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SOCIOECONOMIC DETERMINANTS OF DIVORCE/SEPARATION IN SOUTH KOREA: A FOCUS ON WIFE'S CURRENT AND DESIRED EMPLOYMENT CHARACTERISTICS*

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The crude divorce rates increased substantially in Korea since the economic turmoil in 1997. How socioeconomic factors affect the probability of marital disruption is an important question but under-researched due to the lack of appropriate data. Using data from 6 waves of the Korean Labor and Income Panel Study collected in 1998 through 2003, this study examines socioeconomic determinants of marital disruption, divorce or separation, highlighting wife's employment characteristics. Some findings are straightforward; long hours of working as paid employees are detrimental to marriage. Other findings reveal a complexity in the relationships between women's employment and marital instability. Wife's income may either decrease or increase marital instability, by different subgroups of employment circumstances. Also, marital problems seem to motivate wives to seek employment before the actual marital disruption. The results suggest that the relationship between married women's employment and divorce is contingent on other family circumstances. Lastly, husband's lifetime income may be more important than his current income, especially during the period of economic turmoil observed in the data.

Key Words: Divorce, Korea, Socioeconomic Factors, Employment Characteristics, Economic Turmoil, Family.

INTRODUCTION

For just over a decade between 1990 and 2003, the crude divorce rate tripled from 1.1 to 3.5 in Korea (KOSIS, 2008). The rate rose particularly fast after the 1997 economic turmoil. Although it has fallen back to 2.9, 2.7 and 2.6 in the following three years since 2003, the circumstances around such a rapid rise in the divorce rate pose many research questions to be explored. One central question may be how the economic circumstances of the family have affected the incidence of marital breakup. The literature in the West

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finds accumulation of family wealth to be one of the key deterrents of marital breakup. This means that the loss or lack of accumulated family wealth provides the context of high marital instability. Research also finds that husband and wife's economic activities play distinct roles in affecting marital breakup. Using six waves of longitudinal data collected in the nation's urban areas between 1998 and 2003, this study examines how the socioeconomic factors affect marital disruption, defined as divorce or separation, highlighting wife's employment characteristics.

Despite many important implications of divorce/separation for the families and for the society, few family surveys in Korea systematically highlight the risk factors of divorce. Although the main purpose of the Korean labor and Income Panel Survey (KLIPS) is to examine labor market activities, its prospective survey design and rich information on couple's socioeconomic characteristics — including employment histories and subjective evaluation of life circumstances as well as marital status changes — provide good data for this study. The timing of KLIPS is particularly relevant as it covers the period of aftermath of the 1997 economic crisis.

LITERATURE REVIEW AND RESEARCH QUESTIONS

Family Wealth and Husband's Earnings

Accumulated wealth of the couple, such as home ownership, is one key factor decreasing marital instability. One line of argument is that, family wealth, like children, is a couple-specific resource and its benefits will be diminished outside the marriage, thus discouraging divorce (Becker, Landes and Michael, 1977; Weiss and Willis, 1997). As does family wealth, husband's income stabilizes the marriage (Sayer and Bianchi, 2000). Greater resources available to the family mean a higher standard of living, which can increase family members' life satisfaction. Conversely, the lack or shortage of material resources means various inconveniences and problems in everyday life related to, for example, housing, neighborhood environment, schooling, medical care, and social relationships, all of which may impose physical and emotional tensions among family members. Thus, the economic recession since 1997 in Korea may have boosted the divorce rate, either through the devaluation of family wealth or through husband's unexpected separation from their jobs in the social context where husbands earn the majority of family incomes in Korea. The rate of labor force participation among married women ages 15 to 49 is approximately 40 percent in urban areas according to the 2000 census, and, on average, women's wage is 61 percent of men's

(KOSIS, 2008).

Wife's Income: Income and Independence Hypotheses

Although wife's income may have the same stabilizing effect as husband's income, it is also shown that wife's employment increases the chance of marital disruption (Jalovaara, 2003; Poortman and Kalmijn, 2002). Studies argue that wife's income allows her to walk away from an unhappy marriage, which researchers call "independence effect" in comparison with "income effect" which refers to its effect of stabilizing marriages (e.g., Lee and Kim, 2005; Oppenheimer, 1997; Sayer and Bianchi, 2000). In the proposition that wife's income may destabilize while husband's income stabilizes, marriage may be understood by the model of role specialization between the spouses. The model postulates that family utility can be maximized by gender division of labor, with two spouses engaging in the roles in which they have relative advantages and sharing the fruits of their activities (Becker, Landes and Michael, 1977). Traditionally, relative advantages among husbands and wives are in market production activities and household production activities, respectively. In this model, married women working outside home means less benefit to gain from marriage for both of the spouses, and hence destabilizes marital relationships.

However, as dual earner families are increasingly becoming the norms and women's market skills improve to be comparable to those of men, it is questionable whether the role specialization model would still holds for women's labor market activities to reduce gains from marriage. Wife's income may also have "income effects," stabilizing marriage rather than destabilizing it. The mixed findings in the literature regarding the effects of wives' labor market activities suggest a complexity in the association (Kwon, 1998; Schoen et al., 2002; South, 2001). This study explores such complexity. Specifically, based on an earlier argument that wife's income has independence effects only when marital satisfaction is low (Sayer and Bianchi, 2000; Schoen et al., 2002), we attempt to differentiate the circumstances where wife's income increases or decreases marital instability.

