Women in the Corporate World: Who Hires and Promotes Them?

Jin Hwa Jung
Professor
Department of Agricultural Economics and Rural Development
Research Institute for Agriculture and Life Sciences
Seoul National University
1 Gwanak-ro, Gwanak-gu
Seoul 151-742, Korea

Abstract

This study explores ways to improve the quantity and quality of female employment by analyzing determinants of corporate women-friendliness. Corporate women-friendliness was measured by using three indicators: the ratio of women employees to regular employees; the ratio of women to executives; and the level of fairness in the employment of women. In the empirical analysis, both OLS and fixed effect panel analysis were applied to corporate panel data in Korea. The ratio of women executives and the level of fairness in the employment of women are significantly higher in those companies whose chief executive officers are women. Corporate strategic human resources management did not contribute in enhancing the status of women within the firm. Empirical results indicate a need to investigate policy support for improving the utilization of women in high-level corporate positions.

Key words: women-friendliness, women executives, corporate world, Korea

1. Introduction

The increase of economic activity for women and the decline of gender disparity in the labor markets are worldwide phenomena commonly seen today. These phenomena are especially the case in developed countries where it is more common for women to engage in employment. Gender disparity in terms of employment structure and wages is relatively small. However, it is also true that the status of women in the labor market is worse than the status of men in most countries (UNDP, 2011). Even among the Organization for Economic Cooperation and Development (OECD) member countries, women tend to have a lower labor market participation rate and lower average wage as compared to men (Jung, 2007). According to Catalyst (2006), the average ratio of women executives (board directors) in Fortune 500 companies in 2005 was a modest 12%. The small portion of women to men executives raises the question that the so-called "glass ceiling" may be at work. In contrast to the average ratio of women executives which exceeds 15% in North American companies, the average ratio of women executives in Asian companies is a mere 0.2% (Lim et al., 2007).

Given that human resources are a major factor that determines corporate competitiveness, the strategic development and utilization of women workers is very important. Women are an important human resource for the firm because of the large number of women workers. Presently, it is more common for women to be employed. The same could be said in the sense of labor force quality. The quality has been keeping in step with the higher education level and the increase of professional women. Women workers are likely to become more significant for corporate competitiveness because of the increased importance with the efficient utilization of available human resources in light of declined fertility rates and aging of the working population. In many cases, existing studies on women workers have either analyzed determinants of the supply of women labor force from a perspective of labor supply (e.g., Conelly and Kimmel, 2003; Killingsworth and Heckman, 1986; Ribar, 1992), or analyzed gender disparity in the labor market (e.g., Altonji and Blank, 1999; Blau and Kahn, 2000, 2004; Hellerstein, et al., 2002; Jung and Choi, 2004, Lee et al., 2001; Ural et al., 2009).

However, it is difficult to come across a study that has examined the types of firms that proactively employ and promote women. The objective of this study is to analyze the characteristics of women-friendly firms. The study seeks to suggest conditions for the strategic development and use of the women workers by analyzing determinants of women-friendliness at the organizational level. This study assesses corporate women-friendliness by applying three indicators: the ratio of women employees to regular employees; the ratio of women to executives; and the level of fairness in the employment of women – i.e., the ratio of women to executives in relation to the ratio of women employees to regular employees. For the empirical analysis, ordinary least squares (OLS) and fixed effect (FE) panel analysis are applied to the corporate panel data from Korea.

The subject of this study is women workers at firms in Korea. Women workforce has gained significant recognition as a part of the labor force in the economic development of Korea. Among the OECD member countries, Korea still ranks among the lowest in terms of women's labor market status. The female labor market participation rate and employment-population ratio in Korea are among the lowest when compared with other OECD member countries. The wage disparity of men and women workers in Korea is the largest among the OECD member countries (Jung, 2007). Various human resource indices including the level of higher education tend to show that women in Korea have surpassed women from many developed nations (OECD, 2011). The potential economic loss due to an inadequate use of women workers in the labor market of Korea would be proportionately significant. The results of this study on women-friendliness at firms from Korea can provide important implications for those countries that are seeking to improve the quantity and quality of employment for women.

