## 特集 I:わが国における近年の人口移動の実態一第6回人口移動調査の結果より一(その1)

# The Impact of Long-Distance Family Migration on Married Women's Employment Status in Japan

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Using the data from the Sixth National Survey on Migration conducted in 2006, I analyzed: (1) whether family migration has made a disruptive impact on married women's employment status, and (2) whether the gender-role perspective explains the relationship in the Japanese context. The results are surprisingly consistent with the studies in the United States and Great Britain. The analyses indicated that both long-distance and short-distance family migration exert disruptive long-lasting effects on full-time employment of married women. The negative effect of family migration is much stronger for long-distance migration which is consistent with the past research. In addition, the analyses show that the effect of long-distance migration is significant for part-time employment also, though the effect is attenuated and does not last as long. The analyses also indicated that wives who migrated to follow a spouse whose reason of migration is employment-related are least likely to work full-time relative to wives whose spouse indicated other reasons. Since women playing a subsidiary role in family migration decision are assumed to hold more traditional gender-role beliefs, the result is considered to support the gender-role perspective.

#### I. Introduction

Past empirical evidence clearly indicates that family migration weakens women's labor market status in two-earner households, and that women disproportionately continue to bear the costs of family migration (Boyle, Feng and Gayle 2009; Boyle et al. 2001; Cooke et al. 2009; Jacobsen and Levin 1997; Lichter 1983; Maxwell 1988; Smits 1999). Women are likely to experience lower income (Cooke et al. 2009; Jacobson and Levin 1997; LeClere and McLaughlin 1997; Lichter 1983; Smits 2001), shorter hours or weeks worked (Cooke and Bailey 1999; LeClere and McLaughlin 1997), lower occupational status (Chattopadlhyay 1997), underemployment or unemployment (Bailey and Cooke 1998; Boyle et al. 2001; Chattopadhyay 1997; Chitose 2006; Cooke 2001; Lichter 1982; Shihadeh 1991; Smits 1999), and even an exit from the labor force (Boyle et al. 2003; Clark and Huang 2006; Cooke 2001; LeClere and McLaughlin 1997), while family migration is usually associated with positive earnings growth for men.

Much of the past work on the relationship between family migration and women's labor market status is dominated by the human capital perspective (Mincer 1978; Sandell 1977). In recent years, researchers have started to question the gender-neutrality assumption of the human capital

perspective (Bielby and Bielby 1992; Shihadeh 1991), and to argue that the perspective does not account for the gender biased results of post-migration economic statuses of dual-earner couples. Consequently, more recent studies have started to focus on the gender-role perspective in explaining the relationship between family migration and women's labor market outcome (Bielby and Bielby 1991; Boyle and Halfacree 1999; Cooke 2001; Shauman and Noonan 2007; Shihadeh 1991).

In this paper, I provide additional support of the gender-role perspective by examining the impact of family migration on married women's employment status in the context of Japan. I analyze whether married women experience negative employment consequences after family migration, and if so, whether the gender-role perspective explains the result. The Japanese data provides an excellent opportunity to evaluate the gender-role perspective in the relationship between family migration and married women's employment status for two reasons. First, Japan is one of the least gender-egalitarian societies among industrialized countries (Tsuya and Mason 1995). International surveys have shown that traditional gender-role attitudes remain relatively strong in Japan (for example, see Cabinet Office 2004). Because traditional gender-role attitudes remain stronger in Japan than in other western industrialized countries, it is worth examining whether the perspective accounts for the situation in Japan.

Second, the relationship between family migration and women's economic status is a research area that deserves more scholarly attention among migration studies in Japan. The research in this field has been largely neglected except for a few studies (Chitose 2006; Miyoshi 2009). In Japan, it is well understood that child bearing is the biggest challenge for married women to continue their labor market activities (NIPSSR 2007; Yu 2005). Although the impact of family migration has not become a center of scholarly attention, there is evidence that family migration may be playing an important role in determining the labor market activities of married women. According to the survey conducted by the Japan Institute of Labour (JIL), nearly 70 percent of women who exited the labor market after marriage or child birth cited difficulties in combining work and child care as the reason for leaving the labor market (JIL 1998). In the same survey, nearly 40 percent of women who graduated from university cited the husband's job transfer as the reason for leaving the labor market. An examination of the impact of the relationship between family migration and women's economic status in the Japanese context provides an excellent opportunity to test the generality of the past findings.

#### II. Theoretical Perspectives and Empirical Evidence

Economic outcome of family migration for women emerged as a research agenda once married women's labor force participation began to increase (Lichter 1982). With respect to individual migration, the human capital model of migration is a dominant theoretical perspective since

regardless of sex, individuals appear to migrate in order to maximize his/her utility (Mincer 1978; Sandell 1977). Earlier research in the 1970s found that traditional families (where the husband is the breadwinner) are more mobile and are more likely to make longer distance moves than dual-earner families (Duncan and Perrucci 1976; Long 1974). These studies also indicated that in the case of dual-earner families, long-distance family migration disrupts wives' continued participation in employment (Duncan and Perucci 1976; Long 1974; Sandell 1977).

