the sample reported doing no housework on an average weekday (53%), contributing no income to the household budget (50%), and having no other siblings in the household (46%).

[Table 3 about here]

Results of the baseline model for the transition to first marriage are presented in the form of odds ratios in the second column of Table 3. These figures indicate that city size, part-time work status, and low income are significantly related to the risk of marriage. As expected, the odds of marriage for residents of Japan's thirteen largest cities are significantly lower than those of their counterparts living in smaller cities and rural areas. Those in part-time jobs marry faster than otherwise similar women who are either in full-time jobs or not working at all and those in the lowest income quintile (half of whom report zero earnings) marry significantly faster than otherwise similar women in the middle three quintiles. The coefficient for low earnings should be interpreted with caution, however, as it is possible that women with plans to marry soon may have recently stopped working and thus have no earnings. Interestingly, the odds ratio for the highest income quintile is also greater than one, but the underlying coefficient is not statistically different from zero. Educational attainment and higher status occupations are also unrelated to

the risk of marriage in this sample. Odds ratios associated with the four measures of home environment provide little evidence that the hypothesized "comforts of home" are associated, on average, with a slower transition to marriage. Coefficients for higher parental income, no housework, and no financial contributions to the household are not statistically different from zero. The only significant coefficient is for absence of other coresident siblings. Those who are the only child coresiding with parents are 31% less likely to marry in any given year than are otherwise similar women living with at least one other sibling.

Table 4 presents results of models in which relationships between characteristics of the home environment and the risk of marriage are allowed to differ by respondents' own socioeconomic characteristics. As in Table 2, the shaded cells highlight the interaction coefficients from the twelve models directly relevant to our hypotheses. For the sake of completeness, we also present results for the other twelve models. To concisely summarize the results of these twenty-four models, we present two odds ratios from each model. For women in each category of the six socioeconomic status variables (rows), these figures compare the odds of marriage for women living in more comfortable home environments (columns) to the odds of marriage for otherwise similar women living in less comfortable home environments. For each SES variable, the first row presents the odds-ratio for women possessing the socioeconomic characteristic of interest (i.e., $\exp(\gamma+\delta)$) whereas the second row presents the corresponding odds-ratio for women in the reference SES category (i.e., $\exp \gamma$). For example, the figure of 1.37 in the first row and first column compares the odds of marriage for university graduates living with parents earning at least 7.5 million yen to the odds of marriage for similarly educated women living with parents who earn less than 7.5 million yen. The figure of 1.04 in the second row and first column is the corresponding comparison for women without a university degree.

Odds ratios associated with coefficients that are statistically significant at $p < .10$ are denoted with asterisks and daggers. The former indicate the statistical significance of γ whereas the latter indicate the statistical significance of δ.

[Table 4 about here]

Coefficients in the light gray cells are consistent with the hypothesis that freedom from domestic responsibilities contributes to later marriage among women for whom the opportunity costs of marriage are presumed to be the greatest. The risk of marriage for highly educated women who do no housework (row 1, column 2) is only 40% of that for highly educated women who report doing any housework. A similar pattern is observed for women in higher status occupations. The risk of marriage for coresident women in professional and managerial jobs who do no housework (row 3, column 2) is only 33% of that for women in similar occupations who do any housework. In both cases, the negative relationship between housework and the risk of marriage is significantly stronger (at $p < .05$) for women in the higher status categories (as indicated by ††). Although the relationship between freedom from housework responsibilities and the risk of marriage for women in the highest income quintile (row 5, column 2) is in the expected direction, the coefficients underlying this relationship are not statistically different from zero.

Coefficients in the dark gray cells are, to a lesser extent, consistent with hypothesis 2. In four of the nine models, the material comforts of home have a stronger marriage-delaying effect for women in the lowest category of socioeconomic status. Higher parental income is associated with a substantially lower risk of marriage for women working part-time and those in the lowest income quintile. The risk of marriage for women in part-time jobs who live with high-earning parents (row 9, column 1) is only 30% that of women in similar jobs who live with parents

earning less than 7.5 million yen. The risk of marriage among those in the lowest income quintile marry is roughly 40% lower if parents are in the higher earnings category rather than in the lower earnings category. For women who are not in the lower socioeconomic status categories, parents' income is unrelated to the risk of marriage (i.e., odds ratios are larger than one and underlying coefficients are not significantly different from zero). Results for financial contributions and coresident siblings are less clear. In only two of the six relevant comparisons do the relationships between home environment and the risk of marriage differ significantly by women's socioeconomic status. In both cases, however, these differences are consistent with our second hypothesis. For example, the risk of marriage for high school and vocational school graduates who contribute no money to the household budget (row 7, column 3) is only 62% that of otherwise similar women who contribute any money. The risk of marriage for women working part-time and having no other siblings in the house (row 9, column 4) is only 26% that of otherwise similar women living with at least one other sibling. In both cases, the material comforts of home have a significantly stronger negative effect on the transition to marriage among women in the lowest status categories.