This paper is organized as follows. In section 2, we examine the theoretical basis behind the significance of the women workforce in terms of corporate competitiveness. We also examine the findings of previous studies. Section 3 discusses the methodology used to analyze determinants for the employment of women and the data used for this study. Section 4 discusses findings of the analysis for the characteristics of women-friendly firms. Section 5 concludes the paper with suggestions to enhance the corporate use of women workers.

2. Women: "The Other Half" of the Labor Force

From a resource-based view, corporate comparative advantage is determined by resources within a firm – be it tangible or intangible (Barney, 1991; Wernerfelt, 1984). In particular, human resource is the most important factor that determines firm-specific comparative advantage. In this sense, a firm's competitiveness in human resource serves as the foundation for its corporate competitiveness (Becker, 1962; Wright and McMahon, 1992).

If human resource is the most important determinant for corporate competitiveness, the nurturing and use of women workers takes on a meaningful significance. In light of the fact that half of the world's population is women and the employment of women is increasing, any discussion of corporate competitiveness without considering women would be meaningless. This is especially true given that the optimal use of available human resources has become more important in the light of declining fertility rates and the aging population. Moreover, considering that human resource competitiveness in our knowledge-based economy is determined not so much by the hardware (i.e., manpower) as by the software (i.e., brainpower), gender difference in the labor force has really no practical meaning.

According to Becker (1971), discrimination in the labor market arising from corporate employer or societal prejudices leads to lower corporate competitiveness by bringing down economic efficiency. Employers who engage in non-productivity-related discrimination invariably suffer economic losses from labor costs that tend to be higher than those who do not engage in non-productivity-related discrimination. Accordingly, companies that discriminate based on gender are not likely to maintain competitiveness in a competitive market. However, companies that have a certain degree of monopolistic power can still survive while engaging in gender discrimination. This implies that sex discrimination tends to occur in firms with market power and competitive market forces act to reduce or eliminate discrimination (Hellerstein et al., 2002). An increasing number of companies are hiring more and more women employees due to the growing importance of the utilization of women workers. Gender disparity in the labor market is also on a decreasing trend. However, women in comparison to men in most societies are still under-utilized and are disadvantaged in hiring for employment, promotion, and monetary compensation.

These issues have driven many studies regarding gender disparity in the employment structure and wages. Yet, hardly any studies thus far closely examined the type of firms that tend to proactively employ and utilize women.

Sung (2006) applied firm data from Korea to examine determining factors for hiring women by firms. Newer firms tend to hire more women. Firms that have lower revenue in comparison to total assets and have more employees also tended to hire more women. Conversely, the study showed that women-related benefit programs such as flexible work schedules, maternity programs or childcare leave systems at the workplace did not have a significant effect on the number of women hired by a company. The higher the ratio of women workers, the less likely there would be discrimination against women in terms of hiring and promoting.

From the quality aspect of women's employment, the ratio of women executives as independent of the ratio of women workers takes on its own significance. While many companies hire a great number of women for entry-level or other low level positions due to a need for more workforce or societal pressures (e.g., affirmative action), they may be reluctant to put women in higher level positions. This makes it difficult for women employee recognition within higher level managerial positions. It is well known that, in many countries, a "glass ceiling" still exists for women in a male-centered organization (Forster, 1999; Liff and Ward, 2001; Morrison and Von Glinow, 1990; Wood et al., 1993). Some have pointed out that female leaders tend to encounter difficulties in dealing with male co-workers or other interested parties (Gagliarducci and Paserman, 2009). On the other hand, some studies have shown that the cohort effect may have a greater impact than the glass ceiling effect for hire ranking professionals and executives (Morgan, 1998). According to Catalyst (2006), the ratio of women executives tends to vary depending on the company and the industry. In terms of industry, finance, real estate and entertainment tend to have a high ratio of women executives while auto and auto parts, construction, information technology, metals and mining tend to have a lower ratio of women executives.

