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WHY DO SOME WOMEN PARTICIPATE IN THE LABOR FORCE WHILE OTHERS STAY AT HOME?*

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A woman with a high level of education is expected to participate actively in the labor market, according to the supply-side explanation. Due to her high earning potential, the opportunity cost of her staying at home will be greater than in the case of a woman with a low level of education. However, this approach does not seem to work well in explaining work behaviors of Korean women in 1970. In 1970, Korea was in the initial phase of industrialization which began to provide job opportunities for women in areas other than agriculture on a large scale. But, despite the increasing job opportunities, there were few options for well educated women in the labor market. Furthermore, domestic ideology formed by Confucianism prevailed and influenced Korean women's behaviors. Structural and ideological factors are expected to have a negative effect on the participation in the labor market among educated women. My analysis shows that education effect on women's participation in the labor force is not significant, which is contrary to the expectation from the supply-side explanation. The insignificant effect of education seems to result from the interplay between limited opportunities for women in the labor market structure and domestic ideology in Korea in 1970.

INTRODUCTION

In 1970, Korea was in the initial phase of industrialization and still strongly influenced by Confucianism. Industrialization provided job opportunities for women, while Confucianism emphasized domesticity of women. A group of economists suggest that the earning potentials of a woman in the market will increase the probability of her labor force participation. However, I believe that the effect of the earning potential of Korean women on labor force participation will not be consistent with the economists' theories. Though increasing, limited labor-market options did not provide various job opportunities for women. Strong emphases on women's purity and domesticity would hinder Korean women from participating in the labor force in 1970. Women equipped with feminine

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attributes such as purity and domesticity were highly valued in marriage markets. Marriage was the main way for most women to achieve status as adult women and to secure economic resources for their whole lives. In this paper, I will examine the determinants of women's labor force participation in 1970 Korea, where traditional sex-role division prevailed and at the same time, modern industries were rapidly established. Data come from a 1/100 sample the of 1970 Korean Census. The population in this analysis includes urban women aged 14 to 65. A total of 19,277 married women, 4,373 single women living with parents, and 3,222 single women living away from parents are selected for the analysis.

EXPLANATIONS FROM THE SUPPLY SIDE

Regarding why some women participate in labor force while others not, systematic explanations have been developed by a group of economists (Mincer 1962; Cain 1966; Bowen and Finegan 1969). They study women's labor force participation from the point of labor supply. According to this perspective, participation in the labor force is one of various activities that individuals can choose. Examples of other types of the activities are housekeeping, educational activity, and leisure. Housekeeping is a form of non-paid work and can be defined as the production of goods and services at home for the family. Generally, adult women have two choices of activities for their time: housekeeping or participation in labor force. Women's choices of major activities is greatly influenced by family context and their own ability (Bowen and Finegan 1969). Family resources and women's earning rates are proposed as important factors affecting women's decision to participate in the labor force.

Discussion of labor supply based on the individual unit is said not to be realistic since most people participate in the labor force as members of a household, and family membership has significant effects on motivation of market work (Cain 1966; Bowen and Finegan 1969). Specifically, the amount of family resources affects women's decision to participate in the labor force. Family resources tend to affect negatively women's labor force participation. For women's part, husbands' earnings are a kind of family resource and husbands' higher earnings tend to lead to lower participation in labor force among women (Mincer 1962). Contrary to the effect of husband's earnings, women's own earning power in the market promotes their participation in labor force. When women with great earning potential enjoy leisure and provide home services for other family members, it will be a big loss to the family (Bowen and Finegan 1969).

For married women, home work is one of the main activities in which a substantial portion of their lives are occupied.[1] When family demand for home goods is great and the productivity of married women is high, they are more likely to stay at home. When production of home goods are not easily substitutable by home appliances and services through markets, her productivity remains high. On the other hand, when production of home goods is substitutable through domestic maids, and electric appliances such as a washer or dishwasher, the value of a married woman's home work decreases. In that case, she will compare the cost of those services and her potential earnings in the market. If her wage is great enough to cover those costs, then she will be more likely to work. She will choose to participate in activity where she is more productive. When satisfactory child care is not easily available, the presence of a small child which is a form of family demand for home production, will increase the value of a married woman at home.[2]

STRUCTURAL AND IDEOLOGICAL FACTORS

According to the supply-side explanation, women with high earning potential in the market are expected to actively participate in the labor force. These women tend to have high levels of human capital, usually measured by the level of education. The above explanation assumes that an individual woman freely chooses either market work or home work, depending on her productivity and family situation. However, there are situations where women cannot freely choose activities that they want. Under certain circumstances, women with higher quality human capital are not more likely to work compared to those with lower levels of human capital. Structural and ideological factors seem to work beneath individual women's choice. For some structural and ideological reasons, women's choices of activities often do not fit the supply-side explanation.

In Korea in 1970, structural and ideological factors seem to strongly affect the decision regarding market work among women. When a society has a strong restriction on the range of women's activities, an individual woman cannot freely switch between home and market on the basis of productivity

[1] Cain (1966) defines home work as cleaning house, raising children, and preparing meals. Home goods for each activity are housekeeping, child care, food preparation.

