Division of Household Labor and Marital Satisfaction in China, Japan, and Korea

Takashi Oshio*

Institute of Economic Research, Hitotsubashi University, Japan

Kayo Nozaki

JGSS Research Center, Osaka University of Commerce, Japan

Miki Kobayashi

Graduate School of Economics, Kobe University, Japan

----

* *Corresponding author*: Institute of Economic Research, Hitotsubashi University, 2-1 Naka, Kunitachi, Tokyo 186-8603, Japan. Tel/Fax: +81–42–580–8658. Email: oshio@ier.hit-u.ac.jp.

ABSTRACT

In this study, we compare the association of marital satisfaction with the division of labor between husband and wife in Asia, based on Chinese, Japanese, and Korean General Social Surveys in 2006 (N = 2,346, 997, and 990, respectively). Results show that in all three countries, wives are less satisfied than husbands with marriage, mainly because wives do disproportionately more housework than husbands. Aside from this common gender difference, there are noticeable differences among the three countries. Chinese couples are relatively in favor of an egalitarian division of labor in terms of both market work and housework. Japanese couples are supportive of traditional specialization, with the wives flexibly shifting their efforts between market work and housework. Korean couples are under pressure from conflicts between the wife's labor force participation and the traditional division of labor in the household.

Key words: Division of household labor, gender difference, marital satisfaction,

Running head: Division of Labor and Marital Satisfaction in Asia

Marital satisfaction is a key element of perceived happiness, and a growing number of empirical studies are attempting to identify its determinants, as comprehensively surveyed by Bradbury, Fincham, and Beach (2000) and Fincham and Beach (2010). In this paper, we use nationwide social surveys to examine how marital satisfaction is associated with the division of labor between husband and wife in three major countries in Asia: China, Japan, and Korea. We hypothesize that the association between specialization in household and marital satisfaction is closely related to the social context in these Asia nations, as often observed in Western countries. If the social norms differ, it is likely that the same patterns in the division of household labor yield different patterns of happiness across countries.

The three Asian countries analyzed in this study appear to share a common—and probably non-Western—normative environment, namely, one grounded in Confucianism. The people's attitudes towards marital life may differ across countries, however, in accordance with their different institutional contexts. Fortunately, the datasets of Chinese, Japanese, and Korean General Social Surveys (CGSS, JGSS, and KGSS respectively), which were designed and conducted to be compatible with one another, allow for a cross-country analysis that addresses these issues consistently.

The division of household labor and its association with marital quality and satisfaction has been one of the central issues addressed in family studies. Most prominently, Becker's theory of marriage (1991) suggests that the specialization for the married couples in housework on the one hand and market work on the other constitutes an economic gain from marriage. This well-established theory provides an economic reason for the traditional division of household labor and, as a corollary, suggests the possibility that female labor force participation tends to reduce marital stability (Becker, Landes, & Michael, 1977).

The results of empirical studies have been mixed in general, however. Some researchers

have found no evidence for a negative relation between female employment (or female share of household income) and marital stability or satisfaction (Oppenheimer, 1997; Rogers & DeBoer, 2001; Sayer & Bianchi, 2000). Other researchers have observed the opposite relation, which is in line with the specialization hypothesis (Kesselring & Bremmer, 2006; Robert, Rosalind, & Gareis, 2001; Wilcox & Nock, 2006). It might also be more reasonable to argue for a nonlinear relation rather than a linear positive or negative one, as suggested by findings by Ono (1998) and Rogers (2004).

Furthermore, the association between marital satisfaction and female employment is likely to be mediated by the way in which the husband and wife participate in housework. In general, the wife's additional work outside the home should require a change in the division of household labor, as evidenced by a cross-country analysis by Shannon and Greenstein (2004). Correspondingly, frictions caused by the adjustment to the division of labor or a failure to cope with them may reduce the subjective well-being of the married couple.

Indeed, it is often found that perceived inequality in the division of household labor is negatively associated with reported marital satisfaction, especially for wives (Frisco & Williams, 2003; Yaov & Katz, 2002). It should be noted, however, that both the division of household labor and its subjective assessment are strongly dependent on the social context. National-level gender equity or gender ideology in society is often used as a reference, especially by married women, when determining an appropriate division of housework, and it mediates the effect of perceived fairness on marital satisfaction (Fuwa, 2004; Greenstein, 2009).

Asian countries provide a particularly useful means of examining how married couples in different countries respond differently to the relation between modern lifestyles and traditional norms. The Confucian norm claims that the husband should go outside to pursue

his business, whereas the wife should stay inside to perform housework. Coincidently, this view is consistent with Becker's theory of marriage, provided the man has a comparative advantage for wage earnings in the labor market. An upward trend in female labor force participation coupled with a rising share of dual-earner couples, however, likely adds tension to the balance between modern lifestyles and the traditional norm, especially for Asian wives. For this reason, a cross-country analysis across differing Asian nations is an ideal context to examine how marital satisfaction is affected by the relations between the normative environment and institutional background.

In recent years, various empirical studies have examined these issues in Asian countries. In particular, many researchers have found a substantial change in household behavior and gender attitudes in China, reflecting a series of dramatic social reforms for modernization. Although traditional gender norms still persist, the division of labor has become more equal and people now have more egalitarian gender attitudes than in the past (Lynne, 2002; Pimentel, 2000, 2006; Zuo & Bian, 2001). Unfortunately, most previous research was based on data collected before 2000. It is therefore important to examine the determinants of marital satisfaction in more recent years, particularly given the remarkable economic growth in the last decade.

In Japan, empirical studies about marital satisfaction started earlier than in China, and place an emphasis on comparisons with the United States (see Kamo, 1993, as an early example). As emphasized by many sociological studies including Rindfiiss, Choe, Bumpass, and Tsuya (2004), Japanese families and attitudes towards marriage have been substantially changed in recent years. The share of double-earner couples, for example, rose consistently from 35% in 1980 to 55% in 2008 according to the government's Labor Force Survey. Based on the data of the General Social Surveys for the United States and JGSSs for Japan in

2000–2004, Lee and Ono (2008) conducted US-Japan comparisons of the association between labor specialization in the married couple and marital satisfaction. They found that Japanese wives are happier if they specialize in the household and have a higher total household income, a result consistent with the traditional specialization hypothesis. Lee and Ono (2008) did not explicitly examine how the division of housework affects marital satisfaction, however.