Wife's Employment

1) Role Strain Hypothesis: Long Working Hours

The role strain hypothesis emphasizes the stress that wife's employment causes among family members, predicting a positive association between wife's employment and marital instability (Bumpass and Choe, 2004). It is

well known that husbands in dual earner families do not increase their hours of housework as much as their wives' working hours increase. A 2005 national survey in Korea also shows that the husbands of working women spend only several minutes more on housework per day than do the husbands of full time housewives (KIHASA, 2006). Women do a large chunk of housework even when they are employed outside home. Such role strains may harm the quality of family life for both spouses when wives work very long hours. For example, when wives work long hours husband's health is hurt (Stolzenberg, 2001). Thus, wife's long working hours may increase the probability of divorce.

2) Role Arrangements Hypothesis: Beginning the Job before or after Marriage

This hypothesis is based on the finding that an increase in wives' incomes over the marital duration heightens marital instability whereas wife's income at one point of time does not show any effect (Weiss and Willis, 1997; Tzeng and Mare, 1995). What matters for marital stability is not wife's employment or wife's income per se but whether the role expectations formed between the spouses at the time of marriage are violated or not. The idea is that some couples may agree on wife's employment, and that among such couples wife's employment should not be associated with marital instability. The onset of wife's employment after marriage or unexpected increase in wife's incomes may increase marital conflicts and the chance of marital breakup.

Not Working but Economically Active Wives: Reverse Causal Relationship?

The above existing explanations of the association between women's employment and marital instability assume the causal effects of employment on marital breakup. Both the role arrangement and role strain hypotheses presume that wives' employment is the source of marital problems. To explore the complexity of the relationship between wives' employment and marital disruption, this study pays attention to women who are not currently working but economically active and seeking employment. If these women are more likely to divorce than women who are neither working nor economically active, then it may prove reverse causal influences, that is, anticipation of divorce or separation may motivate women to participate in the labor force. It is rather inconceivable that wives' employment seeking behaviors per se cause marital disruption.

The question is in which circumstances do wives anticipate marital

disruption and seek employment; are they all related to poor quality of marital relationships, such as financial difficulty, or are they also related to the wives' relative status in the labor market? To answer the questions, this study will examine the effects on the probability of marital disruption of various labor market characteristics of wives seeking jobs.

Research Questions

The research questions are summarized as follows. For all questions, the predictors are measured at the baseline survey and the event of divorce or separation is observed over the following 5-year period. First, we test whether family wealth and husband's income stabilize marital relationships in Korea. The second set of questions focuses on how the characteristics of wife's employment affect marital disruption: specifically, whether long working hours increase the chance of marital disruption and whether employment beginning after marriage as opposed to employment begun before marriage increases the probability of marital disruption. The third question is whether wives who seek employment at the baseline are more likely to have marital disruption later, and if so, which aspects of job seeking are particularly relevant to marital disruption. The fourth question is whether wife's income has contradictory effects on the chance of marital disruption by work or family circumstances of the wives. Lastly, this study examines several other factors known to affect marital disruption.

DATA AND METHODS

Data are from six waves of the Korean Labor and Income Panel Study collected from 1998 through 2003 (version 7 released in 2006). The initial survey was conducted in 1998 based on a sample of 5,000 households that represents urban areas of Korea (KLI, 2006). The urban residents comprise approximately 80 percent of the total population in 2000 Korean Census. The survey consists of two main questionnaires, one for household information and the other for individual characteristics. Respondents for the latter questionnaire include all household members aged 15 or older, totaling 13,738 persons, where household members include the household head's spouse living elsewhere (if not separated) and unmarried children living elsewhere who are supported by or support the parents. To identify spouses in the individual data, we use the variable of relationship to household head, which specifies 69 categories of detailed relationships (for example, first child, first child's spouse, first child of first child, spouse of first child of first

child, etc.). We merged the parallel data of the two spouses, and then additionally merged the household data. Thus, in our analysis, the unit of analysis is the couple. The analysis is restricted to the couples in which the marriage was intact and the wife was 49 years old or younger at the time of the baseline survey. The couples in which either spouse reports being widowed in the 5-year period (46 couples) and the couples in which neither spouse was interviewed in the last three waves from 2001 through 2003 (441 couples) are considered censored, and excluded from the analysis. The final sample includes 2,506 couples. The logistic regression is used to examine the determinants of the incidence of divorce or separation.

Dependent Variable: The dependent variable is coded 1, if either spouse reports divorce or separation in the next five waves of survey conducted in 1999 through 2003, and coded 0, if not. The measurement of divorce and separation is summarized in Table 1, which shows a considerable gap between the two spouses in their reporting of the events. The top panel shows that 40 couples were recorded divorced or separated only in husband data and 33 were recorded so only in wife data. For only 27 couples, both husband and wife data recorded divorce or separation. To combine the information, a total of 100 couples divorced or separated between 1998 and 2003. An exploration of the responses revealed that the sole records were due to the non-response or attrition from the panel of the other spouses. In virtually no couple, the two spouses provided conflicting answers regarding their divorce or separation status. The bottom panel shows that out of 100 couples that experienced divorce or separation, 29 couples were separated, 59 couples were divorced, and 12 couples were separated and then divorced. Given the high rate of non-response or attrition of one spouse among the divorced or separated couples, the censored couples where both spouses are dropped from the survey are likely to be so because of divorce or separation, which means that the observed rate of divorce or separation may be underestimated.

Independent Variables: The independent variables are the characteristics of the couples as of the first wave of the survey in 1998. Family wealth is measured by whether or not the couple owns a home. Family's current financial status is measured by the household-questionnaire interviewee's subjective evaluation of whether or not the family experiences a financial difficulty. In this study, husband's and wife's incomes are measured by monthly labor incomes, which include all incomes from labor, including wages, salaries, and profits from self-employment, measured in a million won. We also use the term 'earnings' to refer to labor incomes.

