

Women's Labor Force Participation and Marriage in Korea

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1. Women's Labor Force Participation Rate According to Marital Status

Over the last several decades, Korean women's labor force participation (LFP) pattern shows two very important features. The first one is the general rise of women's labor force participation rate (LFPR) – women's LFPR has risen from 42.8% in 1980 to 49.5% in 1997- and the very low LFPR for women of child-bearing ages. For the age group between 25 and 34, LFPRs are almost 7~10 % lower than those for other age groups. In this study, we focus on the second issue- the impact of marriage on women's LFP.

In Table 1, we report LFPRs for female high school graduates of ages between 20 and 30 by their marital status in six largest Korean cities. Table 1 clearly shows the striking relationship between marriage and women's LFPR. Even after age and education are controlled for, the differences in women's LFPRs are more than 40 percent.

Table 1. Female High School Graduates' LFPRs by Marital Status in Six Largest Korean Cities (%) (For women of age group between 20 and 30)

age	20		21		22		23		24		25		26		27		28		29		30	
City	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M
S	70	33	83	41	87	38	91	36	91	35	90	31	90	28	90	26	89	23	87	23	84	23
P	78	53	87	37	90	32	91	27	90	26	90	24	88	22	86	20	84	21	80	22	77	20
D-G	79	36	90	45	90	38	93	33	90	25	89	22	87	24	81	20	83	17	74	21	81	21
I	80	23	89	28	90	31	92	22	92	26	90	26	87	21	87	19	83	19	84	19	83	19
K	80	26	87	35	88	31	89	31	88	23	85	21	83	24	82	19	78	22	70	18	81	26
D-J	76	24	87	26	91	26	92	30	89	25	89	21	87	23	84	22	80	22	87	21	81	22

Source :1995 Population and Housing Census.

Notes : U=unmarried women and M=married women. S=Seoul, P=Pusan, D-G=Daegu, I=Inchon , K=Kwangju, D-J=Daejon.

2. Regression Analysis of the Impact of Marriage on Women's Labor Force Participation

We utilize a probit model to investigate how much marital status affects women's LFP in Korean cities. The dependent variable is one if a woman has worked or had been looking for a job during the reference month and, otherwise, it is zero. We use the 1995 Korea Population and Housing Census and our sample is women of age group between 21 and 30 in 66 Korean cities. The sample size is 69,213 women. As independent variables, we include demographic characteristics, such as marital status, education, age, migration status, whether she lives with person who is older than 60 (**years** Age 60 dummy) and with children younger than 6 years old or not. We also include city's labor market conditions, such as the unemployment rate; the percentage of workers employed in the service sector and in the manufacturing sector, the percentage of jobs as legislators, senior officials, managers, professionals, technicians and associate professionals(**occupation1**), the percentage of jobs as craft and related trade workers, plant machine operators and assemblers, and laborers(**occupation2**); the percentage of workers employed in firms whose employment size is less than 50(**small firms**); and percentage of workers employed in firms whose employment size is more than 300(**large firms**). Previous studies indicate that those factors affect either reservation wage or market wage, and thus affect women's LFP.

We argue that the factors listed above affect LFP differently for married women and unmarried women. To test this idea, we include interaction terms between marital status and all other independent variables. By testing the significance of the coefficient of marital status, and the significance of the coefficients of all interaction terms together, we can identify how marital status affects on LFP differently for married women and unmarried women.

Table 2. Probit Model for Labor Force Participation for Women of Age Group between 21 and 30 (Number of Obs.=69213)

	(1)	(2)	(3)	(4)	(5)	(6)
Age	-0.006 (0.001)	-0.012 (0.002)	-0.006 (0.001)	-0.012 (0.002)	-0.006 (0.001)	-0.012 (0.002)
Age* married dummy		0.007 (0.002)		0.007 (0.002)		0.008 (0.002)
Schooling	0.017 (0.001)	0.010 (0.002)	0.016 (0.001)	0.011 (0.002)	0.016 (0.001)	0.010 (0.002)
Schooling* married dummy		0.012 (0.002)		0.011 (0.002)		0.012 (0.002)
Age 60 dummy	0.061 (0.009)	-0.031 (0.013)	0.061 (0.009)	-0.032 (0.013)	0.061 (0.009)	-0.028 (0.013)
Age 60 dummy* married dummy		0.161 (0.016)		0.160 (0.016)		0.155 (0.016)
Migration*	-0.030 (0.005)	0.077 (0.008)	-0.027 (0.005)	0.073 (0.008)	-0.030 (0.005)	0.068 (0.009)
Migration* married dummy		-0.156 (0.010)		-0.148 (0.010)		-0.144 (0.010)
Married dummy	-0.590 (0.004)	-0.759 (0.026)	-0.589 (0.004)	-0.936 (0.030)		-0.689 (0.120)

Service			-0.001 (0.001)	-0.006 (0.002)		-0.001 (0.002)
Service*married dummy				0.006 (0.002)		-0.002 (0.002)
Manufacturing			-0.002 (0.001)	-0.005 (0.001)		-0.001 (0.002)
Manufacturing* married dummy				0.003 (0.002)		-0.005 (0.002)
Unemployment rate			-0.002 (0.002)	-0.015 (0.004)		-0.012 (0.004)
Unemployment rate* married dummy				0.018 (0.004)		0.009 (0.005)
Occupation 1					0.147 (0.058)	0.434 (0.103)
Occupation 1*married dummy						-0.462 (0.126)
Occupation 2					-0.052 (0.025)	0.146 (0.061)
Occupation 2*married dummy						-0.098 (0.073)
Small firm					-0.014 (0.116)	-0.593 (0.293)
Small firm*married dummy						1.637 (0.349)
Large firm					-0.131 (0.080)	0.144 (0.180)
Large firms * married dummy						-0.087 (0.205)
C²: H₀ : coefficients of Marital status and all interaction terms		18641.9		18647.3		2042.7

Notes: (1) Reported coefficients are marginal effects. (2) Standard errors are in parentheses. (3) “*” indicates interaction.

In Table 2, the marginal effect of marriage turned out to be around .6 to .9. By 60 or 90 percentage, married women are less likely to participate in labor market than unmarried women after other factors are controlled for. Table 2 also shows that, except the coefficient of schooling, the coefficients of other variables are distinctively different by the marital status. The coefficient of age is significant and negative for unmarried women’s LFP while the coefficient of the interaction term between age and marital status is significant and positive for married women. Residence with old persons is significantly and positively related to LFP for married women while it is significantly and negatively related to LFP for unmarried women. Migration also has the opposite relationship to LFP according to marital status. The impacts of labor market conditions on women’s LFP sharply different by the marital status. City’s unemployment rate has a significant negative effect on LFP for unmarried women and a positive effect on for married women. All other labor market conditions have significantly different impact on women’s LFP according to their marital status. From these results, we can conclude that marriage affect women’s LFP through two channels. It reduces LFP

directly and it also changes the relationship between LFP and demographic characteristics, and between LFP and labor market conditions.

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