Harel et al. (2003) suggest that the ratio of women in management versus the ratio of women employees in general indicates the level of fairness in the utilization of women workers. They analyzed the determining factors for the level of fairness. According to the study, those companies that implement high-performance human resource management (HRM) practices tend to show fairness when it comes to allowing women to enter management positions. Considering that the objective of strategic HRM is to attain corporate comparative advantage by hiring, fostering and retaining able employees, discrimination against women is expected to be less prevalent when strategic HRM is practiced more widely. In reality, such outcomes may be difficult to come by in the short run (Dickens, 1998).

3. Methodology and Data

3.1. Methodology

The determination function for the level of corporate women-friendliness can be expressed as follows:

$$y_{it} = \alpha + C_{it}\beta' + W_{it}\gamma' + H_{it}\delta' + \epsilon_{it} \quad (1)$$

The dependent variable y_{it} is an indicator representing women-friendliness of firm "*i*" in the year "*t*", and is measured by: (1) the ratio of women workers to total full-time regular workers (*Female_worker*); (2) the ratio of women executives to total executives (*Female_executive*); and (3) the relative ratio of these two indices (*Fairness*). C_{it} is a vector for the general characteristics of a firm and includes dummy variables for the type of firm (i.e., listed or non-listed), industry engaged in (manufacturing or services), age of the firm, tangible assets, size of the firm, and the existence or lack of a labor union. W_{it} reflects the personnel make-up of the firm, which includes whether the chief executive officer (CEO) is or is not a woman, the educational composition of regular full-time workers (e.g., below high school, college, graduate school), and the ratio of non-regular employees to total employees. H_{it} is an index for corporate HRM which relates to the workers' hiring, promoting, training and merit-based bonus compensations. ϵ_{it} represents the error term and subscript *t* represents the applicable year.

The OLS and F.E. panel analysis were used in testing the determinants for corporate women-friendliness. With respect to the OLS analysis (equation 1), the dummy variable for 2007 (the second panel year) was added into the analysis. The FE panel analysis is to clear any bias caused by the firms' unobserved heterogeneity and is expressed as equation (2). α_i represents individual firm-specific intercept while μ_{it} represents the error term.

$$y_{it} = C_{it}\beta' + W_{it}\gamma' + H_{it}\delta' + \alpha_i + \mu_{it} \quad (2)$$

The hypothesis of this study is that corporate women-friendliness is closely related to corporate characteristics. In particular, this study focuses on the role of women CEO's and the effects of corporate HRM. If it is the case that male rather than female CEO's are more likely to discriminate against women employees, the firms with women CEO's will be more women-friendly in terms of hiring and promoting. If the firms' strategic HRM practices are more likely to consider individual employee merits instead of gender, then such firms will turn out as more women-friendly. This is especially true for the sectors with a large pool of capable women workers, but where women encounter discrimination in hiring and promoting.

3.2. Data

The study used the Human Capital Corporate Panel Survey (HCCP) data for the years 2005 and 2007 for the empirical analysis. The HCCP data were collected from biennial surveys of firms registered in the *KIS Corporate Data* (Korea Information Service, Inc.) and hiring 100 employees or more, under the supervision of the Korea Research Institute for Vocational Education and Training (KRIVET). The pooled data from 2005 and 2007 were used for the OLS analysis. Firms that were included in both survey years were used in the FE panel analysis. The number of samples in the final analysis excluding missing values was 694 in the OLS and 578 in the FE panel analysis.