TABLE 1. RECORDS OF DIVORCE AND SEPARATION

	Recorded hus	Recorded husband is divorced or separa		
	No	Yes	Total	
Recorded wife is divorced or separated				
No				
Frequency	2406	40	2446	
Percentage, grand total	96.0	1.6	97.6	
Yes				
Frequency	33	27	60	
Percentage, grand total	1.3	1.1	2.4	
Total				
Frequency	2439	67	2506	
Percentage, grand total	97.3	2.7	100	
	Recorded	either spouse	is separated	
	No	Yes	Total	
Recorded either spouse is divorced				
No				
Frequency	2406	29	2435	
Percentage, grand total	96.0	1.2	97.2	
Yes				
Frequency	59	12	71	
Percentage, grand total	2.3	0.5	2.8	
Total				
Frequency	2465	41	2506	
Percentage, grand total	98.4	1.6	100	

Wife's employment characteristics are measured by a combination of employment status, and, for paid employees, whether the current job began before or after marriage and its weekly working hours. Wives who are not currently working are further divided into two groups, depending on whether or not they are seeking employment. For the parsimony of the multivariate analysis models, those characteristics are considered simultaneously. The final 10 categories of wife's employment characteristics are as follows: three categories of paid employees who began the job before marriage currently working 1-35, 36-53, or 54 or more hours per week, three categories of paid employees who began the job after marriage currently working 1-35, 36-53, or 54 or more hours per week, self-employed workers, family workers, wives who are not currently working but seeking work, and wives who are not working and not seeking work.

The category of seeking work includes both women who have actively

searched for a job in the past week, month, or year and women who wanted to work and were available for work in the past week but have not searched for a job. As a considerable proportion of the respondents belong to the "seeking work" category, we performed further analyses to examine the effects on later marital disruption of various characteristics of job seekers, including wage levels they want, the hours and duration of job search, and whether perceiving the lack of work experience to be a problem in getting a job. These results will be presented in a separate table.

Regarding wives' employment and income, one additional analysis was done to examine whether there is interaction effects in affecting marital disruption. All paid employees are regrouped into regular and irregular employments. Irregular workers refer to those who work part time, shifts, or based on temporary or short-term contracts. This analysis tests the income and independence hypotheses by subgroups of employment status.

Other explanatory variables characterizing wives include age at marriage, age, education. The same characteristics of the husband including employment status were considered in the preliminary analysis but showed no significant net effect on marital disruption, and excluded from the analysis. Other variables characterizing the couple include numbers of sons and daughters, family life satisfaction, and living with wife's relatives.

Couple's family life satisfaction was asked to the interviewee of the household questionnaire, who may be the wife, husband, or a third party. The variable has three categories: first, the wife is the interviewee and answers she is dissatisfied with family income and family relationships, second, the husband is the interviewee and answers he is dissatisfied with family relationships, and third, either spouse reports satisfaction with family life (i.e., family income and relationships for wife and family relationships for husband) or a third person is the interviewee. The family life satisfaction scale consisted of five items – overall family life, family income, family relationships, leisure activities, and housing conditions - each ranging 5 scores from very dissatisfied to very satisfied. The preliminary analysis showed that, for wives, joint dissatisfaction with family income and relationships significantly affects the probability of divorce or separation and, for husbands, dissatisfaction with family relationships does it. Living with wife's relatives, such as parents or siblings, is also considered. Contrary to our expectation, living with husband's relatives shows no relationship with marital breakup in the preliminary analysis, and is not included in the analysis.

TABLE 2. CHARACTERISTICS OF MARRIED COUPLES IN THE 1998 BASELINE SURVEY: WIFE'S AGE IS 49 OR LES

Variables	Percent (Mean)
Divorced or separated by 2003 survey	4.0
Wife's age at marriage	1.0
17-20	10.8
21-23	31.7
(24-26)	39.9
(27-29)	14.3
30 or older	3.4
Wife's age at marriage*	24.1
Wife's age*	36.6
Wife's employment status	00.0
(Not working and not seeking work)	34.9
Paid employee:	01.7
Beginning this job before marriage, working 1-35 hours per week	1.5
Beginning this job before marriage, working 36-53 hours per week	3.7
Beginning this job before marriage, working 54 or more hours per week	0.5
Beginning this job after marriage, working 1-35 hours per week	3.6
Beginning this job after marriage, working 36-53 hours per week	7.6
Beginning this job after marriage, working 54 or more hours per week	6.0
Self employed	8.1
Family worker	11.1
Seeking work	23.0
Paid employee: Alternative classification	20.0
Regular employee	12.3
Irregular employee	10.6
Wife's education	
Middle school or less	31.8
(High school)	51.0
Junior college or higher	17.2
Wife's monthly labor incomes* (in million won)	0.26
Wife's income missing	0.4
Husband's monthly labor incomes* (in million won)	1.20
Husband's income missing	0.4
Home ownership, yes	54.8
Family financially difficult, yes	60.9
Number of sons (One)	53.8
None	22.7
2 or more	23.5
Number of daughters (One)	45.6
None	34.5
2 or more	19.9
Dissatisfaction with family life	
Wife is respondent and dissatisfied with family relationships and family income	9.8

Husband is respondent and dissatisfied with family relationships	7.4
(Wife is respondent and not dissatisfied with family relationships or income)	56.1
(Husband is respondent and is not dissatisfied with family relationships)	20.4
(A third person is respondent)	6.3
Living with wife's relatives, yes	2.4
Number of cases	2,506

Note: The categories put in parentheses are the omitted categories in the logistic analysis.

The numbers for the variables marked with * are the means.