As for Korea, previous studies have emphasized the limited options for married women and their psychological stress. For instance, Tsuya, Bumpass, and Kim (2000) revealed that among those who are employed, Korean wives work longer hours than either Japanese or American wives, primarily due to limited opportunities for part-time employment. This finding points to the risk of psychological stress among Korean wives in dual-earner couples who fail to successfully share household work. Indeed, Lee, Um, & Kim (2004) found higher levels of depression for Korean women who have difficulty balancing work in the market work and work at home. In addition, Kwon, Rueter, Lee, Koh, and Ok (2003) observed that economic pressure negatively affected marital satisfaction after the country experienced the economic crisis of 1997.

Given the findings from these empirical studies, we can tentatively speculate that married couples share the household labor in a more egalitarian way in China than in either Japan or Korea, that Japanese wives are more economically dependent on their husbands and have a higher share of housework, and that Korean wives feel stress from the division of household work with their husbands. In other words, it can be hypothesized that Chinese couples deviate most from the traditional specialization model, that Japanese couples are still in favor of it, and that Korean couples experience tension between their deviation from this model and the pressure to adhere to it. Keeping these tentative predictions in mind, we attempt to compare

how marital satisfaction is associated with the division of labor in married couple across these three countries.

Methodologically our empirical study has three features novel in the marital satisfaction literature. First, as already mentioned, it is based on compatible nationwide surveys, allowing us to consistently compare the results across countries. Second, we consider the division of labor in terms of both market work and housework, based on the reports on own and household income as well as time spent on housework. This provides for a more precise and comprehensive examination of a couple's subjective assessment of the division of labor. Third, we explicitly control for the effects of selection into marriage, given that extremely dissatisfied couples are often already separated (Lee & Ono, 2008). Unlike their statistical treatments of such effects, however, we apply maximum likelihood estimation, which is appropriate for discrete choices of reported marital satisfaction.

METHOD

Datasets

The empirical analysis in this paper is based on micro data collected from the CGSS, JGSS, and KGSS, which were conducted in 2006 and provided by the East Asian Social Survey Data Archive (EASSDA). These surveys provide a comprehensive collection of information about respondents' demographic and socioeconomic status as well as other aspects of each country. These questionnaires have the same core content and format, which makes them largely comparable with one another. The original sample size (response rate) is 3,208 (38.5%), 2,130 (59.8%), and 1,605 (65.7%) for CGSS, JGSS, and KGSS, respectively.

We concentrate on those aged 20–69, because JGSS did not collect data on those aged 19 and below and CGSS did not collect data on those aged 70 and above. In addition, given our

concern with the choice between marriage and divorce, we focus on those who are married or

divorced, excluding those who have been never married or who were widowed. To this end,

we treated those who are married but living separately as divorced, excluding those who are

cohabitating but unmarried. After excluding those with missing key variables such as income,

we utilized 2,346 respondents from the CGSS, 997 from the JGSS, and 990 from the KGSS.

Of these, 2,287 in the CGSS, 911 in the JGSS, and 944 in the KGSS were married. The basic

features of the key variables used in the analysis are summarized in Table 1.

Variables

The dependent variable is self-reported marital satisfaction. JGSS and KGSS asked

respondents "Considering all things together, how would you describe your marriage? Would

you say that you are very satisfied or dissatisfied with your marriage?" on a five-point scale

(1 = *very satisfied* to 5 = *very dissatisfied*). CGSS provided a similar question: "On the whole,

are you satisfied with your marriage?" and asked respondents to choose from among *very*

dissatisfied, *dissatisfied*, *so-so*, *satisfied*, *very satisfied.* We rearranged these answers such

that 1 = *very dissatisfied* and 5 = *very satisfied* for all countries. As discussed later, we then

condensed them into two categories: *satisfied* (4 or 5) and *not satisfied* (1, 2, or 3) in the

regression analysis.

We utilize a variety of independent variables to explain marital satisfaction as well as

selection into marriage. For common background variables, we consider gender, age,

educational attainment (graduated from junior high school or below, graduated from high

school, or graduated from college or above), and the spouse's age and educational attainment.

Household income is one of the key predictors for marital satisfaction. CGSS and KGSS

provided actual values, and JGSS provided categorical values. For Japan, we took the median

value of each category for simplicity. The same is true for the respondent's own income. In the regression analysis, we equalized household income by dividing the figure by the root of the number of family members, as done in recent OECD publications comparing income inequality and poverty across countries (OECD, 2008). We further transformed all income data into logarithms, which makes it easy to compare the estimation results across models and countries.

We capture the division of labor between husband and wife in three ways. First, we consider whether the respondent's couple is a double-earner. Second, we calculate the contribution of the respondent's own income to the total household income. It is equal to zero if the respondent earns no money. In addition to these two income-related variables, we construct a composite index of the relative burden of housework as follows. The surveys in the three countries commonly asked respondents how often they and their spouse prepare the evening meal, do the laundry, and clean the house, respectively. The answers were chosen from among seven options: *almost every day*, *several times a week*, *about once a week*, *about once a month*, *several times a year*, *about once a year*, and *never*. We allocate 7, 3.5, 1, .25, .1, 0.2, and 0, respectively, to each category, and take the mean value for the three aspects of housework as the respondent's housework burden. Cronbach's alpha for the three components of housework exceeds 0.95 for each country. Finally, we calculate the share of the respondent's burden relative to the couple's total burden: It is equal to 0.5 if the husband and wife share the housework equally and is close to 1 if the respondent does most of housework.