[2] It is not easy to measure the productivity of a married woman at home. Economists usually assume that productivity in housekeeping and meal preparation is the same among married women. Prescence of a small child or a number of children are the most popular measure for home productivity among many scholars on the labor force participation of married wome.

calculations. A woman with higher earning potential in the market, relative to her productivity at home does not necessarily participate in the labor force when women's work in the market is not favorably perceived. The economists' considerations of the family context for decision regarding labor force participation provide a more realistic approach than the analysis based on individuals alone. *However, they are not concerned with the cultural mechanisms which shape the tastes of the family and define who is more productive in the market or at home*. While the theories of labor force participation have developed based on a highly industrialized society, i.e. the US, Korea in 1970 was in the initial phase of industrialization and was still strongly influenced by a traditional and conservative philosophy as to women's behaviors.

Labor Market Structure for Women

The Korean labor market structure was not differentiated much in 1970, when the history of industrialization was short. The agricultural sector dominated the largest proportion of working women until 1970. Along with industrialization, the agricultural population shifted rapidly to manufacturing and service sectors in Korea. It provided women with job opportunities in areas other than agriculture. Although overall participation rates of Korean women in the total labor force had been impressive, the proportion of women working in the nonagricultural sector had been low. For example, among married women, who comprised the most adult women, only 14% of them in the metropolitan area and 21% of them in other cities participated in the labor force in the early 1970s (Moon 1982, p. 32). This contrasts sharply with single women's rate: around 55% of single women participated in the nonagricultural labor force during the same period. Although participation rates among single women is relatively high compared to married women, they tend to quit their jobs, either forcibly or voluntarily, upon marriage. The low rates of participation in the nonagricultural sector among Korean women continued throughout the period of 1960s and the early 1970s (Brinton et al. 1995; Park 1990). It indicates that marital life and the accompanying familial obligations largely occupy most of the adult lifetime of contemporary Korean women.

Modern job opportunities for Korean women were initially created on a large scale in the manufacturing sector (Kim and Shim 1984). Young girls from rural areas swarmed into urban factory jobs (Koo 1987). Manufacturing jobs accommodated the largest proportion of urban working women; women in the manufacturing sector comprise 37% of the total

nonagricultural female labor force in 1970 (Kim and Shim 1984). Jobs in the manufacturing sector were mostly for women with a relatively low level of education. White-collar jobs were for women with at least secondary education. Clerical jobs had been increasingly available for women with secondary education (Kim and Shim 1984). The number of jobs in the clerical sector increased greatly between 1960 and 1970, but its absolute share out of the total nonagricultural female labor force was much smaller compared to the manufacturing sector (Kim and Shim 1984). Women with higher education tended to enter professional positions. Teaching jobs in primary and secondary schools were the main source of employment for educated women. Although the number of professional jobs increased between 1960 and 1970, the proportion of professional women out of the total nonagricultural female labor force had remained stable (Kim and Shim 1984).

In sum, women's choice of jobs remaind quite limited, despite the changes in employment opportunities. Most positions offereded to women in urban areas tended to be in menial service jobs, strenuous factory jobs, small-scale retailing jobs, and dead-end clerical jobs. Factory girls worked long hours with low wages in poor working conditions (Koo 1987, pp. 108-109). Retailing, the most common job of urban married women, is based on small amounts of capital and frequently takes the form of street vending. Domestic service was the most commonly held job among working women in Seoul in 1970 and constituted around 20 percent of Seoul's working women (Jones 1984, p.53). Since married women tend to be barred from working in clerical and factory jobs, they are heavily concentrated in the small-scale sales and service sectors, working as self-employed or family workers (Moon 1982, p. 42, 44).

Domestic Ideology in the Early Industrial Stage

In the early industrial stage, women's economic sphere tended to shrink compared to the previous stage. In agricultural society, women's economic roles were known to be various-joining domestic production and producing consumer goods. At that stage, women's main role was that of the producer rather than the consumer. The economic activities of women were performed within the boundary of the family and under the supervision of family members. Therefore, there was no strong resistance toward the economic activities of women. On the other hand, work in an industrial setting implies independence from the control of the family (Goode 1970). The family cannot supervise the work environment of women and the

young in an industrial setting as closely as in agricultural or family production. The unsupervised work environment gives the impression that working in industrial settings is full of danger and could lead to moral destruction (Smuts 1959). These worries are particularly focused on women. To avoid these slanted eyes, decent women needed prestigious white-collar jobs. However, at the early industrial stage, not many kinds of jobs were provided for women with decent family backgrounds and levels of education.

An ideology regarding women's attitudes and behaviors emerged in the early industrial period. As men worked in a competitive and impersonal environment, the meaning of the home to comfort the tired soul after work became more important than ever before (Kessler-Harris 1982). Along with it, women were expected to be emotional supporters for men and to be equipped with womanly qualities such as gentility, devotion, purity, and submissiveness. All these expectations could be satisfied as women faithfully performed the role of full-time housewife. The job of full-time housewife is said to be a rather recent industrial product (Giddens 1993). Before industrialization, women in ordinary families could not spend much time on laundry, shopping, cooking, and cleaning and decorating the home. The separation of men and women's worlds surely provided women with control within the family but, in return for it, women were excluded from a wide range of social and economic choices.