Discussion

Unlike their unmarried counterparts in most other late-marrying societies, Japanese women are spending a larger proportion of their young adult years living with parents. This trend appears inconsistent with emphases on personal freedom and self-fulfillment central to theoretical explanations for family changes associated with the second demographic transition (e.g., Lesthaeghe 1995). In this paper, we have put forth and evaluated a novel explanation for the continued prevalence of premarital coresidence with parents among Japanese women. Focusing on increasing economic opportunities for women, the highly asymmetric spousal division of

domestic labor characterizing most Japanese marriages, and increasing economic uncertainty for young men with lower levels of education, we have presented a theoretical framework in which extended coresidence with parents may be seen as an adaptive response to social and economic forces limiting the desirability and feasibility of early marriage. Unlike previous discussions of extended premarital coresidence with parents, we have hypothesized that reasons for delaying marriage may differ fundamentally by women's own socioeconomic characteristics and that these differences may be crucial for understanding how the "comforts of home" contribute to later marriage.

For the most part, results of our analyses are consistent with our hypotheses. Freedom from domestic responsibilities has a strong negative association with the risk of marriage for coresident women possessing the highest levels of achieved socioeconomic status. Considering the difficulty Japanese women face in balancing work and family, these results suggest that the opportunity costs of entering gender-inegalitarian marriages are particularly high for women who have completed the most education and have achieved economic stability on their own. We also find that, in some cases, material comforts of the parental home have a strong negative association with the risk of marriage for coresident women possessing the lowest levels of achieved socioeconomic status. In the context of increasing economic uncertainty for men with lower levels of educational attainment, these results suggest that the prospect of a decline in living standards makes their potential wives less eager to leave their parental homes for marriage.

It is important to note, however, that these results do not discount the importance of economic and normative barriers to cohabitation and independent living. Rather, these two explanations for extended premarital coresidence with parents should be seen as complementary. It is in the context of limited non-family alternatives to marriage that the comforts of home make

extended coresidence an attractive alternative to early marriage for women who are hesitant to enter gender inegalitarian marriages or to marry men with tenuous economic prospects. The incompatibility of the wife-mother role with continued employment and the limited economic resources of young men are two of the key factors emphasized twenty years ago by Morgan and Hirosima (1983) in their interpretation of the continued prevalence of postmarital coresidence. Despite the tremendous social and economic changes that have taken place in the past two decades, our results suggest that these same factors continue to play a vital role in shaping patterns of family formation in Japan.

While it is obviously not possible to generalize results based on a sample of coresident Japanese women in the 1990s to other populations, it is certainly plausible that similar patterns may be found in other societies characterized by very late marriage, a high prevalence of premarital coresidence with parents, relatively inegalitarian marriages, and a high degree of economic uncertainty at young ages. Indeed, many of these factors have been emphasized in recent studies of family formation in Southern European countries where premarital coresidence with parents is even more prevalent than in Japan (Billari et al. 2002; Dalla Zuanna 2001; Rossi 1997). Finding similar relationships between the "comforts of home," women's socioeconomic status, and the risk of marriage in countries such as Italy, Spain, and Portugal would provide further reason to view extended coresidence with parents as an adaptive response to changing incentives to marry in these societies.

Finally, it is also important to recognize that the prevalence of extended coresidence with parents prior to marriage has potentially important implications for the way in which the second demographic transition evolves in Japan, Southern Europe, and perhaps in other East Asian countries. Evidence that the experience of independent living and cohabitation causally

influences attitudes towards marriage and family among women in the U.S. (e.g., Axinn and Thornton 1992; Waite, Goldscheider, Witsberger 1986) suggests that greater normative acceptance of cohabitation, non-marriage, divorce and other family behaviors associated with the second demographic transition may be relatively slow to emerge in societies where marriage remains the modal destination out of the parental home. To the extent that cohabitation serves as a trial marriage, with the least compatible couples splitting up, it is also possible that divorce may become increasingly common in societies where cohabitation remains rare. Recent increases in divorce in Japan (Raymo, Iwasawa, and Bumpass 2004) would be consistent with this scenario. Confirming our findings for Japan with richer data, replicating these analyses in other societies characterized by a high prevalence of premarital coresidence with parents, and examining the extent to which subsequent outcomes such as divorce are related to premarital living arrangements are all promising directions for subsequent research.