Mincer (1978) proposed the family migration theoretical perspective which is basically the extension of the neoclassical human capital model of individual migration (Sjaastad 1962). Taking family as a unit, the model assumes that a family maximizes net benefits accrued to the whole family. Family migration takes place if the expected net income gains of a family after migration exceed the losses of the family. The model suggests that for dual-earner couples, wives are more likely to weaken their labor market position while the husbands strengthen their economic statuses. Often, migration of husbands is associated with offers for pay raise, better paying new jobs or higher positions. For working wives, it is extremely unlikely to get higher paying jobs at the new destination at the same timing as the husband. Thus, given the gender gap in earnings, it is usually the wife who is a "tied migrant" (Sandell 1977).

More recent studies, however, began to question the validity of the human capital perspective. Although the perspective is gender-neutral, empirical results consistently suggested that wives' careers are sacrificed on behalf of husbands' job advancement. For example, some studies revealed that husbands' human capital and job attributes led to improved post-migration economic status for husbands but the same cannot be said regarding their wives (Duncan and Perucci 1976; Lichter 1982, 1983; Shihadeh 1991). Boyle, Cooke and Bailey (1999) showed that even in cases when the women had a higher occupational status than their husbands, women are more likely to be unemployed or economically inactive after the move.

Given these results, family migration studies in the 1990s have shifted its focus more on the gender-role perspective. This perspective emphasizes gender-roles that men and women are socialized to accept in their society (Bielby and Bielby 1992; Shihadeh 1991). Typically, traditional social norms expect wives to take care of children and households while husbands are responsible for the economic aspects of households. This implies that women are assumed to place family first and personal goals second while the opposite applies for men. This is not to state that women lack power in decision making in every sphere of daily life. Women are expected to make important decisions especially when children and household matters are concerned. On the other hand, men have power in making decisions regarding labor market activities and economic aspects of the family. Because long-distance family migration is often associated with the economic improvement of a household as a whole, family migration is more likely to be associated with personal gains for husbands while it is associated with personal loss for working wives.

Bielby and Bielby (1992) demonstrated that a husband holding traditional gender-role beliefs

tend to give little consideration to the disruption of his wife's employment when evaluating a potential job opportunity in new location. This attitude persists even when the level of wife's earnings is substantial. A woman holding traditional gender-role beliefs, on the other hand, tends to sacrifice job advancement if she has to ask her husband to leave a well paying job. Shihadeh (1991) also demonstrated the possibility that gender-role beliefs shape the family migration decisions. According to his study, the most powerful determinant of obtaining post-migration employment for married women was not women's demographic or socioeconomic characteristics, but whether she played a subsidiary role in a decision to move. The chances of post-migration employment substantially decreased for those women who deferred to their husbands in the reasons to move, or those holding traditional gender-role beliefs (Shihadeh 1991).

The number of studies in this area accelerated from the latter half of the 1990s and so did the new empirical findings. Boyle and his associates (2001; 2003) conducted a cross-national comparative study between Great Britain and the United States and found that the disruptive effects of family migration on women are consistently observed for both countries. Research by Clark and Huang (2006) also confirmed that the disruptive effects do exist in both Great Britain and the United States but the effect is short-lived, particularly for the latter. Other research such as the study that considered the distance moved (Clark and Withers 2002; Smits 1999), the women's motherhood status (Cooke 2001), the use of migration reasons rather than arbitrary distance cut-off (Boyle, Feng and Gayle 2009), and the structural explanations of sex segregated labor markets (Shauman and Noonan 2007), all broadly confirmed the past general findings that are consistent with the gender-role perspectives.

Four hypotheses on the relationship between family migration and women's employment status are examined. The first hypothesis is that family migration has a disruptive impact on women's employment status. The negative relationship is expected based on the vast amount of empirical evidence indicated earlier. The second hypothesis is that the longer the distance of family migration, the stronger the negative impact of family migration for women's employment status. Long-distance family migration tends to take place when advancement in the husband's employment status is expected. In such cases, wives careers or employment considerations are likely to be placed after that of their husbands. Longer distance family migration is also disruptive for women's full-time employment since it is very difficult for married women with children to find a new job in a new location unless she has special skills. The third hypothesis is that women's human capital has a positive effect on women's employment status as the human capital perspective suggests. The fourth hypothesis is that women holding traditional gender-role beliefs are more likely to weaken their labor market status. This hypothesis is drawn from the gender-role perspective and examines whether the gender-role attitudes explain the family migration outcome of women. Since traditional gender-role beliefs expect husbands to take care of economic aspect of the family, I expect that wives are particularly more likely to be "tied migrants" if husbands

migrated for employment-related reasons and wives followed.

#### III. Data and Methods

#### 1. Data

I use the data from the 6<sup>th</sup> National Survey on Migration (NSM6). The NSM6 is one of a series of annual population and social security surveys conducted by the National Institute of Population and Social Security Research (NIPSSR). The annual surveys include five different kinds of national level surveys: the National Fertility Survey, the National Survey on Migration, the National Survey on Family, the National Survey on Household Changes, and the Survey on Social Security and People's Life. The NIPSSR conducts one of the national surveys annually and consequently, each survey basically takes place every five years.

The sample of the NSM6 consists of all the households in randomly selected 300 census tracts<sup>1).</sup> The primary respondents are household heads in the selected household. The NSM has been conducted five times in the past<sup>2)</sup> and the sixth was conducted as of July 1st, 2006. Out of 16,997 targeted households, 14,062 questionnaires were distributed and 12,575 questionnaires were collected by enumerators. Of these, 12,262 questionnaires turned out to be valid with a response rate of 72.1 percent (NIPSSR 2009).