FINDINGS

Descriptive Statistics

Sample Characteristics: Distributions of these variables in the sample are presented in Table 2. In urban areas of Korea, about 4.0 percent of the married couples in which wife was aged 49 years or less in 1998 experienced divorce or separation (or both) by 2003. About 35 percent of the wives were neither working nor seeking employment. Detailed characteristics of paid employees are described in the next section. Self-employed and family workers comprise 8.1 and 11.1 percent, respectively. These two percentages could be higher if the sample included rural residents. As much as 23.0 percent of the sample wives were not currently working but seeking employment. The characteristics of these job seekers and the remaining variables are discussed later together with their propensity to divorce or separation.

Paid Employment Begun before or after Marriage: In Table 3, we compare job characteristics of paid employment begun before and after marriage. In Table 2, the two groups comprise 5.7 and 17.2 percent of the total sample, respectively. According to Table 3, within each category, those who are working 1-35, 36-53, and 54 or more hours per week comprise 27, 64, and 9 percent for the former, and 21, 44, and 35 percent for the latter. Working 35-53 hours is more prevalent for the jobs begun before marriage, while 54 or more hours of working is more likely for the jobs begun after marriage.

Among all paid employees, regular employment comprises a little more than half, 54 percent, but the analogous figure is much higher for the jobs begun before marriage than for the ones begun after marriage, 65 and 50 percent (Table 3). Occupational distributions are also skewed. Professional, managerial, and clerical jobs comprise higher percentages for jobs begun before marriage, whereas service and blue-collar jobs comprise relatively higher percentages for job begun after marriage (Table 3).

TABLE	3.	WORK	CHARACTE	ERISTICS	OF	PAID-EMPLOYEE	WIVES	BY	THE	TIMING
		BEGINN	NING THE C	CURRENT	JOE	3				

	Began the current job before or after marriage					ge
	Befo	re	After		Total	
	frequency	%	frequency	%	frequency	%
Weekly working hours						
1-35 hours	38	26.6	86	20.7	127	22.2
36-53 hours	92	64.3	190	44.3	282	49.3
54+ hours	13	9.1	150	35.0	163	28.5
Total	143	100.0	429	100.0	572	100.0
		(25.0)		(75.0)		(100.0)
Type of employment						
Regular employment	93	65.0	214	49.9	307	53.7
Irregular employment	50	35.0	215	50.1	265	46.3
Total	143	100.0	429	100.0	572	100.0
Occupation						
Professional, managerial	41	28.7	12	2.8	53	9.3
Clerical	57	39.8	107	25.0	164	28.7
Service	10	7.0	115	26.8	125	21.8
Blue collar	33	23.1	125	29.1	158	27.6
Unknown	2	1.4	70	16.3	72	12.6
Total	143	100.0	429	100.0	572	100.0

Thus, paid employees who continue their jobs over the transition of marriage are holding more stable jobs with somewhat higher prestige than are paid employees beginning the job after marriage. Entry or reentry into the labor market is more difficult for higher prestige jobs and for full-time permanent contract employment than for lower prestige jobs and for part-time irregular employment. The latter types of jobs may be the only viable options for wives with economic needs either for family finance or for individual independence.

Wife's Employment: Role Strain and Role Arrangement Hypotheses

Results for 9 stepwise logit models examining the determinants of divorce or separation are presented in Tables 4-1 and 4-2. The tables present only coefficients because of limited space. Model 1 controls for wife's age at marriage and age, and examines the effects of wife's employment status on divorce or separation. Then, the next models incrementally add more

TABLE 4-1. DETERMINANTS OF DIVORCE OR SEPARATION: COEFFICIENTS FOR MODELS 1-5

MODELS 1-5					
	M1	M2	M3	M4	M5
Intercept	-1.33	-1.18	-1.16	-0.87	-1.10
Wife's age at marriage (24-29)					
17-20	1.15 **	1.08 **	1.07 **	1.03 **	1.09 **
21-23	0.42 ^	0.35	0.35	0.35	0.37
30 or more	0.64	0.65	0.67	0.59	0.45
Wife's age	-0.07 **	-0.07 **	-0.07 **	-0.07 **	-0.05 **
Wife's employment status (Not workir	ng & not se	eeking wo	rk)		
Paid employee					
begin before marriage, working					
1-35 hours per week	-0.05	0.02	-0.14	-0.26	-0.34
36-53 hours	-0.28	0.02	-0.23	-0.34	-0.37
54 or more hours	1.02	1.07	0.85	0.71	0.60
begin after marriage, working					
1-35 hours per week	-0.08	-0.08	-0.20	-0.24	-0.35
36-53 hours	0.92 *	0.94 *	0.75 ^	0.67	0.65
54 or more hours	1.54 **	1.56 **	1.40 **	1.24 **	1.20 **
Self employed	0.55	0.61	0.40	0.21	0.12
Family worker	-0.31	-0.29	-0.31	-0.28	-0.28
Seeking work ^a	0.74 **	0.76 **	0.76 **	0.70 *	0.71 *
Wife's education (High school)					
Middle school or less		-0.17	-0.16	-0.25	-0.25
Junior college or more		-0.77 *	-0.80 *	-0.70 ^	-0.68 ^
Wife's labor income			0.22	0.25	0.30
Husband's labor income				-0.38 **	-0.34 *
Owns home (No)					
Yes					-0.72 **
Financially difficult (No)					
Yes					
Number of sons (One)					
No son					
2 or more					
Number of daughters (One)					
No daughter					
2 or more					
Satisfaction with family life (satisfied)					
Wife dissatisfied					
Husband dissatisfied					
Living with wife's relatives (No)					
Yes					
Chi square (degrees of freedom)	62(13)	67(15)	68(17)	76(19)	86(20)
Number of cases	2506	2506	2506	2506	2506