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Table 1: Age-Specific Living Arrangements and Marital Status of Japanese Women, 1975 and 2000

	A: Proportion of Never Married Women Living with Parents*		B: Proportion of Women Never Married		C=A*B: Proportion of Women Never Married & Living with Parents	
Age	1975	2000	1975	2000	1975	2000
15-19	0.87	0.92	0.99	0.99	0.86	0.91
20-24	0.77	0.77	0.69	0.88	0.53	0.68
25-29	0.78	0.76	0.21	0.54	0.16	0.41
30-34	0.65	0.70	0.08	0.26	0.05	0.19

Source: Population Census of Japan (1975, 2000).

*Calculations are based on household classification scheme in Hirosima (1998).

Table 2: Hypothesized Direction of Interactions Between Women's Socioeconomic Characteristics and the "Comforts of Home"

Women's Socioeconomic Characteristics	*Characteristics of the Home Environment*			
	Higher Parental Income	No Housework	No Financial Transfers	No Coresident Siblings
High Educational Attainment		$\delta<0$		
High Status Occupation		$\delta<0$		
High Income		$\delta<0$		
Low Educational Attainment	$\delta<0$		$\delta<0$	$\delta<0$
Low Status Occupation	$\delta<0$		$\delta<0$	$\delta<0$
Low Income	$\delta<0$		$\delta<0$	$\delta<0$

Note: Light gray cells correspond to Hypothesis 1 and dark gray cells correspond to Hypothesis 2.

Table 3: Characteristics of the Sample at Wave 1 and Odds Ratios for the Transition to First Marriage

Variable	Wave 1 Sample Characteristics	Odds Ratios from Model 1
Age (linear spline)		
24-26	0.58	1.35*
26-35	0.42	0.82**
City Size		
13 Largest cites	0.30	0.54**
Other cities, towns, villages (omitted)	0.70	1.00
High Educational Attainment		
University	0.21	1.28
Other (omitted)	0.79	1.00
High Status Occupation		
Professional/Managerial	0.19	0.92
Other (omitted)	0.81	1.00
High Income		
Highest Quintile	0.19	1.29
Other (omitted)	0.81	1.00
Low Educational Attainment		
High School, Vocational School	0.53	1.21
Other (omitted)	0.47	1.00
Low Status Occupation		
Part-Time	0.09	1.60*
Other (omitted)	0.91	1.00
Low Income		
Lowest Quintile	0.20	1.72**
Other (omitted)	0.80	1.00
Parental Income		
< 7.5 million yen (omitted)	0.63	1.00
≥ 7.5 million yen	0.37	1.12
Hours of Housework		
0	0.53	0.77
1+ (omitted)	0.47	1.00
Contribution to household finances		
0%	0.50	0.91
>0% (omitted)	0.50	1.00
Coresident Siblings		
0	0.46	0.69**
1 + (omitted)	0.54	1.00
N	419	1,348
Df		13
χ^2		53.83

* p<.10, **p<.05

Table 4: Odds Ratios for the Transition to First Marriage, by Women's Socioeconomic Characteristics and Characteristics of the Home Environment

	Characteristics of the Home Environment			
Women's Socioeconomic Characteristics	Higher Parental Income	No Housework	No Financial Transfers	No Coresident Siblings
High Educational Attainment				
University[a]	1.37	0.40††	2.37††	0.81
Other[b]	1.04	0.93**	0.70*	0.66**
High Status Occupation				
Professional/Managerial[a]	1.64	0.33††	0.82	0.88
Other[b]	1.02	0.92	0.93	0.65**
High Income				
Highest Quintile[a]	0.87	0.57	0.62	1.30
Other[b]	1.19	0.83	0.98	0.78
Low Educational Attainment				
High School, Voc. School[a]	1.00	0.95	0.62††	0.69
Other[b]	1.25	0.59**	1.50	0.69
Low Status Occupation				
Part-Time[a]	0.30††	2.08††	1.19	0.26†
Other[b]	1.29	0.67**	0.88	0.79
Low Income				
Lowest Quintile[a]	0.58†	1.03	0.89	0.75
No[b]	1.36	0.70*	0.92	0.67**

Notes:
1) Light gray cells correspond to Hypothesis 1 and dark gray cells correspond to Hypothesis 2.
2) Rows labeled [a] represent exp(γ+δ). Rows labeled [b] represent exp(γ).
3) For γ: * p<.10, ** p<.05. For δ: † p<.10, †† p<.05.

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