Although the domesticity of women became emphasized in the early industrial period, not all women could meet the standard. The ideas on proper roles for women indirectly revealed class differences. Many families could not afford to keep their wives and daughters inside the home to meet the idealized image of women in the early industrial period. The lower class family desperately needs the economic contributions of their women. The "domestic ideology" is definitely based on the middle and above middle class lifestyle, but influences attitudes and behaviors of all classes of women. When a man allows female relatives to work, people infer that he cannot support them and he fails to protect them from the dangers of the world of work and thus, he cannot control what they do outside the home (Smuts 1959). Employment of wives and daughters is thought of as a sign of masculine failure. In other words, one of the most acceptable ways for a man to display his success and prestige is to keep his wife and daughter in luxurious idleness (Smuts 1959, p.121). Women working out of family necessity were not respected for failing to keep the ladylike qualities, but continued to aspire to be women of domesticity (Kessler-Harris 1982). A consequence of the domestic ideology in the early industrial period is to

restrict job possibilities for women. Due to social pressure that women should maintain gentility, they were excluded from many occupations that were thought to belong to the masculine world. Consequently, those women who had to work had very limited choices, and were under constant exploitation (Kessler-Harris 1982).

Domestic Ideology on Korean Women

Purity and femininity have been regarded as the most valued qualities of Korean women. However, working in an industrialized city contains "dangerous" aspects, such as the issues of seduction, prostitution, rape, and abortion. As a result, women who are thought to be working in uncontrollable environments cannot avoid the negative glance of society (Chung 1985).[3] The negative attitude toward working in menial jobs is also internalized into the minds of working women themselves. The domestic roles of women are strongly aspired by women who worked out of family necessity. Due to the social praise for women's work in the home, women in the market need to justify the reasons for working. The decency of the job helps women avoid critical eyes for failing to fulfill the domestic role. But job opportunities with decency were very limited. Instead, factory jobs and domestic maids were easily available for ordinary women with rural backgrounds (Jones 1983). The majority of both single and married working women from lower class did not earn womanly respectability based on domesticity.

During the 1970s in Korea, the demand for women in the labor force in the manufacturing sector was high. Many poor girls from the countryside swarmed into industrial areas. The main reason for work among these women was to support the family and their brothers's education (Chung 1985; Lee and Lee 1982). However, the social perceptions toward these young factory girls were not favorable at all. They were looked down upon simply due to the fact that they worked in the factory and did not perform the role of middle-class girls (Chung 1985, p. 125). They were often viewed

3 In a survey (Lee 1982) of 602 single female factory workers, they are asked how they think people evaluate working women.

Think positively	19.4%
Think negatively	41.7
Despise	39.9
Total cases	602

Only 19 percent of the respondents said that people think working women positively (Lee 1982, p. 214, table 4-7)

as sexually promiscuous (Chung 1985, pp. 126-128). Foremen and factory managers were frequently reported to sexually exploit them. Besides the absence of protection for these girls's purity, they were constantly exposed to harsh factory environments where they had to walk through and shout over noisy machinery. However, despite a great deal of difficulties of maintaining the "domestic ideology," they cherished various womanly virtues based on middle-class life-styles (Chung 1985).

A study of married women based on an urban poor area also shows a great gap between reality and the aspiration (Cho 1987, pp. 73-82).[4] Most working married women in this area are occupied in manual jobs; small trading in the sidewalk or in market stalls, domestic help, or car washing. Most working married women want to avoid the work they are doing and want to have a normal, middle class family life where the husband economically supports the family. Some married women who have factory work experience have to return to the place where they had worked before marriage. In that case, they are afraid of the fact that their former factory colleges may know that they come back to their former work place, since they hope to be known as ordinary housewives of salary men (Cho 1987, p. 73).

Cho (1987) finds that the traditional division of sex roles is strongly accepted among working women in this poor urban area. Single women want to quit their jobs upon marriage and stay at home performing the conventional roles expected of women. Men also retain their ideas about the traditional role of the head of the household, but their inability to provide adequate financial resources for the family reduces their authority and power over other family members. Traditional family life is seldom realized among these poor families, where traditional sex-role division is strongly idealized.

In summary, I expect that the determinants suggested by the economists will somewhat differently affect labor force participation of Korean women in 1970. Even though family resources and earnings of the father or the husband will have negative influence on women's labor force participation as economists propose, women's own earning potentials will not positively influence the probability of women's work in the market. The contrary expectation to the supply-side explanation seems to result from limited job opportunities for educated women and the domestic ideology regarding

[4] The research was done in a large settlement which is located on a poor area in southern part of Seoul in 1982. 180 households are covered and data are collected through interviews and participant observation.

women's behaviors in Korea in 1970. Thus, a woman with higher earning potential is not expected to work more in the market. Her education will be used as an asset for marriage markets rather than skill for a job or career.

DATA AND METHODOLOGY

Logistic regressions will be employed for my analysis, since the dependent variable is dichotomized.[5] The data used in this analysis are from a 1/100 sample of the 1970 Population Census of Korea (ESCAP 1977). 1/100 sample of the 1970 Census of Population of Korea was provided to the United Nations Economic and Social Commission for Asia and the Pacific by the Bureau of Statistics of the Korean government (ESCAP 1977). The population of my sample consists of Korean women who reside in urban areas and who are age 14 to 65 during Census week. Specifically, the sample contains married women living with their husbands, and single women. Women who are attending schools are excluded, since their educational levels have not been determined and they are involved in an activity which is neither work for pay nor home work for family members.