The NSM6 contains basic demographic characteristics as well as important migration related information for all household members. The latter includes a list of past residence at the time of major life events such as the time of birth, graduation from junior high school, graduation from the last school that a respondent was enrolled, right before the first marriage, right after the first marriage, and when the first child entered elementary school. The ages that a respondent experienced each event are also recorded<sup>3)</sup>. In addition, the residence five years before the survey and one year before the survey are also included.

One of the advantages of using the NSM6 data is that it contains some valuable information regarding the most recent migration for all household members. The data contains information as to whether a respondent has ever moved, and if yes, then information on the year and month of the most recent migration that took place, the place of previous residence<sup>4</sup>, and the reason for the move is included. By utilizing the information, it is possible to determine whether husbands and wives moved together, from where to where, and for what reason and when. Moreover, the availability of migration reason information enables me to distinguish the aim of family migration and to test

<sup>1)</sup> These randomly selected 300 tracts are a part of 1,056 census tracts selected for the *Comprehensive Survey on Living Conditions of the People on Health and Welfare 2006* conducted by the Ministry of Health, Labour and Welfare.

<sup>2)</sup> So far, the NSM has been conducted in 1976, 1986, 1991, 1996 and 2001.

<sup>3)</sup> All the ages at the respective event are included except for the time right after marriage.

<sup>4)</sup> The previous residence question asks a respondent to choose one from the following 5 categories: (1) same residence as now, (2) within the same ward/city, (3) within the same prefecture, (4) another prefecture, and (5) abroad.

hypotheses drawn from the gender-role perspective.

I restricted the analyses to married women living in nuclear-family households together with her husband, aged 18 to 59. For each woman in the data, her husband's demographic and migration related information is appended. In order to take advantage of the information on migration reasons available only for the most recent migration, I focus on the most recent family migration. Thus, in this analysis, family migration is defined as the most recent move taken together by a couple from the same origin to the same destination in the same year and the month. If the joint move is confined within the prefecture, then the move is defined as a short-distance family migration. If the move crosses the prefectural line, then the move is defined as a long-distance family migration. I assume that moves taken within a prefecture are more likely to be residentially motivated while moves crossing prefectural lines are more likely to be complete spatial displacement from the origin. Excluding those observations without the necessary information as will be explained below, the final data set contains 2,562 women.

Before proceeding to the analysis, it is important to warn of the possible sample selection bias in the relationship between family migration and women's employment status. It is well known that migrants are a select sample and are different from nonmigrants in many ways (Clark and Withers 2002). In specific, migrants tend to be those who expect to benefit from moving and nonmigrants tend to be those who expect to benefit from staying. In the family migration context, women who expect to benefit from staying may choose to remain in the origin in order to pursue their career. Professional dual-career couples may move in a different timing or may even choose to live separately, often referred to as a commuter marriage in literature (Miyoshi 2009). Unlike the United States, however, commuter marriage in Japan is probably more common among homemakers rather than professionals. A typical case is that husbands migrate alone due to job transfer while wives and children choose to stay mostly because of schooling or housing reasons. Still, it is important to bear in mind of the possibility that professional women may be systematically dropped out of the sample of women moving together with husbands.

#### 2. Variables

The analyses proceed in two stages. At the first stage, I estimate women's employment status using multinominal logistic regression models to assess the impact of family migration on married women's employment status. In the second stage, I examine the impact of migration reasons on women's employment status restricting the sample to movers alone.

Information concerning the most recent migration has its own unique features. Because there is no temporal restriction, the timing of the most recent migration ranges from the move that took place several decades ago to those that took place right before the survey. Because the time dimension of the most recent migration widely varies, I restricted the analysis to the family migration that took place within the past 5 years and 10 years, respectively. In addition, a model

without time restriction is also tested. By introducing the time restriction, I am comparing women who migrated with husbands within the given time range to their counterparts who migrated before the given time range and those who have never moved after marriage. The latter group also includes a couple who moved separately at different timing.

The dependent variable indicates women's employment status at the time of the survey in three categories: (1) in full-time employment, (2) in part-time employment, and (3) non-employed. The key independent variable in the first analysis is whether women has experienced family migration. I classified family migration into two categories: (1) long-distance migration which crossed the prefectural line and (2) short-distance migration which is confined within a prefecture. Consequently, the model compares three groups of women: (1) nonmigrants, (2) family migrants who moved short-distance within a given time range, and (3) family migrants who moved long-distance within a given time range.

A set of human capital, household and contextual variables that are expected to influence women's employment status are included as independent variables. Women's human capital characteristics are included as age and education. Past studies also suggest the importance of women's past employment experience. These studies typically use panel data and incorporate women's employment status in the year before the move (Bailey and Cooke 1998; Clark and Huang 2006; Cooke et al. 2009). Because of the data limitation, women's employment status in the year before the move is not available for this analysis. Instead, I use women's employment status (whether she worked full-time or not) immediately after her graduation from the last school she was enrolled in.