It should be noted that this index of the share of housework is not free from biases. First, the spouse's effort reported by the respondent might be undervalued especially if the respondent is a husband (Kamo, 2000; Lee & Waite, 2005). Second, contributions to

housework from other family members such as parents and children are ignored. Third, other aspects of housework are not reflected in the index. Despite these drawbacks, we believe that this index can roughly assess the degree of burden of housework. Moreover, regarding the second point, we confirm that the addition of dummy variables for parents' support for housework does not affect the estimation results and that their associations on marital satisfaction are not significant.

As for predictors of marital satisfaction, we additionally consider coresidence with parents and coresidence with parents-in-law, self-rated health, and the presence of children. Previous studies found that coresidence with parents, especially when accompanied by parent care, tends to reduce adult children's subjective well-being (Amirkhanyan & Wolf, 2006; Choi & Marks, 2006). Regarding self-rated health, we define good health as the top two categories of self-rated health on a five-point scale. Boot and Johnson (1994) and Joung et al. (1998) found a positive impact of health on marital quality, although reverse causation cannot be ruled out. Regarding the presence of children, Twenge, Campbell, and Craig (2003) and Van Laningham, Johnson, and Amato (2001) found a negative association with marital satisfaction. We also add the dummy variables for having one child, two children, and three children or more, respectively.

As for predictors of selection into marriage, we assume that the respondent's working status and the presence of young children are relevant. Working raises the economic resources and likely reduces the incentive to marry, whereas unstable occupational status may reduce the chance to find a partner. Having a young child is likely to reduce the incentive to divorce. We further take into account the educational attainment of the respondent's parents (coding 1 if at least one parent graduated from college or above) and residential area at age 15 (coding 1 if the respondent lived in a village). These two factors are predicted to affect the

individuals' attitudes toward marriage and divorce via family or community norms.

Analytical strategy

In addition to descriptive analysis, we employ maximum likelihood estimation for probit regression with sample selection. More specifically, we estimate the probit model to determine whether the respondent is satisfied with his/her marriage or not, explicitly taking into account selection into marriage. Two remarks should be made on this methodology. First, selection effects must be controlled for in this case, because marital satisfaction is only observed for currently married individuals. It might be that the currently divorced individuals, who were not asked to report marital satisfaction in the survey, were too unhappy in marriage to stay together. Lee and Ono (2008) dealt with this problem by using Heckman's two-step estimation method. For binary or ordinal responses in the second stage, however, maximum likelihood (ML) estimation is more appropriate because accounting for sample selection is complicated by the nonlinear structure of the model (Miranda & Rabe-Hesketh, 2006). Hence, we apply ML estimation in this study. To identify variables for predicting estimation of selection into marriage, we use dummy variables for working, having a child aged 6 or below, parents graduating from college or above, and having lived in a village at age 15, as mentioned above.

Second, we employ probit regression rather than ordered probit regression, even though five ordinal categories of marital satisfaction are available from the dataset. Valid ordered probit or ordered logit models assume that the coefficients describing the relationship between, say, the lowest versus all higher categories of the response variable are the same as those that describe the relationship between the next lowest category and all higher categories, etcetera. The results of the approximate likelihood-ratio tests (not reported) suggest that the

proportional odds assumption is violated in most cases when estimating ordered probit models. This is not surprising, given that the distribution of marital satisfaction on a five-point scale is substantially skewed to the high end for both men and women in all countries, with a low proportion of the lowest two categories (see below for discussion). We also confirm that we can obtain nearly the same results even if we neglect the violation of the proportional odds assumption and estimate ordered probit models.

RESULTS

Descriptive analysis

Table 2 summarizes gender differences in key variables for each country, with the top part presenting the distribution of marital satisfaction and the bottom part presenting the pattern of specialization for market work and housework. From the top part, we find that the distribution of marital satisfaction is skewed to the high end for both men and women. This is especially true in China, where more than 80% of respondents chose 4 or 5 and less than 5% chose 1 or 2. Oshio, Nozaki, and Kobayashi (2011) observed the same pattern for life satisfaction, a broader concept of subjective well-being, for the three Asian countries.

More importantly in the context of the present study, women are less satisfied than men with their marriage. Judging by the average of five-point scores, the gender difference is much larger in Japan (.46) and Korea (.37) than in China (.07), although it is difficult to compare the reported level of subjective well-being across countries. Consistently, the share of those who are satisfied with their marriage—that is, the total share of the top two categories—is much lower for women than for men in Japan and Korea when compared to China.

The bottom part of the table summarizes the pattern of specialization for market work,

income, and housework. The first row, which shows the share of working individuals, reveals that dual-earner couples are much more common in China than in Japan and Korea. Nearly 90% of married women work outside the home in China, compared to roughly 50% in Japan and Korea. Consistent with this result, wives have the highest share of income in China, about 30%, compared to less than 20% in Japan and Korea.

Comparisons between Japan and Korea reveal the difference in the working styles between two countries. The wife's share of income is higher in Korea (31.9%) than in Japan (23.8%) among dual-earner couples, but it is higher in Japan (19.3%) than in Korea (16.9%) among all couples. This fact is consistent with the view that Korean wives in dual-earner couples work more often as full-time workers or longer in general than Japanese wives. Indeed, the last row of Table 2 indicates that the wife's working hours per week for dual-earner couples are 46.9 hours in Korea, much longer than the 31.6 hours in Japan.

Turning to the division of housework, the fourth row shows that Chinese couples share housework more equally than either Japanese or Korean couples. Chinese husbands account for 29.6% of housework, much higher than Japan (10%) and Korea (18.4%). This is consistent with the highest level of the wife's labor force participation and her share of income in China. Another interesting finding is that the wife's share of household work does not differ much between all and dual-earner couples in all three countries. This finding suggests that married women are under heavier stress in Korea than in Japan, considering that Korean wives tend to work longer than Japanese wives.

Figures 1 and 2 lend additional support to this interpretation. Figure 1 compares the cumulative distributions of the wife's share of income for all married couples (left panel) and dual-earner couples (right) across three countries. For all couples, we notice that Japan's and Korea's curves are more convex toward the upper left than China's one, showing that

Chinese wives contribute more to household income. For dual-earner couples, Korea's curve shifts downward and towards China's curve, indicating that Korean working wives make a greater contribution to household income than those in Japan.