TABLE4-2.DETERMINANTSOFDIVORCEORSEPARATION:COEFFICIENTSFORMODELS6-9

	M6	M7	M8	M9
Intercept	-1.50	-2.99	-2.94	-3.09
Wife's age at marriage (24-29)				
17-20	1.08 **	1.33 **	1.30 **	1.30 **
21-23	0.39	0.50 *	0.49 ^	0.48 ^
30 or more	0.48	0.18	0.11	0.07
Wife's age	-0.06 **	-0.03	-0.03	-0.03
Wife's employment status (Not working &	not seeking w	vork)		
Paid employee	_			
begin before marriage, working				
1-35 hours per week	-0.35	-0.37	-0.43	-0.50
36-53 hours	-0.36	-0.53	-0.53	-0.58
54 or more hours	0.53	0.47	0.49	0.39
begin after marriage, working				
1-35 hours per week	-0.43	-0.41	-0.37	-0.35
36-53 hours	0.61	0.62	0.59	0.55
54 or more hours	1.18 **	1.15 **	1.11 **	1.11 **
Self employed	0.06	0.09	0.17	0.14
Family worker	-0.35	-0.36	-0.39	-0.40
Seeking work ^a	0.65 *	0.60 *	0.61 *	0.57 *
Wife's education (High school)				
Middle school or less	-0.27	-0.29	-0.30	-0.30
Junior college or more	-0.68 ^	-0.74 ^	-0.73 ^	-0.77 *
Wife's labor income	0.35	0.35	0.34	0.34
Husband's labor income	-0.24	-0.20	-0.16	-0.15
Owns home (No)				
Yes	-0.66 **	-0.64 **	-0.59 *	-0.61 **
Financially difficult (No)				
Yes	0.56 *	0.63 *	0.59 *	0.60 *
Number of sons (One)				
No son		0.82 **	0.80 **	0.80 **
2 or more		-0.21	-0.22	-0.23
Number of daughters (One)				
No daughter		0.56 *	0.53 *	0.53 *
2 or more		-0.54	-0.56	-0.55
Satisfaction with family life (satisfied)				
Wife dissatisfied			0.64 *	0.66 *
Husband dissatisfied			0.70 *	0.73 *
Living with wife's relatives (No)				
Yes				1.21 **
Chi square (degrees of freedom)	92(21)	106(25)	113(27)	119(28)
Number of cases	2506	2506	2506	2506
^ p<.10 * p<.05 ** p<.01				

Note: Models 3-9 also include 'wife's income missing,' Models 4-9 also include 'husband's income missing,'

a) The results from the analyses of more detailed categories of "seeking work" are presented in Table 5.

characteristics of the couple. As usual, our interpretation will focus on the full model, Model 9, but we present all nine models to show how the previous coefficients change as more variables are added.

The findings demonstrate that the coefficients for wife's employment status change only slightly across the models. Paid employee wives who began the current jobs after marriage and who work for 54 hours or more per week are substantially more likely to divorce or separate than are wives who are out of the labor force. This is the case even after controlling for several indicators of family financial status (odds ratios ranging between 4.8 and 3.0 in Models 1 through 9), which means that their higher likelihood of marital disruption is not due to other family circumstances. Paid employee wives who began the job before marriage and who work for 54 hours or more per week also appear considerably more likely to divorce or separate, but it is not statistically significant, probably due to too small number of cases for the group. Thus, the results for working hours confirm the role strain hypothesis.

The results are also consistent with the role arrangement hypothesis but the evidence is weaker. In Model 1, paid employees who work full time (36 through 53 hours per week) and began the job after marriage are significantly more likely to divorce or separate than wives out of the labor force, whereas wives who work for the same hours and began the job before marriage are no more likely to divorce or separate than wives out of the labor force. This contrast by the timing of the onset of the job, however, is no longer statistically confirmed after controlling for family financial status, such as wife's and husband's incomes. Yet, in Model 9, for each category of working hours, the logit of divorce or separation is still more negative among wives who began the job before marriage than among their counterparts who began the job after marriage. This could be related to the work characteristics as jobs begun before marriage are more regular (full time and permanent) employment in white-collar occupations than the jobs begun after marriage, as discussed in Table 3. However, neither regular employment nor occupational sectors have significant effects on divorce or separation (results not shown). Alternatively, the result seems to be due to a violation of the role arrangements assumed at the time of marriage not only between the spouses but also with other family members, such as parent-in-laws. Possibly related, previous studies show that when the parents agree on the marriage decision, the marriage is less likely to be disrupted (Suh, 1993; Lee, 1997). Beside spousal agreement, support from extended family members may also play a role. Another possibility is that these wives may have started working after marriage because their marital relationships deteriorated or, more

specifically, anticipated marital disruption. Facing the prospect of marital disruption, women tend to prepare more for economic consequences than do men (Han, Kim and Kang, 2004).

Self-employed wives are as equally likely to divorce or separate as wives who are out of the labor force. The coefficients for family workers are negative across the models but the effects are not statistically significant. If including family workers living in rural areas, the coefficient might become significant, as shown in Lee (2006). Interestingly, wives who are seeking work are significantly more likely to divorce or separate than wives who are out of the labor force, regardless of the controls. The detailed analysis of wives seeking employment is discussed in the following.

Economically Active Wives: Reverse Causal Relationships?

The finding of a positive effect of wife' seeking of employment on marital breakup shown in Tables 4-1 and 4-2 may be explained either by reverse causality or by a spurious relationship created by some third factors. These women have not yet participated in employment, and thus their roles should not yet violate the premarital arrangement or be strained. It is rather unlikely that the behavior of seeking work itself causes marital conflicts or that these wives get jobs between the baseline survey and the time of marital breakup and they cause marital breakup. The factors that may simultaneously motivate wives to seek employment and cause marital breakup may include financial difficulties of the household, but our analysis supposedly controls for them, including home ownership, subjective evaluation of household financial difficulty, and husband's income (Models 4-9). Models 8-9 also control for couples' satisfaction with family life. Thus, a spurious relationship is rather unlikely. Reverse causality seems plausible, i.e., the anticipation of marital breakup or at least some problems in their marriage motivates married women to seek employment.