Household variables include the husband's education (Yu 2005), ownership of housing (Boyle et al. 2001; Lichter 1982), the life course stage of a family as measured by the age of the youngest child (Boyle, Feng and Gayle 2009; Boyle et al. 2001, 2003), and the number of children (Chattopadhyay 1997; Cooke et al. 2009; Yu 2005). As a measure to represent the labor market context of the destination, past studies included rural-urban distinction (Bailey and Cooke 1998; Lichter 1982), region (Boyle, Feng and Gayle 2009), population size (Clark and Huang 2006), and unemployment rate (Clark and Huang 2006). In this study, I include whether the present residence is classified as the Densely Inhabited Districts (DID) or not. DID is often utilized as a representation of urban areas in Japan which has been applied since the 1960 Census<sup>5)</sup>.

The second analysis targets family migrants alone and the same sets of independent variables are included. The key variable in this analysis is a combination of migration reasons between wives and husbands. Migration reasons are included as three dummy variables: (1) husbands who migrated for employment-related reasons and wives who migrated to accompany their spouse, (2)

<sup>5)</sup> The formal definition of the DID is "an area within a *shi*, *ku*, *machi or mura* that is composed of a group of contiguous Basic Unit Blocks each of which has a population density of about 4,000 inhabitants of more per square kilometer and whose total population exceeds 5,000 as of 1 October 2005 (Statistics Bureau 2005).

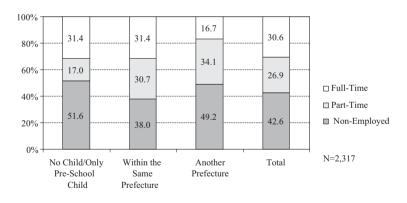
husbands who migrated other than for employment-related reasons and wives who migrated to accompany their spouse, and (3) wives who migrated due to reasons other than to follow their spouse. The third group consists of the reference group. From the gender-role perspective, I expect that the disruptive effect on women's employment status is strongest when wives cited "accompany spouse" as the migration reason and husbands cited "employment" as the migration reason. Excluding observations without information on migration reasons, the data for the second analysis consists of 1,767 women.

## IV. Preliminary Analysis

Figure 1 presents percentage distribution of women's employment status by the place of residence at a time when the first child entered elementary school. The most striking result is that only about 17 percent of women who resided in another prefecture when the first child entered elementary school, work full-time. In contrast, more than 30 percent of women who stayed within the same prefecture work full-time. The share of non-employed women is also high among women in the "another prefecture" category with 49.2 percent, but slightly less than 51.6 percent of the "no child/only preschool child" category. The share of the non-employed is lowest with 38.0 percent among women who remained in the same prefecture. The high figure of non-employed women

among the "no child/only preschool child" is probably due to the larger share of those preschool with only aged children. Although the proportion of women working full-time lowest among the "another prefecture" category, notice that the proportion of women working part-time highest in this category.

Figure 1 Women's Employment Status and the Place of Residence When the First Child Entered Elementary School



This implies that women who exited full-time employment due to long-distance family migration may have diverged into part-time employment.

Table 1 presents descriptive statistics of married women in the sample by employment status. Table 1 reveals interesting contrast in the composition of family migration categories between

women who are not employed and women working full-time. The share of nonmigrants is higher for full-time (39 %) than the nonemployed (29 %). On the other hand, the share of long-distance grants is higher among the non-employed (14%) than full-time (6%).With respect to the percentage of short-distance migrants, the proportions out of the nonemployed (57 %) and of full-time (55 %) do not differ much. The preliminary results are generally consistent with the past findings that women who move long distance with their hus-

Table 1 Descriptive Statistics for Married Women's Employment Status

	Non-En	ployed	Part-	Гіте	Full-	Гіте
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Family Migration						
Nonmigrants	0.29	0.45	0.25	0.44	0.39	0.49
Short Distance Migrants	0.57	0.49	0.62	0.48	0.55	0.50
Long Distance Migrants	0.14	0.34	0.12	0.32	0.06	0.24
Age Group						
18-29	0.11	0.31	0.06	0.23	0.07	0.26
30-39	0.43	0.50	0.29	0.46	0.33	0.47
40-49	0.23	0.42	0.39	0.49	0.35	0.48
50-59	0.23	0.42	0.26	0.44	0.25	0.43
Education						
High School	0.46	0.49	0.56	0.50	0.40	0.49
Jr. College	0.41	0.49	0.37	0.48	0.41	0.49
University	0.13	0.34	0.07	0.26	0.19	0.40
Past Empllyment Status						
Full-Time	0.86	0.35	0.90	0.31	0.92	0.27
Husband's Education						
High School	0.44	0.50	0.50	0.50	0.47	0.50
Jr. College	0.14	0.35	0.17	0.37	0.18	0.38
University	0.42	0.49	0.33	0.47	0.36	0.48
House Ownership						
Owned	0.65	0.48	0.75	0.43	0.77	0.42
Age of Youngest Child						
No Child	0.10	0.30	0.10	0.29	0.15	0.35
0-3 Years	0.33	0.47	0.09	0.29	0.16	0.37
4-6 Years	0.13	0.33	0.11	0.31	0.10	0.30
7 Years +	0.44	0.50	0.70	0.46	0.59	0.49
Number of Children	1.53	0.86	1.62	0.85	1.53	0.94
DID/Non-DID						
DID	0.73	0.44	0.66	0.47	0.60	0.49
N	1,071		701		790	
(%)	41.80		27.36		30.84	

<sup>\*</sup> Total N=2,562

bands are less likely to be employed full-time.