For my analysis, I required personal information on the father or husband, such as age, education, employment status, and occupation. However, the 1970 Korean Census collected data based on the individual person, and the individual record does not contain information on other household members. For example, a wife's record does not have the educational or occupational information of her husband. However, even though the sampling unit is individual, the same household information is spread over individual records.[6] When an individual's status within the household is identified, personal information on another household member is available on the basis of common household information. Kinds of household status are household head, wife, children, husband's parents, wife's parents, other relatives, employee or boarder, member of a dormitory, etc. In order to get father or husband's education, age, and occupation, I matched father's record to daughter's and husband's record's to wife's. I assumed the data as hierarchical, and specified one record above another. For example, I put father's record in the upper level of daughter's. Thus, personal information on the father is obtained.[7] I had 19,277 matches of the

[5] An enhanced program for logistic regression is available in SPSSX 4.0 version (1990).

[6] Household information which is shared among household members includes residence area, enumeration district number, and household identification number (ESCAP 1977).

[7] The original data, 1/100 sample of the 1970 Korean Census, have 300,000 records. When I selected urban males and females aged 14 to 65 in urban areas, the sample was reduced to

husband and wife records and 4,373 matches of the father and daughter records. However, educational and occupational data of fathers are not available among single women living away from their parents. For analysis of their labor force participation, I used only their personal characteristics, such as cohort and education.

Single women are divided into two groups, according to their residence in relation to their parents. Single women living away from their parents are very different from those living with their parents. Descriptive statistics are presented for comparison of the two groups in table 1. Single women living with parents are younger and more educated than those living away from parents. The mean age for single women living with parents is 19 compared to 23 for single women living away from parents. The average educational year is 8.9 for single women living with parents compared to 7.4 for those living away from parents. More single women living away from their parents participate in the labor force than those living with their parents; 80 percent of single women living away from their parents are working for pay, relative to 44 percent of single women living with their parents. Also, the proportion of full-time workers, measured by working 10 months per year or more, is higher among single women away from parents.

Where does this difference come from? In Korea, grown-up children stay with parents until marriage, unless they have to live in cities or areas which are far away from their parents' houses. The single women living alone in urban areas mostly migrated for employment from rural areas where poverty prevails. Seventy six percent of migrated single women are away

TABLE 1. MEANS AND PERCENTAGE AMONG SINGLE WOMEN

Variables	Living with Parents		Living away from Parents	
	Mean	SD	Mean	SD
Age	19.2	3.9	22.6	10.1
Years of schooling	8.90	2.96	7.44	2.22
Proportion in the labor force	0.44	0.50	0.80	0.40
Percentage of working more than 10 months last year	31.2		62.5	
Total cases	4,373		3,222	

Source: 1/100 sample of the 1970 Census of Population of Korea

80,832 among which 40,775 were women. When I matched married women and single women to their household heads, only male household heads were selected (11.8 percent of household heads were women.). I included only married or single women. The breakdown of the subset of the sample by relation to household head and by marital status is presented in the following table.

from home compared to only 25 percent of single women who continually reside in urban areas.[8] In summary, the sample for my analysis consists of married women living with husbands and single women. Single women are divided by their residence with parents. Sample sizes are 19,277 for married women living with husbands, 4,373 for single women living with parents, and 3,222 for single women living away from parents.

TABLE 2. DESCRIPTION OF VARIABLES

Variable name	Value	Description
Dependent variable	1	In the labor force
	0	Not in the labor force
Independent variable		
Household head characteristics		
Socioeconomic index	10 to 90	International socioeconomic index of occupational status
Family worker	1 or 0	1 Family worker, 0 others
Daily worker	1 or 0	1 Daily worker, 0 others
Unemployed	1 or 0	1 Unemployed, 0 others
Men at home	1 or 0	1 Men at home, 0 others
Variables for the total women		
Education	1 to 5	1 Primary or less 2 Middle school 3 High school 4 Junior college 5 University
Marital status	1 or 0	1 Single, 0 married
Migration	1 or 0	1 Migrants, 0 others
Away from home	1 or 0	1 Away from home, 0 others
Variable for single women		
Cohort	1 to 3	1 14 to 19 2 20 to 24 3 25 to 65
Variable for married women		
Cohort	1 to 4	1 14 to 24 2 25 to 34 3 35 to 49 4 50 to 65
Child	1 to 11	Number of children
Extended family	1 or 0	1 Extended family, 0 others

[8] The percentage is based on 1/100 sample of the 1970 Korean Census.