Table 1 shows the definition of the variables used in the empirical analysis, and the methods of measurement and mean values. Corporate women-friendliness was measured by using indices, which includes the ratio of women workers, the ratio of women executives, and fairness in the employment of women workers. The ratio of women workers represents how proactive a company is in hiring women. The ratio of women executives reflects how likely a company is to promote internal women employees into the management level or rank. The fairness in the utilization of women is measured by the ratio between these two indicators. In terms of corporate women-friendliness, while 21% of the regular workers are women, only 1.4% of the executives are women. This implies that it is very limited for women to make inroads into higher ranking management positions. There is a weak correlation between the ratio of women workers and the ratio of women executives. The fairness in the use of women in the workforce shows high correlation with the ratio of women executives, but not with the ratio of women workers (See Table A.1).

Table 1. Definition of Variables and Summary Statistics

Variable	Definition and Measurement	Mean	(S.D.)
Dependent variable			
Female_worker	Ratio of women to total regular-employees (%)	21.05	(18.26)
Female_executive	Ratio of women executives to total executives (%)	1.37	(5.63)
Fairness	*Female_ executive/Female_worker*	0.07	(0.33)
Independent variable			
Listed_KSE	Dummy variable (1 if listed on the Korea Stock Exchange, 0 otherwise)	0.31	(0.46)
KOSDAQ	Dummy variable (1 if listed on the KOSDAQ, 0 otherwise)	0.33	(0.47)
Service	Dummy variable (1 if service industry)	0.23	(0.42)
Firm_age	The Age of company since the founding (years)	27.83	(16.41)
Asset	Log value of tangible assets (in thousand won)	16.99	(1.96)
Size_2	Dummy variable (1 if employing 300-999 workers)	0.41	(0.49)
Size_3	Dummy variable (1 if employing 1,000 workers or more)	0.16	(0.37)
Union	Dummy variable (1 if unionized)	0.78	(0.42)
Female_CEO	Dummy variable (1 if female CEO)	0.01	(0.08)
COLL	Ratio of college educated employees to total regular-employees (%)	52.10	(23.14)
GRAD	Ratio of employees with graduate or higher degrees to total regular-employees (%)	4.92	(6.74)
Irregular	Ratio of non-regular employees to total employees (%)	9.01	(16.5)
Training	Log value of cost of training for each employee (in thousand won)	4.25	(1.86)
Core[1)]	Number of programs for recruiting and developing core talents	0.07	(0.96)
Promotion[1)]	Ratio of employees promoted through selective promotion system to total number of employees promoted. (%)	0.03	(1.06)
Piecerate[1)]	Ratio of merit-based bonus to total compensation (%)	0.04	(0.99)
Comp_diff[1)]	Number of compensation items which reflect the evaluation results	0.05	(0.97)
Y2007	Dummy variable (1 if year 2007)	0.49	(0.50)
N		694	

Note: 1) Standardized score is used.
2) The average value and sample size (N) are based on OLS analysis data.

In terms of corporate characteristics, one-third of the firms are listed on the Korea Stock Exchange, one-third of the firms are registered on KOSDAQ, and the remaining one-third firms are not listed anywhere. Seventy-seven percent of the firms are in the manufacturing sector, and remaining 23% of the firms are in the service sector. Fifty-seven percent of the firms are large-sized firms with 300 or more employees and 78% had labor unions. In terms of human resource or personnel composition, only 1% of the firms have women as a CEO. Fifty-two percent of the regular employees are college graduates, while 9% of total employees are non-regular employees. In terms of HRM practices, 3~7% of the firms have some type of performance-based recruitment, promotion and/or compensation system.

4. Determinants of Corporate Women-Friendliness

Table 2 presents the OLS results for factors that determine the ratio of women workers and women executives, and the level of fairness in the employment of women. The existence of women CEO's does not raise the ratio of women workers in a company. However, women CEO's significantly raise the ratio of women executives and the level of fairness. In other words, it is not necessarily the case that firms with women CEO's are more likely to hire women workers. However, women CEO's are friendly to the promotion of higher ranks for women. The higher the ratio is for highly educated (college or higher) regular employees, the lower the ratio is for women employees and executives.