The descriptive statistics for other variables also are generally in line with the past empirical findings. Age composition of the sampled women shows that 43 percent of non-employed women are between 30-39 years old (the corresponding figure for full-time is 33 %). A large share of women in this age group left the labor market due to marriage, pregnancy, child birth, or for child care. Women working full-time have a higher share of being university graduates (19%) than women who are not employed (13%). Also, women working full-time have a higher percentage of those having experience in working full-time in the past (92 %) than non-employed women (86 %). These descriptive results are consistent with the human capital perspective. The percentage distribution of the age of the youngest child also is not contradictory from the empirical results. The percentage of women with no child is higher for women working full-time (15 %) compared to women who are not employed (10 %). In contrast, the percentage of women with 0-3 year old

children is highest among the non-employed (33 %) and lowest among the full-time (16 %).

Table 2 indicates the percentage distribution of women's employment status by family migration status. The result of Table 2 points to two things. First, the share of women who are not employed is highest, and the share of women working full-time is lowest among long-distance migrants no matter how we define the time dimension of family migration. Second, the result also demonstrates that the proportion of the non-employed decreases and at the same time, the proportion of those working full-time increases as the time dimension of family migration becomes more inclusive. In other words, the effect of long-distance family migration weakens as time passes.

Table 2 Married Women's Employment Status by Period and Family Migration Category

	Non-Employed	Part-Time	Full-Time		N	%
2001-2006						
Nonmigrants	37.6	28.5	34.0	100.0	1,873	73.1
Short-Distance Migrants	49.0	26.6	24.5	100.0	580	22.6
Long-Distance Migrants	75.2	11.9	12.8	100.0	109	4.3
1996-2006						
Nonmigrants	37.4	28.3	34.3	100.0	1,425	55.6
Short-Distance Migrants	44.7	27.1	28.2	100.0	981	38.3
Long-Distance Migrants	64.1	20.5	14.4	100.0	156	6.1
Total						
Nonmigrants	39.1	22.5	38.4	100.0	795	31.0
Short-Distance Migrants	41.3	29.4	29.4	100.0	1,491	58.2
Long-Distance Migrants	52.5	30.4	17.0	100.0	276	10.8

<sup>\*</sup> Total N=2,562

When family migration is defined as a move that took place between 2001 and 2006, 75 percent of long-distance migrants are not employed. When the time dimension of family migration is widened to 1996-2006, the share decreases to 64.1 percent. Finally, when there is no time restriction, the percentage of the non-employed among long-distance migrants decreases down to 52.5 percent. In a similar way, the percentage of women working full-time among long-distance migrants increases from 12.8 percent in the 2001-2006 period to 14.4 percent in the 1996-2006 period and finally to 17.0 percent in the model without time restriction. In particular, the rate of increase is high for part-time employment. These observations suggest that the disruptive effect of long-distance family migration does exist but the effect weakens over time. The effect lasts longer especially for full-time employment than part-time. Interestingly, the share of full-time workers among long-distance migrants never reaches the level of nonmigrants, but the share of part-time workers surpasses that of nonmigrants in the long-run.

#### V. Results

Table 3 displays results from a multinominal logistic model predicting the employment status of married women. The omitted category for the dependent variable is the non-employed. The three models listed in Table 3 all demonstrate that both short-distance and long-distance family migration exerts disruptive effects on the full-time employment of married women, regardless of the time restriction. In other words, family migration is detrimental to married women who work full-time. The negative effect of family migration is much stronger for long-distance migration than short-distance migration which is consistent with past research (Smits 1999). With respect to part-time employment, only long-distance family migration has negative effects. The effect weakens over time and disappears altogether in the long-run, as descriptive tables have shown.

The impact of women's human capital as represented by education and past full-time employment experience are positive and significant for all models of full-time employment. Junior college graduates and university graduates are more likely to work full-time relative to high school graduates, with the likelihood of working full-time being the highest among university graduates. The effect of past full-time employment is also positive and significant for all models of full-time employment. However, the results of the part-time employment models reveal that women's education is negatively related with the likelihood of working part-time. Regardless of how the time dimension of family migration is defined, women with university level education are less likely to work part-time compared to high school graduates.

With respect to the household and contextual variables, the husband's schooling is negatively associated with his wife's likelihood of working full-time. The husband's schooling may have two opposite effects because it affects both his earnings and gender attitudes. The husband's higher education may work to reduce the likelihood of his wife's full-time employment due to his high earnings potential. At the same time, his higher education may work to increase the likelihood of his wife's full-time employment through his less traditional gender-role attitudes. In this analysis, the husband's education appears to reflect the effect of earnings rather than gender-role attitudes since variables measuring income are not included in the models. The negative relationship between women's employment and their husband's education is also confirmed in Yu's work (2005).