Dependent Variable

The dependent variable in this analysis is whether a woman participates in the labor force or not. I will define participants in the labor force as employed or unemployed persons. The question asked for labor force participation is "Did you work for pay last week?" Value 1 is given to those who answered "Yes" and 0 to those who answered "No". Some of the respondents who said "No" to the question may have taken a rest for illness or labor disputes or to look for a job. If a woman did not work in the last week but claims that she has a job or is looking for a job, then she is considered as a participant in the labor force.[9]

In summary, participants in the labor force are defined as those women who worked last week or those who did not work last week but have jobs or look for a job. Table 3 shows that the proportion of working women among the married is much smaller than that among single women; 13

TABLE 3. PERCENTAGES, MEANS, STANDARD DEVIATIONS OF VARIABLES

Variable	Total Sample		Married Women		Single with Parents		Single away from parents	
Percentage distribution								
In the labor force	29.2%		13.3%		43.9%		80.1%	
Marital status	30.3%							
Migration	35.8%							
Away from home	11.0%							
Extended family			10.4%					
Men at home			2.9%					
Daily worker					16.6%			
Family worker			0.5%		0.8%			
Unemployed			4.1%		5.1%			
Mean and SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Years of schooling	8.2	2.8	8.0	2.8	8.9	3.0	7.4	2.2
Age	30.6	11.1	35.0	9.2	19.2	3.9	22.6	10.1
Child			3.1	1.9				
Years of schooling of the head			10.1	3.5	8.6	3.1		
Socio-economic index			43.3	36.0	43.3	46.7		
Total cases	31,397		18,945		3,649		3,109	

[9] "Type of activity" is another variable used to measure labor force participation. The question for this variable is "What was this person doing during most of last week?" The categories for response are working, with job not work, looking for work, housekeeping, attending school, too old, disable to work, and others (ESCP 1977).

percent of married women work in the market compared to 44 percent of single women living with parents, and 80 percent of single women living away from parents.

Independent Variables

Independent variables are largely classified into two kinds. One group of variables is about the household head and the other is about women respondents themselves. The household head is the father for a single woman while it is the husband for a married woman. Variables for a household head are Socio-Economic Index of occupational status (ISEI), family worker, daily worker, unemployed, men at home, and education. Variables for a woman respondent are her education, cohort, migration, away from home, and extended family.

Education is a proxy for the earning potential of a household head or a woman in the market. The education variable is used as a categorical variable, since its linear relationship to the probability of labor force participation is not clearly shown. One is given to primary school graduates, 2 to middle school graduates, 3 to high school graduates, 4 to junior college graduates, and 5 university graduates. But for descriptive statistics of education, years of schooling replaced the categorical values for each educational level; 6 years for primary school, 3 years for middle school, 3 years for high school, 2 years for junior college, and 4 years for college.[10] In Table 3, we can find that single women living away from parents are less educated than others; 7.4 mean years of schooling among single women living away from parents compared to 8.0 among married women and 8.9 among single women living with parents.

1. Variables for Household Head's Characteristics

As a proxy for the income of the household head, I used an International Socio-Economic Index (ISEI) of occupational status. The index of occupational status is designed to maximize the role of occupation as an intervening variable between education and income (Treiman et al 1990).[11]

[10] In questions about education, a space is given to those who never attended school. Somehow the space is processed as system missing value. Thus, women without school education come to be excluded from analysis. We should be aware of the fact that mean level of education is overestimated. The missing proportion which can be assumed as the percentage of women without school education is 13 percent among married women, 1 percent among single women living with parents, and 5 percent among single women living away from parents.

[11] The International Socio-economic Index (ISEI) of occupational status has been developed

Family workers are those who work in a business or on a farm operated by a member of the household where they live (National Bureau of Statistics 1975, p15).[12] Family worker is used as a dummy variable. Daily workers are those who receive their wages on a daily basis. Daily workers usually work as manual laborers and have an unstable work status. Since they are not employed by a formal organization, their labor activities are based on a short term contract-for several days or for a construction period. Daily worker is a dummy variable; value 1 is given to a daily worker and 0 to others. Men at home are the disabled or housekeepers. The variable unemployed indicates those who are looking for jobs.

2. Variables for Women Respondents

The cohort variable for single women is divided into three groups; ages 14 to 19, 20 to 24, and 24 to 65. Single women are concentrated from age 14 to 24. Around 90 percent of single women are aged 14 to 24. The cohort variable for married women consists of four groups; 14 to 24, 25 to 34, 35 to 49, 50 to 65. Marital status is introduced as a dummy variable for analysis of the total women's sample. A 1 is assigned to single women and 0 to married women. Domestic responsibilities will hinder labor force participation of married women. If a person has changed residence in the last 5 years, then she is defined as a migrant. A dummy variable is used for migration; 1 for migrants and 0 for others. Around 36 percent of women migrated in the last 5 years. Even though migration is not clearly defined in a geographic context in the 1970 Census, most migration in Korea is from rural to urban areas. Big cities have a higher living standard and are thought to provide more economic opportunity than rural areas. One of the main reasons for migration from rural areas is for employment. Women away from home are defined as those who reside in dormitories as boarders, or with employers. Eleven percent of women belong to this category.

based on education, occupation and income for 73,901 full-time employed men from 16 countries (Ganzeboom, De Graaf, Treiman, 1990). ISEI is derived from the International Standard Classification of Occupation (ISCO). The four digit ISCO is equal to the three digit classification of Korean Occupation (National Bureau of Statistics, 1974).