In the same manner, Figure 2 compares the cumulative distributions of the wife's share of housework for all married couples (left panel) and dual-earner couples (right panel) across the three countries. This figure is based on the shares reported by the female respondents, although the results are similar to those reported by the male respondents. For all countries, the curves stay close to the horizontal axis if the wife's share of housework is lower than 50% and jumps when it is close to 100%, confirming a strong gender bias in the share of housework towards the wife. China's curve jumps at 50%, however, indicating that a substantial portion of married couples share housework equally, unlike in Japan and Korea. By contrast, Japan's curve is most convex toward the lower right for both all and dual-earner couples, indicating Japanese wives' strong tendency to specialize in housework. Korea's curve is located somewhat more upward for dual-earner couples than for all couples, indicating that the husbands do more housework than in the case of single-earner couples. Korea's curve is still well below China's for dual-earner couples, however, in contrast to the share of income (see the right panel of Figure 1). This provides additional evidence of the heavy burden placed on Korean wives who do both market work and housework.

Regression analysis

The probit regression models with selection into marriage are expected to more precisely examine the gender differences in marital satisfaction because they control for background variables and selection effects. Table 3 provides the estimated coefficients on key variables predicting marital satisfaction (top part) and selection into marriage (bottom part). These

coefficients are obtained simultaneously by ML estimation. The estimated coefficients on background variables are not reported to save space. Estimations in this table are done for the whole sample (men and women jointly) and gender is controlled for by adding a dummy variable for women in the model. Results obtained from separate estimations for men and women (see Table 4) are discussed later.

Starting with selection into marriage, we notice that different factors are relevant for each country. Working and having a child aged 6 or below reduces the probability of marriage only in Japan, whereas the experience of living in village at age 15 reduces the probability of divorce in China and Korea, not in Japan. Women are also slightly more inclined than men to avoid divorce in China, and this is not significantly associated with the parents' educational attainment.

As for marital satisfaction, we first find that household income enhances it in all countries, albeit to a lesser extent in China, a reasonable result indicating that income conditions are relevant for marital satisfaction. Second, being in a dual-earner status is positively associated with marital satisfaction in China. It may partly reflect differences in the mean income and/or standard of living across the countries, but it should be noted that we obtain this positive association even after controlling for household income. Third, the share of income is positively associated with marital happiness only in China. Combined with the second result, it points to egalitarian attitudes of Chinese couples.

Forth, we notice that a higher share of housework is negatively associated with marital satisfaction only in Korea. It is somewhat surprising, given that there is a substantial difference in the share of housework between husbands and wives in all countries (see Table 2 and Figure 2) and that the wife's marital satisfaction is significantly lower than the husband's (see Table 2). A possible reason is that a substantial difference in the share of

housework between husbands and wives is highly correlated with the dummy variable for women. Indeed, the coefficients on the dummy variable for women are not significant for all countries. We will discuss this issue in more detail using Table 4.

As for other variables, we further notice that good health significantly contributes to marital satisfaction. Although coresidence with parents or parents-in-law is not related to marital satisfaction in general, it does have a modestly positive association in Korea. This suggests that the Confucian norm that children should care about their parents is still in place in Korea. The number of children is not relevant for marital satisfaction for all countries.

The Wald test indicates that the correlation between the two equations (for selection into marriage and marital satisfaction) is not significant for all countries. This might be due in part to a limited proportion of divorced respondents in the sample (less than 10% of the whole sample for all countries), although the possibility that our model specification fails to control for selection effects cannot be ruled out. Therefore, the estimation results should be interpreted cautiously.

Table 4 compares the results from four models: using the whole sample and controlling for gender (as already reported in Table 3), using the whole sample and not controlling for gender, and estimating models for men and women separately. The results are expressed in terms of the marginal effect—that is, how a marginal change in each predictor affects the probability of marital satisfaction—in order to make cross-model comparisons easier. For the dummy variables (dual earning and women), the marginal effect indicates a change in the probability of marital satisfaction in response to a change in their value from 0 to 1.

Comparing the results for the whole sample when controlling for gender (first part of the table) and not controlling for gender (second part) explains the gender differences in marital satisfaction. First, the estimated effects of household income and dual earning are almost the

same, respectively, between two models in each country. Given that the distribution of household income and the probability of dual earnings should not be much different between men and women, this fact suggests that these two factors do not explain the gender difference in marital satisfaction.

More interestingly, the effect of the share of housework, which is significantly negative only for Korea after controlling for gender, becomes significant in all countries when not controlling for gender. Considering that women share a much larger portion of housework in all countries, this suggests that the gender difference in marital satisfaction is largely attributable to a relative burden of housework between the husband and wife. That is the case in Korea as well, but the fact that the effect of the share of housework is highly significant even after controlling for gender in Korea suggests that both men and women are sensitive to the share of housework in the country. Another noteworthy fact is that dual earning as well as a higher share of income raises marital satisfaction only in China, regardless of whether one controls for gender or not, confirming the robustness of the results obtained from Table 3.

Comparing results from regression models separately estimated for men (third part) and women (fourth), we first notice that women are sensitive to household income in all countries, whereas men are sensitive to it only in Korea. Second, dual earning is welcome by both men and women only in China, as already suggested by the results for the whole sample. Third, a higher share of income raises the wife's satisfaction in China but reduces it in Japan. This is consistent with the view that Chinese wives prefer an egalitarian division of labor, while Japanese wives are in favor of economic dependence on husbands. Finally, both husbands and wives are sensitive to the share of housework in Korea, as indicated by the significance of this variable for the whole sample even after controlling for gender. This contrasts with the cases in China and Japan, where the share of housework does not significantly affect marital

satisfaction when conducting separate estimates for men and women.

DISCUSSION

We compared the associations between the division of household labor and marital satisfaction in China, Japan, and Korea, using the micro data obtained from nationwide surveys. The results obtained from our descriptive and regression analyses are generally supportive of the hypothesis that the relationship between specialization in household and marital satisfaction is closely related to the social context, which substantially differs across countries. In the following sections, we summarize and further interpret these results.