Child care demand is one of the major reasons for women to exit the labor market. All three models in Table 3 indicate that the younger the age of the youngest child, the lower the likelihood of women to be employed either full-time or part-time. A closer look at the effect of the age of the youngest children shows that the effect of 0-3 year old children is extremely strong for both types of employment. As the youngest child becomes 4-6 year old, the negative effect weakens, especially for part-time employment. When the child reaches school age, the effect disappears for

Table 3 Multinominal Logistic Regression Results for Married Women's Employment Status

	Non-Employed vs. Full-Time	yed me	Non-Employed vs. Part-Time	yed me	Non-Employed vs. Full-Time	yed ime	Non-Employed vs. Part-Time	sd ie	Non-Employed vs. Full-Time	/ed ne	Non-Employed vs. Part-Time	yed ime
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Variable Family Mioration												
Nonmigrants	,		,		1		1		٠		,	
Short-distance	-0.32 **	0.13	0.11	0.13	-0.29 ***	0.11	-0.05	0.11	-0.43 ***	0.11	0.04	0.12
Long-distance	-1.42 ***	0.31	-1.26 ***	0.32	-1.17 ***	0.25	*** 89.0-	0.23	-1.18 ***	0.20	-0.16	0.18
Age Group												
18-29											•	
30-39	0.01	0.20	-0.15	0.23	0.04	0.20	-0.14	0.23	90.0	0.20	-0.18	0.22
40-49	0.02	0.24	-0.15	0.26	0.09	0.24	-0.11	0.26	0.19	0.24	-0.12	0.26
50-59	-0.38	0.25	-0.71 ***	0.27	-0.34	0.25	*** 0.70-	0.27	-0.18	0.25	-0.68 **	0.27
Education												
High school			,		•		•		•		•	
Jr. college	0.38 ***	0.12	-0.17	0.12	0.37 ***	0.11	-0.17	0.11	0.36 ***	0.12	-0.16	0.12
University	1.06 ***	0.17	-0.44 **	0.20	1.07 ***	0.17	-0.44 **	0.20	1.05 ***	0.17	-0.45 **	0.20
Past Employment												
Non-employed/Part-time			•						•		•	
Full-time	0.59 ***	0.17	0.29 *	0.16	0.58 ***	0.17	0.26	0.16	0.59 ***	0.17	0.25	0.16
Husband's Education												
High school			•				•					
Jr. college	0.10	0.15	0.20	0.16		0.15	0.20	0.16	60.0	0.15	0.20	0.16
University	-0.48 ***	0.13	-0.16	0.13	-0.48 ***	0.13	-0.18	0.13	-0.45 ***	0.13	-0.19	0.13
House Ownership												
Renting	•											
Owned	0.22 *	0.13	-0.08	0.13	0.25 *	0.13	-0.05	0.13	0.29 **	0.13	0.01	0.13
Age of Youngest Child												
No Child			•									
0-3 years old	-1.40 ***	0.23	-1.73 ***	0.26	-1.42 ***	0.22	-1.69 ***	0.26	-1.43 ***	0.22	-1.69 ***	0.26
4-6 years old	-1.03 ***	0.25	-0.57 **	0.27	-1.02 ***	0.25	-0.53 **	0.27	-1.00 ***	0.25	-0.56 **	0.27
7 or older	-0.35	0.22	0.30	0.24	-0.35	0.22	0.29	0.24	-0.29	0.22	0.29	0.24
Number of Children	0.14 *	0.08	0.19 **	0.08	0.16 **	0.08	0.19 **	0.08	0.16 **	80.0	0.20 **	0.08
DID												
Non-DID			,		•		•		•		•	
DID	-0.53 ***	0.11	-0.18	0.11	-0.53 ***	0.11	-0.17	0.11	-0.50 ***	0.11	-0.18	0.11
Constant	-0.16	0.27	-0.12	0.28	-0.18	0.27	-0.11	0.28	-0.19	0.27	-0.18	0.28
Likelihood Ratio N		2095	2095.090			2197.330	.330			2249.350	350 52	

both types of employment. An increase in the number of children increases the likelihood of women's employment for both full-time and part-time employment. An increase in the number of children increases monetary needs to raise them. Moreover, older children may be of help in taking care of younger siblings thereby enabling mothers to work outside. Finally, urban residence decreases the likelihood of full-time employment but no effect is observed for part-time employment. Urban residence may have two effects. It may increase the likelihood of full-time employment due to more work opportunities. On the other hand, it may decrease the likelihood of working full-time because of the higher income of their husbands. The negative effect of urban residence in this analysis may be reflecting income as the models do not include income measures.

Table 4 cross-classifies wives' reason for migration with that of the husbands' to see the extent of wives playing a subsidiary role in family migration. The most popular migration reason among wives is housing-related. More than half of them indicated this response (52.0 %). Accompanying the spouse is the second highest reason indicated by wives and accounts for 21.8% of migrant women. In contrast, only 0.4 percent of husbands indicated this response. Among husbands, the most cited reason for migration is housing-related with 61.6 percent. Next follows an employment-related reason with 13.8 percent.

Looking at the combination of migration reasons, by far, the highest frequency is found among both wives and husbands indicating housing-related reasons. This combination accounts for about half of the total (51.9 %). A combination of husbands indicating "employment-related" and wives indicating "accompany spouse" is the second highest. This combination accounts for about 10 percent of the total. Table 4 also shows that among wives who moved to follow their spouse, a little less than half of their husbands indicated employment as their reason for migration.

