

# The New Socioeconomic Marriage Differentials in Japan

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## **1. Introduction**

This study will be the one of the first studies to provide insights into the emerging patterns of Japanese marriages. My analyses of Japanese marriage market will seek to uncover the structural and behavioral changes in patterns of assortative mating, i.e., who marries with whom with respect to educational and occupational characteristics. The study builds upon and re-examines studies of the U.S. experience and considers the social and policy implications of the causes and consequences of the recent changes in marriage behavior in Japan. In the EPC session, only results from the analysis of educational homogamy/heterogamy will be presented due to the time constraint of the presentation and author's limited resources to utilize for this project by the end of June<sup>2</sup>.

## **2. Background**

The expansion of the never-married population is one of the most dramatic demographic changes in the latter half of the 20th century in Japan. The trend toward later marriage and growth in the proportion of men and women who never marry is not only a major cause of the Japan's low fertility rate, but is also a driving force behind other major family and social changes (Iwai 2010, Iwai 2011).

Though correlates of the trend toward later and less marriage are complex, previous studies showed that women's economic well-being (measured by educational attainment or income) was negatively associated with marriage. Women with higher education and higher income tended to marry later and were more likely to never marry (Tsuya and Mason 1995, Higuchi 2001, Retherford, Ogawa, and Matsukura 2001, Ono 2003, Raymo 2003, Raymo and Iwasawa 2005, Tsuya 2009, Sakai 2009). However, more recent studies demonstrate that this relationship has reversed, with women's socioeconomic resources positively associated with the likelihood of marriage in the 2000s (Fukuda 2013, Iwasawa 2013, Statistics and Information Department of the Ministry of Health, Labour and Welfare 2013).

In fact, a similar change has been evident in the U.S. (Goldstein and Kenney 2001), Australia and New Zealand (Heard 2011), some of European countries (Kalmijn 2013) and most recently reported in Taiwan (Yen-hsin 2013). In the US., for example, since the 1980s, college-educated women, on average, had lower marriage rates than their less-educated counterparts during the most of the 20th century (Goldin 2004). Previous studies, however, have shown that the

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marriage rates of college-educated women started rapidly catching up with those of women with less education beginning in the 1980s (Goldstein and Kenney 2001). Similarly, the relationship between women's earnings and marriage has also changed from no correlation to a strongly positive association since the 1980s (Sweeney 2002). As a result, several studies have shown that college-educated women and women with higher income are more likely to marry since the 1980s (for reviews, see Oppenheimer 1997, Sweeney 2002).

How can one theoretically interpret the relationship between women's socioeconomic status and marriage formation? Both sociological and economic theories which deal with benefit from marriage have long emphasized the advantages of gender role division between spouses and argued that the benefits from marriage are maximized when the husband specializes in market production, and the wife in household tasks (Parsons 1949, Becker 1981). Oppenheimer (1988), however, challenged this view by arguing that economic contributions of the wife should bring even more direct benefit to marriage than gender specialization. Oppenheimer (1988) applied job-search theory and suggested that a woman's greater economic resources increase her incentives and capacity to prolong her spouse-search process in order to find a better match. Therefore, a woman's high socioeconomic status potentially relates positively rather than negatively to her attractiveness as a marriage partner and it can have a positive effect on marriage formation by offsetting the presumed negative effects of a woman's greater economic independence. Recent studies in the U.S. mostly support Oppenheimer's theory and, therefore, suggest that the benefits of marriage are more directly conceived by today's couples as deriving from the economic contributions of both spouses rather than the advantages of gender division of spousal roles.

In the U.S., the shift in the relationship between women's economic resources and marriage has been accompanied by a concurrent increase in educational and earnings homogamy (Blackwell 1998, Schwartz and Mare 2005, Sweeney and Cancian 2004). That is, an increasing tendency for highly-educated or high-earning women to marry men with similarly high levels of education and earnings. Several studies have shown that this trend toward increased socioeconomic homogamy is partly responsible for widening economic inequality in the U.S. (Burtless 2003, Sweeney and Cancian 2004).