Associations between several characteristics of the job seekers and the incidence of divorce or separation, presented in Table 5, seem to support the hypothesis of reverse causality. The results show that the job seekers who are particularly likely to divorce or separate are those who want a relatively high monthly salary, one million won or more (i.e., about \$1,000 or more), search for a job of less than 5 hours per week, have searched for a job for more than a year, and report that the lack of work experience is not an important reason for not yet having gotten one. We can picture that the wives seeking work to prepare for possible divorce or separation would need a relatively high income (more than a million won), where search for such jobs may take long

TABLE 5. EFFECTS ON DIVORCE OR SEPARATION OF VARIOUS CHARACTERISTICS OF **JOB-SEEKERS**

	b		Percentage		
	D	se	in sample		
			(%)	(n)	
Model 4-1: Monthly earnings wanted					
Less than one million won (about \$1,000)	0.38	0.35	10.4	262	
One million won or more	1.24*	0.53	2.7	67	
Wanted a job but not actively searched	0.60	0.38	9.9	249	
Model 4-2: Hours per week spent searching for a job	1				
5 hours or less	0.78*	0.35	8.8	220	
More than 5 hours	0.05	0.53	4.3	109	
Wanted a job but not actively searched	0.59	0.38	9.9	249	
Model 4-3: Duration searching for a job					
Less than one year	0.42	0.36	9.6	242	
More than one year	0.92^	0.49	3.5	87	
Wanted a job but not actively searched	0.60	0.38	9.9	249	
Model 4-4: Lack of work experiences is a problem in	getting a j	ob			
Serious or somewhat serious problem	0.14	0.48	6.7	168	
Experience is not a problem	0.83*	0.37	6.4	161	
Wanted a job but not actively searched	0.59	0.38	9.9	249	
Model 4-5: Actively searched for a job?					
Searched in past week or past month	0.61	0.37	8.5	213	
Not in past month but in past year	0.45	0.48	4.6	116	
Wanted a job but not actively searched	0.59	0.38	9.9	249	
^ p < .10, * p < .05					

Note: These results are from the models that include the same variables as those of Model 9 of Table 3, except that the "seeking work" category in Model 9 is now further classified by the characteristics of the job seekers. Thus, the reference category for these coefficients is the same as that of Model 9, "not working and not seeking work."

(more than a year). Yet, unlike the ones pressed by family needs, these women spend more time contemplating getting jobs than actively searching for one (less than 5 hours per week), even though their (lack of) work experience does not hinder job search.

Wife's Income: Independence or Income Effects?

In Tables 4-1 and 4-2, wife's income does not have any effect on marital breakup, regardless of controls of husband's income or other family financial circumstances. This result is not inconsistent with the literature. The independence and income effects may offset with each other. In the US, wife's income showed differential effects by couple's marital satisfaction levels (Sayer and Bianchi, 2000; Schoen et al., 2002), but in this data couple's marital satisfaction did not show such interaction effects (results not shown).

TABLE 6. INTERACTION EFFECTS OF WIFE'S LABOR INCOME AND REGULAR PAID EMPLOYMENT

	Model 9		
	b	se	
Wife's employment status			
(Not working & not seeking work)			
Regular employee	1.49 ^	0.78	
Irregular employee	0.48	0.38	
Self employed	-0.11	0.54	
Family worker	-0.44	0.51	
Seeking work	0.57 *	0.29	
Wife's income	0.55 *	0.28	
Wife's income*Regular employee	-1.64 ^	0.96	

Note: This model is the equivalent of Model 9 in Table 4-2 except for the variables related to wife's employment and earnings, which are now specified as above. Thus, this model also includes the variables of wife's age at marriage, age, education, husband's income, home ownership, family financial difficulty, numbers of sons and daughters, satisfaction with family life, living with wife's relatives, and earnings missing.

Instead, differential probabilities of divorce or separation by wife's employment statuses discussed above suggest that wife's income may have distinct effects on marital disruption depending on employment characteristics. Among wives with unstable jobs with long working hours, who are more likely to divorce or separate, their incomes may have a more positive effect, whereas among wives of more stable jobs, whose probability of marital disruption is lower, income may have a more negative effect. For the analysis, paid employees are regrouped into regular and irregular types of employment, and the interaction term between regular paid employment and income is examined.

The results in Table 6 show a significant positive effect of income (p<.05) and a significant negative interaction effect (p<.10). That is, wife's income has a significant positive effect on marital breakup among wives who are not regular paid employees, but the effect is significantly more negative among regular paid employees. The relationship is illustrated in Figure 1 with income values ranging 0 to 2.26 million won. The value of .26 is the mean for all wives in the sample. The means for regular, irregular employees, and self employed workers are 1.0, .6, and .8 million won, respectively. The seemingly high logit values for the regular employees with low incomes are somewhat artificial; they are extensions of the linear slope produced at the higher values of incomes, because practically no regular employee earns less

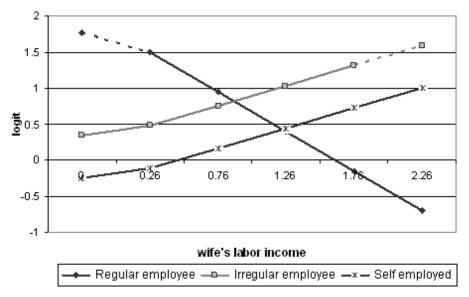


FIGURE. 1. INTERACTION EFFECTS BETWEEN WIFE'S INCOME AND EMPLOYMENT STATUS ON THE LOGIT OF DIVORCE/SEPARATION

than .26 and only about 10 percent of regular employees earn less than .50 in the sample. Approximately 40 percent of regular employees and self-employed workers earn one million won or more, while only about 15 percent of irregular employees do so. A further analysis shows that the negative effect of earnings on marital breakup among regular paid employee (-1.09 = .55 -1.64) is not statistically significant (test not shown). A supplementary analysis with the sample of only paid employees produced the same results with or without controlling for hours of working (results not shown). In summary, among irregular employee and self employed wives, their income has the "independence" effect, whereas income tends to stabilize the marriage among regular employee wives.