First, marital satisfaction is lower for wives than husbands for all three countries. This common gender difference is largely attributable to a higher burden of housework on wives. For all countries, wives typically perform more than half of the housework and this share is not much lower for dual-earner couples than for the single-earner ones.

Second, however, the wife's disadvantageous position is somewhat less remarkable in China than in other two countries. This likely reflects an egalitarian division of housework as well as market work for Chinese couples, as observed by Pimentel (2006). In fact, dual earning is welcome by both husbands and wives in China, unlike in Japan and Korea. This study cannot identify the reason for their egalitarian attitudes from the data. One possible explanation is, however, that the progressive ideology of gender equality introduced by the communist regime—combined with the fact that a single earner's wage income is often not sufficient to make a living in China—may have contributed to an egalitarian attitude towards the division of household labor (Pimentel, 2006).

Third, our observations are in line with the hypothesis that Japanese couples are in favor of the traditional household specialization, a result consistent with that of Lee and Ono

(2008). Even if Japanese wives work outside the home, they tend to be employed as part-time workers and their share of housework is higher than Chinese or Korean wives. Most notably, a higher share of income reduces their marital satisfaction, whereas a higher share of housework does not explain differences in satisfaction among the Japanese wives. One reason for their preference for economic dependence on husbands is that the current tax and social insurance schemes tend to discourage wives from working as full-time workers (Abe, 2009; Akabayashi, 2006). Given the institutional disincentives to work, it is reasonable for Japanese wives to specialize in housework and work as part-time workers if they work outside the home.

Fourth, compared to Chinese and Japanese wives, Korean wives have more difficulty with balancing market work and housework. When employed outside the home, Korean wives tend to work longer than Japanese wives and their relative contribution to household income is much higher than in Japan. The division of housework, however, is not as egalitarian in Korea as China. Moreover, unlike Chinese and Japanese husbands, Korean husbands are sensitive to a higher share of housework. This means that Korean husbands are in favor of traditional specialization in household work and suggests that Korean couples often experience frictions and frustrations when adjusting to wives working outside the home (for similar observations see also Tsuya et al. (2000) and Lee, Um, and Kim (2004)).

Taken together, our empirical analysis highlights substantial differences in the attitudes of married couples towards the division of labor in the three countries under consideration. Chinese couples are relatively in favor of the egalitarian division of labor, Japanese couples are most supportive of traditional specialization, and Korean couples are under pressure from conflicts between the wife's labor force participation and the traditional division of labor. These results are generally consistent with those of preceding studies, but our empirical

analysis is grounded in compatible nationwide surveys and thus provides a truly comparative perspective.

This study has several limitations beyond the limited sample size, the tentative assessment of the division of housework, and the risk of insufficient control for sample selection effects. Most of all, as is often the case with cross-sectional analysis, this study could not precisely identify any causality regarding marital satisfaction. Indeed, Shoen, Rogers, and Amato (2006) reported that unhappily married wives are more likely to shift into full-time employment. It is therefore reasonable to predict that the division of labor and marital satisfaction should have a bidirectional and dynamic relationship. This problem can be addressed using panel data. Moreover, considering that social norms and gender attitudes change over time, it might be that the observed association between the division of labor and marital satisfaction in this study is unstable. If that is the case, future research would do well to use a more dynamic analytic framework.

NOTE

The data for this paper were downloaded from the East Asian Social Survey Data Archive (EASSDA) after obtaining the necessary permission. The East Asian Social Survey (EASS) is based on the Chinese General Social Survey (CGSS), the Japanese General Social Survey (JGSS), the Korean General Social Survey (KGSS), and the Taiwan Social Change Survey (TSCS), and distributed by the EASSDA.

REFERENCES

Abe, Y. (2009). The effects of the 1.03 million yen ceiling in a dynamic labor supply model. *Contemporary Economic Policy*, *27*, 147 – 163. DOI: 10.1111/j.1465-7287.2008.00115.x

Akabayashi, H. (2006). The labor supply of married women and spousal tax deductions in Japan: A structural estimation. *Review of Economics of the Household*, *14*, 349 – 378. DOI: 10.1007/s11150-006-0012-5

Amirkhanyan, A. A., & Wolf, D. A. (2006). Parent care and the stress process: Findings from panel data. *Journal of Gerontology: Social Sciences*, *61B*, S248 – S255.

Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy*, 85, 1141 – 1187.

Becker, G. S. (1991). *A Treatise on the Family*. Harvard University Press, Cambridge.

Bookwala, J. (2009). The impact of parent care on marital quality and well-being in adult daughters and sons. *Journal of Gerontology: Psychological Sciences*, *64B*, 339 – 347. DOI: 10.1093/geronb/gbp018.

Booth, A., & Johnson, D. R. (1994). Declining health and marital quality. *Journal of Marriage and the Family*, *56*, 218 – 223.

Bradbury, Th., Fincham, F. D., Beach. S. R. H. (2000). Research on the Nature and Determinants of Marital Satisfaction: A Decade in Review. *Journal of Marriage and*

Family, *62*, 964 – 980. DOI: 10.1111/j.1741-3737.2000.00964.x

Brennan, R. T., Barnett, R. C., & Gareis, K. C. (2001). When she earns more than he does: A longitudinal study of dual earner couples. *Journal of Marriage and Family*, *63*, 168 – 182. DOI: 10.1111/j.1741-3737.2001.00168.x.

Choi, H., & Marks, N. F. (2006). Transition to caregiving, marital disagreement, and psychological well-being. *Journal of Family Issues*, *27*, 1701 – 1722. DOI: 10.1177/0192513X06291523.

Davis, S. N., & Greenstein, Th. N. (2004). Cross-national variations in the division of household labor. *Journal of Marriage and Family, 66*, 1260 – 1271. DOI: 10.1111/j.0022-2445.2004.00091.x

Fincham, F. D., & Beach, S. R. H. (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family*, *72*, 630 – 649. DOI: 10.1111/j.1741-3737.2010.00722.x

Frisco, M. L., & Williams, K. (2003). Perceived housework equity, marital happiness, and divorce in dual-earner households. *Journal of Family Issues*, *24*, 51 – 73. DOI: 10.1177/0192513X02238520.