On the other hand, much less is known about the new relationship between women's economic standing and the likelihood of marriage in Japan. I provided the first documentation of the newly emerging marriage pattern in Japan (Fukuda 2013) from panel data analysis by showing effects of women's earnings turn to be positive in marriage intensities in the 1970s cohort. It is not clear, however, if the same conclusion will be confirmed from the analysis of another type of longitudinal data, i.e. retrospective survey data. In general, panel data (i.e., data from surveys that follow the same respondents over time), though rich in information at each survey point, focuses on a narrower range of cohorts and observation length is shorter than is the case with retrospective data.

In addition, panel data suffer from non-random attrition (drop-out) from the survey, while retrospective data does not have this problem. Therefore, retrospective data actually have advantages over panel data for providing accurate behavioral changes over time (across cohorts).

Furthermore, there have been few studies of recent trends in assortative mating (who marries whom) in Japan. We have little knowledge about whether the emerging marriage pattern suggests, just as is the case for the U.S., an increasing trend of socioeconomic homogamy in Japan. Only Iwasawa's (2013) study shows signs of a small increase in educational homogamy between 2005 and 2010. However, more systematic analysis of assortative mating is called for.

In sum, change in the economic determinants of marriage formation is not only important in understanding recent trends in assortative mating in Japan and other countries, but is also of great importance for its relationship to social class mobility and economic inequality in contemporary societies. Therefore, the findings of this study will also be particularly meaningful for policy makers in Japan in assessing the need for relevant public policies such as family policy and policy measures for income redistribution.

### **3. Data and Methods**

#### **a.) Data**

The study will examine the trends of homogamy in Japan based on brides' and grooms' economic characteristics such as educational attainment, employment status, and occupation. The study aims to assess if education and other economic qualifications of newlyweds have become increasingly similar over time in Japan. In this paper, I focus on the trend of educational homogamy as a first step.

For the analysis of Japanese marriage, I will use individual-level data pooled across the 11th through 14th Japanese National Fertility Surveys (JNFS) - conducted in 1997, 2002, 2005 and 2010, respectively. JNFS is a series of surveys of married women as well as non-married men and women aged 18-49. The surveys were conducted by the National Institute of Population and Social Security Research. In each survey round, a total of 8,000 to 10,000 women provided information on the date of their marriage and educational attainment of herself and her husband if present. Other information on family and demographic background prior to marriage is also collected. The surveys are authorized by Japanese government and achieve high response rates at around 80% in each wave by the drop-off and pick-up method which is a commonly used method in Japan. Currently, pooled data from JNFS provides the largest sample set to analyze the trends in the educational combinations of spouses in Japan.

#### **b.) Methods**

The analysis of "who marries with whom" often utilizes two-sex marriage models, in contrast to the

sex-specific analyses of marriage correlates just described. Formal demography is rich in the development of two-sex marriage models. In this study, I will use the harmonic-mean model proposed by Schoen (1988). The model allows me to decompose changes in marriage rates of a particular combination of a groom and bride into changes in marriage market composition and changes in a composition-independent marriage tendency. This method allows me to assess, for example, how much of the increase in educational homogamy is due to the increase in the supply of college-educated females, and how much is due to behavioral changes across cohorts.

Raymo and Iwasawa (2005) applied this model to Japanese marriages between 1980 and 1995 to examine the pattern of educational assortative mating using JNFS. Their study, however, did not cover marriages after 2000 which is the main focus of this study. Therefore, I will conduct similar analyses by adding updated data from the 2002, 2005 and 2010 rounds of the JNFS. Through this analysis and other analyses planned to conduct on spouses' occupation and employment status in later phase, my study investigates if positive assortative mating is observed with respect to couples' economic qualifications and explains how compositional and behavioral changes in the marriage market have contributed to the observed changes.

### **3. Expected Results**

The central focus of the study is to investigate the latest marriage behaviors in Japan by using the most up-to-date data. The study seeks to provide new insights into the socioeconomic differentials and homogamies in Japan. As Japan and other western societies are substantially different, for example, in the degree of gender role division or in labor market environment, investigating the extent of similarity in the changes in the social and economic differentials of female marriage will provide a good test case of accessing the universality and scope conditions of theories regarding shifts in men's and women's economic roles within marriage. The study's findings are expected to contribute to the field of the social theory which explains the relationship between socioeconomic development and widely observed family changes, i.e. the transition from male-breadwinner marriages to dual-earner marriages (Blossfeld and Drobnic 2001, Goldin 2006).

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