Table 4 Wives' Reasons for Moving by Husbands' Reasons for Moving

			Hus	bands' Reas	ons for Movin	ıg		
Wives' Reasons for Moving	Schooling- related	Employment- related	Housing- related	Family- related	Accompany spouse	Other	N	Total
Schooling-related	16(0.9)	0	0	0	0	0	16	0.9
Employment-related	0	67(3.8)	0	0	0	0	67	3.8
Housing-related	0	0	917(51.9)	0	1(0.1)	0	918	52.0
Family-related	0	0	0	164(9.3)	0	0	164	9.3
Acoompany spouse	2(0.1)	175(9.9)	170(9.6)	32(1.8)	6(0.3)	0	385	21.8
Other	0	2(0.1)	2(0.1)	2(0.1)	0	211(11.9)	217	12.3
N	18	244	1,089	198	7	211	1,767	100.0
Total	1.0	13.8	61.6	11.2	0.4	11.2		

<sup>\*</sup> proportion of total in parentheses

Figure 2 illustrates the composition of migration reasons by women's employment status. Migration reasons are classified into two categories: (1) accompanying spouse, and (2) other reasons. It is clear from this figure that women who are not employed constitute a disproportion-

ately high share among those who played a subsidiary role in the family migration decision with 49.6 percent. The corresponding figure for those who indicated reasons other than "accompany spouse" is 41.2 percent. If we assume that women who follow their spouse hold more traditional genderrole beliefs then women who indicated other reasons for family migration, than the result is consistent with what the gender-role perspective implies.

Figure 2 Married Women's Migration Reasons by Employment Status

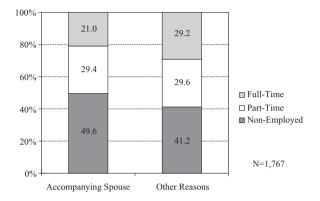


Table 5 lists the results of a multinominal logistic model predicting the employment status of married women restricting the sample to family migrants. Looking at the likelihood of full-time employment first, it is clear that long-distance family migration has a lasting negative impact on the likelihood of women's full-time employment though the magnitude of the impact weakens over time. The result also reveals that a combination of migration reasons ("accompanying spouse" for wives and "employment-related" for husbands) which represents traditional gender-role beliefs, significantly decreases the likelihood of full-time employment for women. Moreover, the magnitude of the impact appears to remain at the same level over time. This result implies that the likelihood of full-time employment among women who have traditional gender-role beliefs do not change over time.

The result of part-time employment shows a different picture from the first analysis. The disruptive effect of long-distance family migration is observed only for Model 1. After the first 5 years, the negative effect of long-distance migration disappears. One of the reasons for this result is relative ease in finding part-time employment compared to full-time jobs. Part-time work also allows women to balance work and child care more easily than full-time work. The negative impact of migration reason on part-time employment shows up in Model 1 and Model 2. Women following their spouse when the husband migrates for employment-related reasons are less likely to work part-time as well. This negative effect, however, disappears when the time restriction is not taken into account.

Table 5 Multinominal Logistic Regression Results for Married Women's Employment Status (Migrants Only)

		-		-	-	-	1	-	-	-	1	-
	Non-Employed vs. Full-Time	yed	Non-Employed vs. Part-Time	oyed ime	Non-Employed vs. Full-Time	yed ime	Non-Employed vs. Part-Time	yed me	Non-Employed vs. Full-Time	yed ime	Non-Employed vs. Part-Time	yed ime
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Variable												
Family Migration Short-distance					,		,		ı			
Jona distance	*** 02.0	92.0	* 000	750	* 040	000	000	900	** 050	0.20	- 000	0.18
Long-uistance Migration Reason	-0.79	0.30		0.57		0.7.0	67:0-	0.20	00.0-	0.20	50:0-	0.10
Other than "accompanying spouse"			1		1						1	
Accompany & employment-related	* 2.77	0.42	** 98.0-	0.41	*** 06.0-	0.34	-0.62 **	0.30	-0.71 ***	0.27	-0.35	0.23
Accompany & other reasons	-0.41	0.37	-0.15	0.34	-0.06	0.25	0.08	0.25	-0.05	0.19	0.05	0.19
Age Group												
18-29							•					
30-39	-0.22	0.32	-0.24	0.33	-0.18	0.30	-0.21	0.32	-0.24	0.30	-0.27	0.31
40-49	-0.36	0.43	-0.36	0.43	-0.07	0.35	-0.12	0.36	-0.05	0.33	-0.16	0.34
50-59	0.04	0.54	-0.75	0.53	-0.02	0.40	-0.65	0.41	-0.28	0.34	-0.72 **	0.35
Education												
High school	1		1		1				•			
Jr. college	0.10	0.25	-0.15	0.23	0.30	0.19	-0.14	0.18	0.23	0.15	-0.17	0.14
University	1.28 ***	0.34	-0.51	0.40	1.01 ***	0.26	-0.42	0.30	0.85 ***	0.21	-0.38	0.23
Past Employment												
Non-employed/Part-time			•		•						•	
Full-time	0.22	0.33	-0.14	0.30	0.37	0.27	-0.12	0.24	0.36 *	0.21	0.01	0.19
Husband's Education												
High school	•		1		•				•		•	
Jr. college	0.15	0.29	0.02	0.28	0.23	0.22	0.21	0.22	0.08	0.19	0.15	0.19
University	-0.42	0.28	-0.28	0.26	-0.54 ***	0.20	-0.51 **	0.20	-0.52 ***	0.16	-0.38 **	0.16
House Ownership												
Renting			1				1					
Owned	0.17	0.23	-0.05	0.23	0.28	0.19	-0.11	0.18	0.29 *	0.16	-0.06	0.15
Age of Youngest Child												
INO CILITA		040	***	0.46	***	0.35	1 20 1	0.30	. C.7. L	0 33	1 00 1	0.36
0-3 years old	-1.14	0.40				0.33		0.30		0.32		
1-0 years ord		0.43	-0.01	1.0		5.0	-0.+0	0.00		00.0		
/ Of Older Number of Children	-0.30	0.47	0.30	0.45	-0.32	0.34	0.41	0.55	** 900	0.20	0.00 **	
		21.0		21.0		0.11		71.0	3	6.6	9	0.0
Non-DID	•		•		•		•		•		•	
DID	-0.60 ***	0.23	-0.24	0.24	-0.42 **	0.17	-0.08	0.17	-0.43 ***	0.13	-0.21	0.13
Constant	0.26	0.51	0.69	0.50	-0.12	0.43	0.34	0.43	-0.05	0.39	0.34	0.40
Likelihood Ratio		926	956.250			1367	1367.530			180	1803.950	
		c	689			=	1.13/			-	/ 2	