Fuwa, M. (2004). Macro-level gender inequality and the division of household labor in 22 Countries. *American Sociological Review*, *69*, 751 – 767. DOI: 10.1177/000312240406900601.

Greenstein, Th. N. (2009). National context, family satisfaction, and fairness in the division of household labor. *Journal of Marriage and Family*, *71*, 1039 – 1051. DOI: 10.1111/j.1741-3737.2009.00651.x

Joung, I. M. A., van de Mheen, Stronks, K., Frans, van Poppel, W. A., & Mackenbach, J. P. (1998). A longitudinal study of health selection in marital transitions, *Social Science and*

Medicine, *46*, 425 – 435. DOI: 10.1016/S0277-9536(97)00186-X.

Kamo, Y. (1993). Determinants of marital satisfaction: A comparison of the United States and

Japan. *Journal of Social and Personal Relationship*, *10*, 551 – 568. DOI:

10.1177/0265407593104005.

Kamo, Y. (2000). ''He said, She said'': Assessing discrepancies in husbands' and wives'

reports on the division of household labor. *Social Science Research*, *29*, 459 – 476. DOI:

10.1006/ssre.2000.0674.

Kesselring, R. G., & Bremmer, D. (2006). Female income and the divorce decision: Evidence

from micro data. *Applied Economics*, 38, 1605 – 1616. DOI:

10.1080/00036840500426934.

Kwon, H.-K., Rueter, M. A. Lee, M.-S., Koh, S., & Ok, S. W. (2003). Marital relationships

following the Korean economic crisis: Applying the family stress model. *Journal of*

Marriage and Family, *65*, 316 – 325. DOI: 10.1111/j.1741-3737.2003.00316.x.

Lavee, Y., & Katz, R. (2002). Division of labor, perceived fairness and marital quality.

Journal of Marriage and the Family, 64, 27 – 40. DOI:

10.1111/j.1741–3737.2002.00027.x.

Lee, K. J., Um, C. C., & Kim, S. (2004). Multiple roles of married Korean women: Effect on

depression. *Sex Roles*, *51*, 469 – 478. DOI: 10.1023/B:SERS.0000049235.60839.ef.

Lee, K. S., & Ono, H. (2008). Specialization and happiness in marriage: A U.S.–Japan

comparison. *Social Science Research*, *37*, 1216 – 1234. DOI:

10.1016/j.ssresearch.2008.02.005.

Lee, Y.-S., & Waite, L. J. (2005). Husbands' and wives' time spent on housework: A

comparison of measures. *Journal of Marriage and Family*, *67*, 328 – 336. DOI:

10.1111/j.0022–2445.2005.00119.x.

Miranda, A. & Rabe-Hesketh, S. (2006). Maximum likelihood estimation of endogenous switching and sample selection models for binary, ordinal, and count variables. *The Stata Journal*, *6*, 285 – 308.

OECD. (2008). *Growing Unequal ? Income Distribution and Poverty in OECD Countries*, Paris.

Ono, H. (1998). Husbands' and wives' resources and marital dissolution. *Journal of Marriage and Family, 60*, 674 – 689.

Oppenheimer, V. K. (1997). Women's employment and the gain to marriage: The specialization and training model. *Annual Review of Sociology, 23*, 431 – 453. DOI: 10.1146/annurev.soc.23.1.431.

Oshio, T., Nozaki, K. & Kobayashi, M. (2011). Relative income and happiness in Asia: Evidence from nationwide surveys in China, Japan, and Korea. *Social Indicators Research*, forthcoming. DOI: 10.1007/s11205-010-9754-9.

Pimentel, E. E. (2000). Just how Do I love thee? Marital relations in urban China. *Journal of Marriage and Family*, *62*, 32 – 47. DOI: 10.1111/j.1741-3737.2000.00032.x

Pimentel, E. E. (2006). Gender ideology, household behavior, and backlash in urban China. *Journal of Family Issues*, *27*, 341 – 365. DOI: 10.1177/0192513X05283507

Rich, S. L. (2002). Determinants of family life satisfaction in reforming urban China. *International Journal of Comparative Sociology*, *43*, 169 – 191. DOI: 10.1177/002071520204300204.

Rindfiiss, R. R., Choe, M. K., Bumpass, L. L., & Tsuya, N. O. (2004). Social networks and family change in Japan. *American Sociological Review*, *69*, 838 – 861. DOI: 10.1177/000312240406900605.

Rogers, S. J. (2004). Dollars, dependency, and divorce: Four perspectives on the role of

wives' income. *Journal of Marriage and Family*, *66*, 59 – 74. DOI: 10.1111/j.1741-3737.2004.00005.x.

Rogers, S. J., & DeBoer, D. D. (2001). Changes in wives' income: Effects on marital happiness, psychological well-being, and the risk of divorce. *Journal of Marriage and Family*, *63*, 458 – 472. DOI: 10.1111/j.1741-3737.2001.00458.x.

Sayer, L. C., & Bianchi, S. M. (2000). Women's economic independence and the probability of divorce. *Journal of Family Issues*, 21, 906 – 943. DOI: 10.1177/019251300021007005.

Schoen, R., Rogers, S. J., & Amato, P. R. (2006). Wives' employment and spouses' marital happiness. *Journal of Family Issues*, *27*, 506 – 528. DOI: 10.1177/0192513X05283983.

Tsuya, N. O. Bumpass, L. L., & Choe, M. K. (2000). Gender, employment, and housework in Japan, South Korea, and the United States. *Review of Population and Social Policy*, *9*, 195 – 220.

Twenge, J. M., Campbell, W. K., & Craig A. F. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and Family*, *65*, 574 – 583. DOI: 10.1111/j.1741-3737.2003.00574.x.

Van Laningham, J., Johnson, D. R., & Amato, P. (2001). Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. *Social Forces*, *78*, 1313 – 1341. DOI: 10.1353/sof.2001.0055.