Husband's Income and Household Financial Status

Our preliminary analyses examined husbands' socioeconomic characteristics as well, but controlling for wife's characteristics hardly any husband variables including education, unemployment, and work status had a significant net effect, and they are not included in the final analysis. In Table 4-2, even husband's income does not have a net effect controlling for family financial circumstances (Models 6-9). It seems plausible that during the period of economic turmoil between 1998 and 2003, husband's current

income does not directly affect family stability. Instead, the subjective financial difficulty, which probably is the summary outcome of all formal and informal transfers to the family, provides a better indicator affecting marital stability (Models 6-9 Table 4-2). Not available in the data, but cumulative husband's income over the lifetime may be important. As expected, home-ownership decreases the probability of divorce or separation (Models 5-9).

Other Family Characteristics

Controlling for income and work characteristics, wife's education represents her contribution to household work, such as education of children, and it stabilizes the marriage (Weiss and Willis, 1997). The data in Korea show a somewhat deviant pattern; wives with junior college or more education is less likely than wives with high school education, but no less likely than wives with middle school or less education, to divorce or separate (Tables 4-1, 4-2).

Numbers of sons and daughters have strong negative effects on marital breakup. Comparing sons and daughters, the effects are equally important but, for sons, the difference between 0 and 1 is more pronounced, while for daughters, the difference between 1 and 2 or more is greater (Table 4-2). This is in contrast to the findings in the United States, where sons have a stronger deterrent effect on divorce than do daughters (Morgan, Lye and Condran, 1988). The literature in the US argues that father-son solidarity plays a role of deterrent. In Korea, where single parenthood is still a foreign lifestyle, the prospect of raising children alone may deter marital breakup. Also, stigma of single parenthood may be considered more harmful to daughters than to sons, especially in the marriage markets where men are more often judged by their individual achievements.

Controlling for number of children, the strong negative effect of wife's age on divorce or separation disappears (Models 7-9), where wife's age may represent both life-cycle stage and birth cohort. Wife's young age at marriage increases the probability of divorce, which is consistent with the literature arguing that uncertainty about spouses' lifetime socioeconomic status and likely misinformation about spouses increase the chance of marital breakup among those marrying at young ages (Oppenheimer, 1997; Weiss and Willis, 1997).

Interestingly, living with wife's relatives, parents or siblings, is positively associated with the probability of divorce or separation. The percentage of the sample in this living arrangement is only about 2 percent, and the causal

direction may be both ways. Whether or not controlling for this living arrangement has little influence on the effects of other factors.

Whichever spouse was the interviewee, only the respondent was asked about family life satisfaction. And it is a significant determinant of marital disruption, but the findings reveal some interesting gender difference. For the husband interviewees, dissatisfaction with family relationships increases the probability of marital breakup, but for the wife interviewees, joint dissatisfaction with both family relationships and family income increases the probability of marital breakup. The reference category consists of couples in which either spouse who is interviewed expressed satisfaction with the corresponding aspects of family life or in which a third party was the interviewee. Although family life satisfaction has a significant effect, its controlling does not noticeably reduce the effects of other variables, including family financial circumstances and wife's employment status. This means that family life satisfaction, at least as measured in this survey, is not a proximate determinant of marital disruption.

CONCLUSION

The findings reveal a complexity in the relationships between wife's employment and marital instability. First, wives who work very long hours as paid employees are more likely to divorce or separate than wives out of labor force, controlling for various other family circumstances, which supports the role-strain hypothesis. Second, wives who became paid employees after marriage tend to be more likely to divorce or separate than wives who continue paid employment from before marriage, probably because wives' role change after marriage is detrimental to marital relationships.

Third, data show that wife's income has the potential to both decrease and increase marital instability. Among wives with "regular" (i.e., permanent full-time) paid employment, income shows a negative association with marital disruption, but for other wives, including irregular (part time, shift, or temporary contract) paid employees and self employed workers, income has a significant positive association. "No association" observed between wife's income (or employment in the absence of income) and marital disruption may hide these contradicting relationships by the employment status or family circumstances.

Fourth, married women who seek employment are significantly more likely to divorce or separate in the next five years than wives out of the labor force. This finding seems to suggest that marital problems, or more specifically an anticipation of marital breakup, may motivate married women to seek employment. That is, wife's employment is an outcome rather than a cause of marital breakup although employment may occur before the actual marital disruption. The hypothesis of workplaces providing opportunities to meet a date (South and Lloyd, 1995) may not be very relevant in Korea. The number of divorce and separation cases examined in the analysis is not large, and replications with larger data sets are needed for more conclusive discussions.

Family financial circumstances, as measured by home ownership and the interviewee's subjective evaluation of family financial situation, are powerful predictors of marital disruption in Korea. Controlling for those variables, unemployment or income of the husband does not have any net effect, which probably suggests an importance of husband's cumulative incomes over the lifetime rather than current income especially during the period of economic turmoil. It is noteworthy that other socioeconomic characteristics of the husband do not have net effects controlling for family and wife socioeconomic characteristics. Future research may further explore in which circumstances husband's characteristics matter.