#### VI. Conclusion

In this paper, I demonstrated that long-distance family migration has a disruptive impact on married women's employment status in the context of Japan as well. The negative impact is particularly evident for full-time employment. Moreover, the negative effect on women's full-time employment weakens over time but never disappears. From such empirical evidence, it can be concluded that women bear the costs of family migration, especially when family migration involves long distance. Consequently, my first hypothesis – family migration has a disruptive impact on women's employment status, and the second hypothesis – the longer the distance of family migration, the stronger the negative impact of family migration, are not rejected.

Independent of family migration status, the results confirmed that women's human capital is positively associated with employment status as the human capital perspective states. Thus, even when women migrate with husbands, those equipped with high quality human capital have more chances to find full-time jobs in the new environment. This finding is consistent with the third hypothesis – women's human capital has positive effect on women's employment status. Note, however, that this generally applies only to full-time employment. For part-time employment, university level education is inversely related.

I have also presented evidence to support the gender-role perspective in explaining the relationship between family migration and women's employment status. Wives who migrated to follow their spouse whose reason of migration was employment-related, are least likely to work full-time relative to wives who indicated other reasons. Since wives who follow their spouse when husbands indicated employment-related reasons are assumed to hold traditional gender-role beliefs, my fourth hypothesis – women holding traditional gender-role perspectives are more likely to weaken labor market status, is not rejected. Note also that the effect of gender-role beliefs is stronger and lasts longer for the full-time employment.

Overall, the empirical results are surprisingly consistent with the studies in the United States, Great Britain, and the Netherlands (Boyle et al. 2001; Smits 1999). One of the unique findings in this study is that in the case of Japan, the effect of long-distance migration on full-time employment never disappears. In addition, the analyses show that the effect of long-distance migration is significant for part-time employment also, though the effect is somewhat attenuated and lasts for a shorter period.

Although this research highlights some common and unique determinants of women's employment status, it is not without some limitations. First, availability of support from kin is not considered in this analysis. It is well known that women who co-reside with their parent(s) or their husbands' parent(s) are more likely to continue their job because the parents provide additional support for child care and household chores (NIPSSR 2003). If co-residence with parents is taken

into account in the analyses, the negative effect of long-distance family migration may have not been this strong. In some cases, couples might have migrated to co-reside with or reside close to parents in order to continue the dual-earner life style. If such cases account for a large share of long-distance family migrants, then the magnitude of family migration effect is overestimated in this analysis.

Second, there is an issue that women who played a subsidiary role in family migration had no intention to work full-time over her life time in a first place. If such cases account for a sizeable share of wives out of total family migrants, then the family migration effect cannot be interpreted as disruptive. It may be the case that many of them were not working full-time right before the move. In order to clarify precisely to what extent married women bear the costs of family migration, analyses using longitudinal data are necessary.

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## The Impact of Long-Distance Family Migration on Married Women's Employment Status in Japan

## 千年 よしみ

夫婦移動と移動後の既婚女性の労働状況に関する研究は、米国・英国を中心に盛んに行われている。海外における研究においては、一貫して夫婦移動が夫の所得にプラスに働く一方、妻の側には所得・従業上の地位・労働時間等の様々な指標において、マイナスに働くことがわかっている。本稿では2006年に実施された第6回人口移動調査の個票を用い、日本における両者の関係を分析した。直近の移動に関するデータを用い、観察期間を(1)過去5年間(2001年~2006年)、(2)過去10年間(1996年~2006年)、(3)期間限定無しの三つに設定し、その間に発生した夫婦移動が妻の従業上の地位にどのような影響を与えるのかを分析した。多項ロジット・モデルを用いて推定した結果、(1)短距離・長距離にかかわらず夫婦移動は女性のフルタイム労働に負の影響を及ぼすこと、(2)夫婦移動の負の影響は、長期にわたって残ること、(3)負の影響は長距離移動で特に強いこと、(4)夫婦移動の影響はパートタイム労働にも見られるが、時間の経過と共に弱くなり、最終的には見られなくなることが明らかになった。また、その要因について分析したところ、海外の研究でも指摘されているように、夫・妻それぞれが持つ性別役割分担意識の影響が大きいことが示唆された。