Wilcox, W. B., & Nock, S. L. (2006). What's love got to do with it? Equality, equity, commitment and women's marital quality. *Social Forces*, *84*, 1321 – 1345. DOI: 10.1353/sof.2006.0076.

Zuo, J., & Bian, Y. (2001). Gendered resources, division of housework, and perceived fairness: A case in urban China. *Journal of Marriage and Family*, *63*, 1122 – 1133. DOI: 10.1111/j.1741-3737.2001.01122.x.

Figure 1 *The cumulative distribution of the wife's share of income among married couples*

All couples

Dual-earner couples
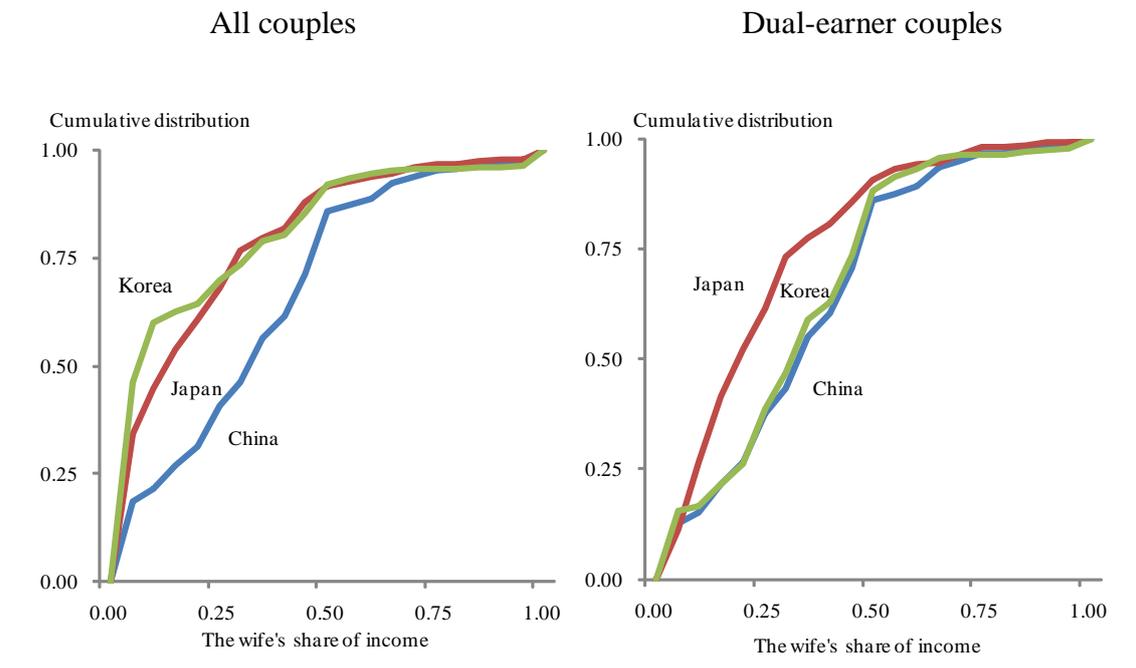
Figure 2 *The cumulative distribution of the wife's share of housework among married couples*

All couples

Dual-earner couples
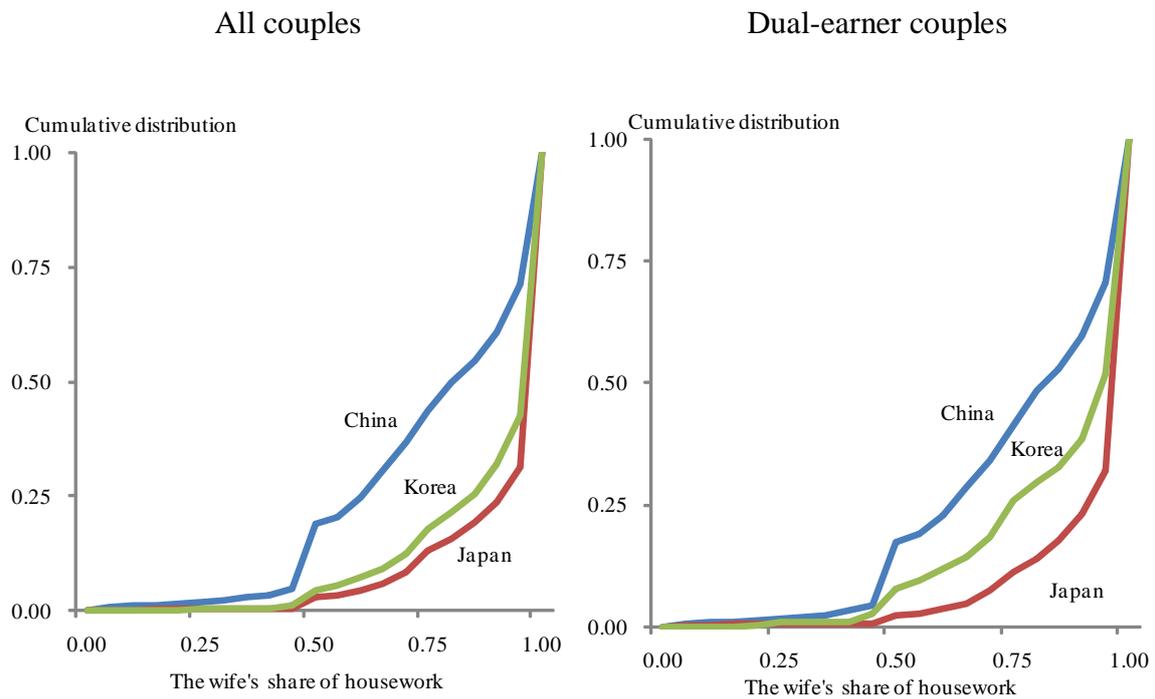
Table 1 *Descriptive Statistics for Key Variables in Analysis*

	China	Japan	Korea
N	2,346	997	990
Proportion (%)			
Women	.559	.560	.574
Married	.978	.937	.956
Divorced	.022	.064	.045
Having children aged 6 or below	.167	.242	.181
Graduated from junior high school or below	.663	.139	.196
Graduated from high school	.230	.537	.382
Graduated from college or above	.107	.324	.423
Father or mother: graduated from college or above	.015	.151	.126
Working	.913	.685	.656
Good health	.754	.499	.565
Living in village at age 15	.341	.116	.363
Dual earning in married sample	.653	.504	.423
Residing with parents in married sample	.202	.088	.035
Residing with parents-in-law in married sample	.123	.117	.045
Age: *M*	44.3	50.8	44.4
SD	11.7	11.8	10.0
Household income: *M*	11,088	366.8	1,881
SD	14,945	246.1	1,931
Number of children: *M*	1.66	1.96	2.02
SD	1.04	.92	.98

Note: "Divorced" includes "married but living separately." Units of household income are yuan in China, million yen in Japan, and thousand won in Korea.