Other findings are broadly as predicted. College educated wives are less likely to divorce or separate than wives with high school education. In addition, high school graduates show a higher propensity to divorce or separate than any other levels of education. The numbers of sons and daughters are almost equally important factors decreasing marital disruptions. Wife's young ages at marriage under 20 increase marital disruption. Living with wife's relatives can be harmful to the marriage. Couple's family life satisfaction also affects the probability of divorce or separation, but the effect is independent of other socioeconomic and demographic factors, suggesting that family life satisfaction is one of many determinants of marital failure, not the ultimate or foremost one.

To conclude, the relationship between wife's employment and divorce or separation is not straightforward. Wife's employment can either stabilize or destabilize marriage. It tends to stabilize marriage when the employment is regular (i.e., permanent and full time) and yielding high earnings, but destabilizes marriage when working hours are very long or when irregular employment is combined with high earnings. A stronger causal influence may be the reverse way, that is, the anticipation of divorce or separation may motivate married women to enter the labor force. Job seekers are eventually more likely than women out of the labor force to divorce or separate. Summing up the findings, high school educated women who enter the labor market after marriage into irregular employment may be depicted as the

highest risk group for divorce or separation, but the underlying causal influences among these characteristics are inconclusive. Although this study explores relationships between married women's employment and divorce or separation using data between 1998 and 2003, the findings do not provide a particular insight on whether and why the crude divorce rate would be declining in the following years. Given the complex and inconclusive nature of the relationship, it appears that changes in women's employment characteristics are not the cause of the recent trend.

REFERENCES

- Becker, Gary, Elisabeth M. Landes and Robert T. Michael. 1977. "An Economic Analysis of Marital Instability." *Journal of Political Economy* 85(6): 1141-1187.
- Bumpass, Larry L. and Minja K. Choe. 2004 "Attitudes Relating to Marriage and Family Life." Noriko O. Tsuya and Larry L. Bumpass, eds., Marriage, Work & Family Life in Comparative Perspective: Japan, South Korea, and the United States, pp. 19-38. Honolulu: University of Hawaii Press.
- Han Gyounghae, Kim Joohyun, and Kang Hyewon. 2004. "Gender Differences in the Divorce Process." *Korean Journal of Family Relations* 9(2): 93-118 (in Korean).
- Jalovaara, Marika 2003. "The Joint Effects of Marriage Partners' Socioeconomic Positions on the Risk of Divorce." *Demography* 40(1): 67-81.
- Korean Labor Institute (KLI). 2006. *Korean Labor and Income Panel Study: User's Guide*. Seoul, Korea. (in Korean)
- Korean Statistical Information Service (KOSIS). 2008. Population, Census, Wages. http://www.kosis.kr/OLAP/Analysis/stat_OLAP.jsp, accessed March 2008. (in Korean)
- Kwon Ki-Sook. 1998. "Structural Determinants of Divorce in Jeju Island." *Family and Culture* 10(1): 135-75. (in Korean)
- Lee Hyun-Sang. 1997. "Demographic and Socioeconomic Determinants of Divorce." *Family and Culture* 9: 69-90. (in Korean)
- Lee Myung-Shin and Kim Yu-Soon. 2005. "Factors Affecting Inclination to Divorce with Respect to the Causes of Divorce: A Comparison between Male and Female Models." *Women's Studies* 69: 35-91. (in Korean)
- Lee, Yean-Ju. 2006. "Risk Factors in the Rapidly Rising Incidence of Divorce in Korea." Asian Population Studies 2(2): 113-131.
- Morgan, S. Philip, Diane N. Lye and Gretchen A. Condran. 1988. "Sons, Daughters, and the Risk of Marital Disruption." *American Journal of Sociology* 94 (1): 110-129
- Oppenheimer, Valerie K. 1997. "Women's Employment and the Gain to Marriage: The Specialization and Trading Model." *Annual Review of Sociology* 23:431-53.
- Poortman, Anne-Right and Matthijs Kalmijn. 2002. Women's Labor Market Position and Divorce in Netherlands: Evaluating Economic Interpretations of the Work Effect." European Journal of Population 18(2): 175-202.
- Sayer, Liana C. and Suzanne M. Bianchi. 2000. "Women's Economic Independence and the Probability of Divorce." *Journal of Family Issues* 21(7): 906-943.
- Schoen, Robert, Nan M. Astone, Kendra Rothert, Nicola J. Standish and Young J.

- Kim. 2002. "Women's Employment, Marital Happiness, and Divorce." *Social Forces* 81(2): 643-662.
- South, Scott. J. 2001. "Time-Dependent Effects of Wives' Employment on Marital Dissolution." *American Sociological Review* 66: 226-245.
- South, Scott. J. and Lloyd, K. M. 1995. "Spousal Alternatives and Marital Dissolution." *American Journal of Sociology* 60: 21-35.
- Stolzenberg, Ross M. 2001. "It's about Time and Gender: Spousal Employment and Health." *American Journal of Sociology* 107(1): 61-100.
- Suh Moon-Hee. 1993. "Effects of Sociodemographic and Marriage Related Variables on Divorce and Remarriage among Korean Women." *Journal of Population, Health and Social Welfare* 13(2): 1-19. (in Korean)
- Tzeng, Jesse M. and Robert D. Mare. 1995. Labor Market and Socioeconomic Effects on Marital Stability. *Social Science Research* 24: 329-351.
- Weiss, Yoram and Robert Willis. 1997. "Match Quality, New Information, and Marital Dissolution." *Journal of Labor Economics* 15(1): S293-S329.

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