[12] In an extended family, a married son helps his father's business which is usually small scale. Even though the son is indicated as an independent household head in the Census, his economic status as well as that of his family is completely dependent on his parents. sometimes, he does not receive pay on a regular basis. since the son resides with parents, his parents usually cover the living expenses for his family and implicitly promise rewards in the future.

3. Variables for Married Women

The number of children is a variable for married women. The mean number of children is 3.1. Unfortunately, the age of the child, which is an important factor affecting labor activity of a married woman, is not available in the data. Extended family is defined as a family type in which the subject resides with the parents of household head or the wife. I can assume that most parents in the extended family are those of the husband. Approximately 10 percent of married women belong to an extended family.

4. Strategy of Analysis

For the analysis, I will first run a logistic regression based on the total women sample in order to see the effect of marital status on Korean women's labor force participation. Secondly, I will run three separate logistic regressions each for married women, single women living with parents, and single women living away from parents. In logistic regressions for married women and single women living with parents, I will examine the effects of household head's earning potentials and women's own education on labor force participation of Korean women. In a logistic regression for single women living away from parents, the effect of women's education on labor force participation will be examined.

HYPOTHESES

Based on both economic and cultural considerations, I will hypothesize the determinants of women's labor force participation in the Korea in 1970.

Family Resources

I expect that family resources will have negative effects on the labor force participation of Korean women; women having more family resources are less likely to work in the market. Socio-economic index, education, daily worker, unemployed, and men at home measure earning potentials of the household head and family resources. Higher socio-economic index represents higher occupational status of the household head; higher socio-economic index of the household head will decrease the probability of a woman's participation in the market. It is well known that more educated father or husband have higher earnings in the market. Household head's education will negatively affect labor force participation of women; a wife or a daughter of the highly educated household head is less likely to work

in the market. Daily worker, unemployed, and men at home reflect lower earnings of the household head. Thus, if the household head is a daily worker or unemployed, or at home, women of the household are more likely to participate in the labor force.

Family workers work in small shops or factories which are usually adjacent to their houses and run by other family members. Since work place is not separated from home, women will not have much difficulties in combining works in the market and at home. When the household head is a family worker, the wife and daughters will help him as family workers. Thus, "family worker" will have positive effects on women's labor force participation.

Migrated women were mostly from rural areas, where poverty prevailed in the 1970. Their rural backgrounds represent smaller family resources. Thus, migrated women are more likely to participate in market work. Single women living away from home were not regarded as conventional, since most single women resided with their parents until marriage. "Away from home" indicated parents' inability to control their daughters' activities in urban areas, where young women were thought to be susceptible to the vice of cities. "Away from home" will have a positive effect on the labor force participation of single women.

Earning Potentials in the Market

Women's education is used to measure earning potentials in the market. Economists argue that women's education is positively related to their labor force participation. On the other hand, I expect that women's education will have no significant effect on their labor force participation, since women's education was mainly utilized as a social asset for marriage, rather than as skills for a job or career.

Earning Potentials in Non-Market Work

Marital status is a variable indicating earning potentials of women at home. Since married women are expected to take care of home work, their earning potentials at home work will be much higher than those of single women. Therefore, married women, having higher productivity at home, are less likely to work in the market than single women. In other words, single women with less domestic responsibilities are more likely to participate in market work than married women. "Marital status" is a dummy variable which assigns 1 to single women and 0 to married women. Thus, "marital status" will have a positive effect on women's labor force

participation.

The presence of children will be one of the main factors which increase the productivity of married women at home. Number of children will negatively affect labor force participation of married women. The effect of "extended family" on labor force participation of married women will depend on whose parents married women live with, i.e. whether they live with their parents or husbands' parents. Married women's own parents will help them with house chores, while husbands' parents will be waited on by them. The data do not specify whose parents, married women live with, but we expect that most parents in extended families will be husbands' parents, since the partrilocal family is dominant in Korea. Thus, "extended family" will negatively influence labor force participation of married women. Early "cohort" of married women are in the period of child bearing and rearing; I expect that cohort 14 to 24 or cohort 25 to 35 are less likely to work in the market than cohort 35 to 45.

RESULTS AND DISCUSSION

Table 4 exhibits results of logistic regressions each for single women living with parents and married women. Daughters of family workers are less likely to work than those of non-family workers, which is different from my expectation. On the other hand, wives of family workers are more likely to work, as I hypothesized. In family shops adjacent to houses, daughters seem to be excluded from adult business. Daughters of unemployed fathers are more likely to work in the market, while the unemployment effect of husbands on wives' labor force participation is not significant. Wives of husbands staying at home are more likely to work in the market. Father's education does not have a significant effect on daughters' labor force participation, except father's high school education. Daughters of high school graduated fathers are more likely to work in the market, which is hard to interpret. However, husbands' education has a negative effect on wives' labor force participation; the lower the educational levels of husbands, the more likely their wives are to work. The husbands' educational effect on wives' labor force participation is consistent with my hypothesis.