Table 2 *Gender Differences in Key Variables among Married Individuals*

Proportion (%)	China		Japan		Korea	
	Men	Women	Men	Women	Men	Women
Marital satisfaction (on a five-point scale)						
1 (= *very satisfied*)	1.0	.5	.1	2.6	1.2	3.5
2	1.4	4.0	2.9	11.1	5.9	7.2
3	11.4	14.2	24.4	34.9	22.9	38.7
4	72.8	69.2	45.6	36.1	42.5	35.2
5 (= *very dissatisfied*)	13.3	12.2	27.0	15.3	27.6	15.4
4 or 5	86.1	81.3	72.6	51.4	70.0	50.5
Mean score	3.96	3.89	3.96	3.50	3.89	3.52
Working	96.6	87.1	83.5	55.1	89.8	46.9
Share of income	53.9	30.6	79.0	19.3	72.3	16.9
(for dual-earner couples)	51.7	32.3	72.6	23.8	66.9	31.9
Share of housework	29.6	75.9	10.0	92.2	18.4	89.3
(for dual-earner couples)	30.1	77.2	10.9	92.4	22.5	86.1
Working hours per week for dual-earner couples (hours)						
	51.5	50.2	48.6	31.6	52.7	46.9

Table 3 *Estimated Coefficients on Variables Predicting Selection into Marriage and Marital Satisfaction, Controlling for Background Variables: Summarized Results of Probit Models with Sample Selection for Men and Women*

	China		Japan		Korea	
Marital satisfaction (1 = *satisfied*)						
Women	−.059	(.135)	−.330	(.309)	.178	(.220)
Household income (log)	.082†	(.045)	.274***	(.085)	.287***	(.076)
Dual earning	.274**	(.092)	−.040	(.105)	−.123	(.095)
Share of income	.268†	(.157)	−.020	(.218)	−.106	(.172)
Share of housework	−.251	(.167)	−.250	(.331)	−.983***	(.257)
Good health	.259**	(.096)	.651***	(.093)	.403***	(.091)
Residing with parents	−.077	(.117)	.114	(.199)	.461†	(.256)
Residing with parents-in-law	.079	(.129)	−.053	(.146)	−.212	(.202)
Having one child	−.018	(.222)	−.065	(.204)	−.100	(.249)
Having two children	.138	(.230)	−.107	(.179)	−.071	(.241)
Having three children or more	.145	(.249)	.016	(.191)	-.188	(.259)
Selection into marriage (1 = *married*)						
Women	.236†	(.131)	−.154	(.130)	−.019	(.166)
Working	−.024	(.205)	−.360*	(.167)	−.237	(.177)
Having a child aged 6 or below	−.073	(.265)	1.108***	(.259)	.394	(.250)
Parents graduated from college	−.444	(.401)	.023	(.177)	−.354	(.253)
Lived in village at age 15	.374*	(.155)	−.228	(.182)	.441*	(.176)
ρ	−.613	(.330)	−.222	(.366)	−.020	(.537)
Wald test of $\rho = 0$: χ^2	1.82		.34		.00	
N	2,346		997		990	
N married	2,287		911		944	
N satisfied with marital life	1,901		557		557	
χ^2	58.39		101.85		137.12	

Note: Figures in parentheses are robust standard errors. Controls for selection into marriage are the respondent's age and educational attainment. Controls for marriage satisfaction are respondent's and his/her spouse's age and educational attainment.

†< .01.*p < .05. **p < .01. ***p < .001.

Table 4 *Estimated Marginal Effects of Key Variables on Marital Satisfaction*

	China		Japan		Korea	
Men and women (controlling for gender)						
Household income (log)	.019†	(.010)	.090***	(.028)	.097***	(.025)
Dual earning	.064**	(.021)	−.013	(.035)	−.042	(.032)
Share of income	.062†	(.037)	−.007	(.072)	−.036	(.058)
Share of housework	−.058	(.038)	−.082	(.109)	−.333***	(.085)
Men and women (not controlling for gender)						
Household income (log)	.019†	(.010)	.092***	(.027)	.098***	(.025)
Dual earning	.064***	(.021)	−.012	(.035)	−.040	(.032)
Share of income	.066†	(.037)	.016	(.069)	−.046	(.057)
Share of housework	−.068*	(.033)	−.175**	(.062)	−.286***	(.062)
Men						
Household income (log)	.007	(.016)	.014	(.038)	.123***	(.039)
Dual earning	.063*	(.029)	.019	(.045)	−.041	(.045)
Share of income	.026	(.049)	.119	(.094)	.075	(.080)
Share of housework	−.036	(.050)	−.106	(.122)	−.221*	(.105)
Women						
Household income (log)	.033*	(.014)	.127*	(.051)	.087**	(.033)
Dual earning	.054†	(.030)	.011	(.056)	−.033	(.052)
Share of income	.130*	(.058)	−.221*	(.111)	−.065	(.103)
Share of housework	−.094	(.059)	.031	(.166)	−.375**	(.141)

Note: Figures in parentheses are robust standard errors. The estimated figures are based on the probit models to predict marital satisfaction with sample selection into marriage. The marginal effects of "women" and "dual earning" indicate a change in the probability of marital satisfaction in response to a change of their dummy variable from 0 to 1.

†$p < .1$. *$p < .05$. **$p < .01$. ***$p < .001$.