Daughters' own education has no significant effect on their labor force participation, as hypothesized. On the other hand, wives education has a somewhat positive effect on the probability of their labor force participation, as economists suggested. Why do not university graduates of single women work more, while those of married women are more likely to participate in

TABLE 4. LOGISTIC REGRESSION PREDICTING LABOR FORCE PARTICIPATION OF MARRIED WOMEN AND SINGLE WOMEN LIVING WITH PARENTS IN KOREA IN 1970

Independent Variable	Single Women		Married Women	
	B	SE	B	SE
Household head characteristics				
Socio-economic index	–0.01	0.04	0.07**	0.02
Family worker	–0.90*	0.52	1.03***	0.25
Daily worker	0.11	0.12		
Unemployed	0.63**	0.20	0.145	0.14
Men at home			1.31***	0.35
Education				
Primary school	0.28	0.20	0.94***	0.13
Middle school	0.13	0.20	0.63***	0.12
High school	0.57**	0.20	0.36**	0.11
Junior college	0.14	0.27	–0.14	0.18
University	–	–	–	–
Respondent characteristics				
Education				
Primary school	–0.18	0.22	–1.03***	0.16
Middle school	–0.22	0.22	–1.08***	0.16
High school	–0.09	0.20	–1.01***	0.15
Junior college	0.16	0.31	–0.18	0.23
University	–	–	–	–
Cohort for single women				
14 to 19	0.15	0.18		
20 to 24	0.33	0.18		
25 to 65	–	–		
Cohort for married women				
14 to 24			–0.36**	0.17
25 to 34			–0.08	0.14
25 to 49			0.29	0.13
50 to 65	–	–	–	–
Extended family			0.24***	0.08
Child			0.01	0.02
Intercept	–0.37	0.16**	–2.29***	0.12
Model x^2 (d.f.)	40.32	(14)	293.45	(17)
Total cases	2,490		15,094	

* p < .10 ** p < .05 *** p < .001

a The group of single women includes only those living with parents.
b Dependent variable is coded as 1 = in the labor force, 0 = not in the labor force
c International Socio-Economic Index of occupational status developed by Treiman et. al. in 1990.
d If household head works as a family worker, 1 is given and 0 to others.
e If household head works as a daily worker, 1 is given and 0 to others.
f If household head looking for a job, 1 is given and 0 to others.
g I grouped single and married women differently by cohort since women have different life-cycle by marital status.
h Extended family is only for married women. 1 is given to those living with their or husbands' parents and 0 to others.

market work? University education of single women seems to be utilized as an asset for marriage rather than as job skills, as I pointed out. On the other hand, marriage is not a issue anymore among married women, and university educated wives begin to appreciate earning potentials in the market.

Cohort 20 to 24 are more likely to work among single women. I think that the age group is the most demanded cohort in factories or service jobs. The coefficients of cohort seem to be related to the life cycle of married women. Married cohort 14 to 24 are less likely to work, while married cohort 35 to 49 are more likely to work. The former cohort is in the period of child bearing and rearing whereas the latter cohort is in the period of having half-grown or grown-up children. The effect of cohort among married women is consistent with my expectation. Married women living in the extended family are more likely to work in the market, which is different from my hypothesis.

If we further consider whose parents married women live with, i.e. their parents or husbands' parents, the coefficient of extended family is more interpretable. Number of children has no significant effect on married women's labor force participation. Even though the result is not consistent with my hypothesis, it is not surprising. The effect of children on married women's labor force participation will be sensitive to the age of child; the presence of babies or little children will negatively affect mothers'

TABLE 5. LOGISTIC REGRESSION PREDICTING LABOR FORCE PARTICIPATION OF SINGLE WOMEN LIVING AWAY FROM PARENTS IN KOREA IN 1970

Independent Variable	Coefficient	Standard Error
Education		
Primary school	0.70**	0.34
Middle school	0.86**	0.35
High school	0.04	0.36
Junior college	2.21***	0.10
University	–	–
Cohort		
14 to 19	0.88***	0.11
20 to 24	0.82***	0.12
25 to 65	–	–
Intercept	1.52***	0.17
Model x2 (d.f.)	120.71 (6)	
Total cases	3,690	

** $p < .05$ *** $p < .001$

a Dependent variable is coded as 1 = in the labor force, 0 = not in the labor force.

participation in the market work while the presence of teen-age children will positively affect their participation in the labor force. Thus, the effect of little children and teen-age children will be somewhat canceled out.

In summary, family resources generally have negative effects on women's labor force participation, both in single and married women. The most interesting result is the effect of education on women's labor force participation. *Education is positively related with the probability of work in the market among married women whereas it has no significant effect among single women*. Finally, the result of a logistic regression for single women living away from home is presented in table 5. Education seems to have a significant effect on labor force participation of single women living away from home. However, since we have not controlled the effect of family resources, it is hard to believe that the effect of education reflects the net effect of education.

CONCLUSION

In this paper, I tried to examine determinants of labor force participation for Korean women in 1970. Economists suggested that family resources have a negative effect and women's education have a positive effect on women's labor force participation. But, I expected that the effect of women's education on their labor force participation would not be significant, rather than be positive. I argued that women's university education was utilized as an asset for a successful marriage, rather than skills for a job or career. Even though rapid industrialization from the 1960s provided educational and job opportunities for women, Korean women were strongly bound by Confucian doctrines. Though job opportunities were increasing, there were few for women with high levels of education. Thus, women tended to turn easily to marriage for their lifetime career. Confucian doctrines emphasize women's purity and domesticity and women with little experiences of the dangerous aspects in the industrial world will be highly evaluated in marriage markets. Marriage was the main way for a woman to secure material resources and to obtain her adult status. I expected that women's own education will have little effect on women's labor force participation and thus, highly educated women are not necessarily more likely to work in the market.

Results from logistic regressions seem to support my argument on the effect of education among single women. In a logistic regression for single women living with parents, education has no significant effect on their labor force participation. On the other hand, education has a somewhat positive

effect on labor force participation among married women. These contrasted results seem to strengthen my argument on the effect of education among single women. Women's work experience did not function favorably for the successful marriage in 1970, when purity and domesticity of women were stressed. However, purity and domesticity as a valuable asset for marriage would not matter much for married women, since they had already passed the test. Consequently, highly educated single women invested their education for marriage, rather than for a job or career in 1970 when marriage was much more lucrative in the financial and psychological sense compared to a job or career. The effect of education among single women living away from parents is not strictly examined, since I could not control for their family resources. In conclusion, the effect of family resources on women's labor force participation is consistent with economists' suggestion. But the effect of women's education is somewhat different from economists' expectations. Confucian ideology and the limited job opportunities for women seem to discourage highly educated single women from participating in market work.

REFERENCES

Bowen, William G., and T. Aldrich Finegan. 1969. *The Economics of Labor Force Participation*. Princeton, NJ: Princeton University Press.

Brinton, Mary C., Yean-Ju Lee, and William L. Parish. 1995. "Married Women's Employment in Rapidly Industrializing Societies: Examples from East Asia." *American Journal of Sociology* 100 (5): 1099-1130.

Cain, Glen G. 1966. *Married Women in the Labor Force: An Economic Analysis*. Chicago: The University of Chicago Press.

Cho, Oakla. 1987. "Women in Transition: The Low Income Family." Pp. 71-84 in *Korean Women in Transition: at Home and Abroad*, edited by Eui-Young Yu and Earl H. Phillips. Los Angeles, CA: Center for Korean-American and Korean Studies.

Chung, Hyunbak. 1985. "The Consciousness and Life of Women Workers." (in Korean) Pp. 116-62 in *Women*. Vol. 1. Seoul: Changjakkwabipyoung.

Economic and Social Commission for Asia and the Pacific in the United Nations. 1977. *File of Sample of 1970 Population Census of Korea*. Bureau of Statistics, Korea.

Ganzeboom, Harry B. G., and Paul M. De Graaf, and Donald J. Treiman. 1990. "Standard International Socio-Economic Index of Occupational Status." presented at the Meetings of the American Sociological Association, San Francisco, August 9-13, 1989.

Giddens, Anthony. 1993. *Sociology*. Polity Press.

Goode, William J. 1970. *World Revolution and Family Patterns*. New York: The Free Press.

Jones, Gavin W. 1984. "economic Growth and Changing Female Employment Structure in the Cities of Southeast and East Asia." in *Women in the Urban and Industrial Workforce*, edited by Gavin W. Jones,

Kessler-Harris, Alice. 1982. *Out to Work: A History of Wage-Earning Women in the United States*. Oxford: Oxford University Press.

Kim, Sugeon, and Kyoung-Ok Shim. 1984. An Analysis of Labor Force Participation among Korean women (in Korean). Policy Report 84-05. Korea Development Institute.

Koo, Hagen. 1987. "Women Factory Workers in Korea." Pp. 103-12 in *Korean Women in Transition: At Home and Abroad*, edited by Eui-Young Yu and Earl H. Phillops. Los Angeles: Center for Korean-American and Korean Studies.

Lee, On-Jook. 1982. "Korean Female Factory Worker's Attitudes toward Marriage and Work." *Journal of Asian Women* 21. Seoul, Korea: Sookmyoung Women's University.

————. 1985. "Korean Women's Participation in Public Sphere." (in Korean). Pp. 226- 251 in *Development and Change of Korean Society*. Seoul: Bubmunsa.

Mincer, Jacob. 1962. "Labor Force Participation of Married Women." Pp. 63-97 in *Aspects of Labor Economics*, a Conference of the Universities-National Bureau Committee for Economic Research. A Report of the National Bureau of Economic Research, New York. Princeton, NJ: Princeton University Press.

Ministry of Education, Republic of Korea. 1970. *Yearbook of Educational Statistics*.

————. 1972. *Annual Survey of Education*.

Moon, Uhn Cho. 1982. "Married Women and Urban Employment in Korea: Class Differentiation in Income-Opportunities." Unpublished Ph.D. Dissertation. University of Hawaii.

National Bureau of Statistics. 1974. *Population and Housing Report*. Vol. 2. Five Percent Sample Survey. 3-1 Economic Activity. Economic Planning Board. Republic of Korea.

Park, Young Jin. 1990. "Women's Labor Force Participation in Korea: Trends in Levels, Patterns, and Differentials during 1960-1980." Unpublished Ph.D. Dissertation, University of Pennsylvania.

SPSS, Inc. 1990. "Logistic Regression." Pp. 312-22 in *Spss Reference Guide*. Chicago: SPSS, Inc.

Smuts, Robert W. 1959. *Women and Work in America*. New York: Columbia University Press.

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