Table 2. Determinants of Corporate Women-Friendliness: OLS Estimates

Variable	*Female worker*	*Female executive*	*Fairness*
KOSDAQ	7.126***	-0.579	-0.019
	(1.664)	(0.469)	(0.032)
Unlisted	2.741*	-0.007	0.008
	(1.640)	(0.503)	(0.035)
Service	-1.555	0.572	0.027
	(2.337)	(0.613)	(0.037)
Firm_age	-0.054	0.012**	-0.001
	(0.053)	(0.011)	(0.001)
Asset	-3.238***	-0.385*	-0.015
	(0.529)	(0.220)	(0.012)
Size_2	3.732**	-0.166	-0.024
	(1.529)	(0.417)	(0.023)
Size_3	11.871***	-0.284	-0.011
	(2.847)	(0.914)	(0.056)
Union	-4.170**	-0.299	0.015
	(1.773)	(0.454)	(0.022)
Female_CEO	-6.369	32.156***	1.526***
	(4.670)	(8.886)	(0.476)
Training	0.289	0.297**	0.017**
	(0.435)	(0.129)	(0.008)
Core	1.730**	0.603***	0.033***
	(0.795)	(0.206)	(0.012)
Promotion	0.987	-0.206	-0.020**
	(0.768)	(0.164)	(0.009)
Piecerate	-1.083	-0.619*	-0.043*
	(0.707)	(0.328)	(0.024)
Comp_diff	1.788***	0.188	0.010
	(0.720)	(0.184)	(0.013)
COLL	-0.172***	-0.034**	-0.002**
	(0.039)	(0.015)	(0.001)
GRAD	-0.488***	-0.046*	-0.002
	(0.146)	(0.026)	(0.002)
Irregular	0.120**	0.000	-0.000
	(0.054)	(0.011)	(0.001)
Y2007	1.682	0.219	0.003
	(1.310)	(0.415)	(0.022)
Constant	82.435***	8.408**	0.389*
	(9.352)	(4.12)	(0.224)
N	694	694	694
R^2	0.22	0.24	0.17

The relationship between corporate HRM and the hiring of women and the promotion of women differs depending on the system. Firms that place a lot of effort into the recruitment and development of core talent tend to show a significantly higher number of women employee and executive ratios. This is the same for the high level of fairness. Conversely, neither selective promotion system nor merit-based compensation system has any effect on the ratio of women employees. However, there is a negative effect on the ratio of women executives and the level of fairness. This result demonstrates that women are not yet beneficiaries of the selective promotion system or merit-based compensation system. Talented women are still subject to discrimination and are barred from recruitment and/or promotion. However, it should be noted that firms with selective promotion or merit-based compensation systems may have only recently increased the hiring of women and, as a result, women employees hired are still at the early stages of their career. The low ratio of women executives and low level of fairness may be explained by an insufficient pool of women candidates qualified or in position for high-rank jobs. The effects of the general corporate characteristics are as follows. The larger the company is, the higher the ratio of women employees. However, the size of the company has no significant effect on the ratio of women executives or the level of fairness.

The KOSDAQ registered companies and non-listed firms have a higher ratio of women employees than the Korea Stock Exchange listed firms. The value of the 2007 dummy variable is not significant and implies that when other variables are controlled, the trend in the last two years for an increase in the ratio of women employees and executives has no significance.

Table 3 represents the FE panel estimates for the ratio of women employees, the ratio of women executives and the level of fairness. When controlling for the unobserved heterogeneity of individual firms, statistical significance for the effects of the variables related to general corporate characteristics mostly disappear. On the other hand, the effects of women CEO's and some HRM variables still remain significant. While the ratio of women employees is not significantly higher in firms with women CEO's, the ratio of women executives and the level of fairness in the employment of women is significantly higher in those firms with women CEO's. Specifically, although female CEO's do not necessarily hire more women employees than male CEO's, women are more likely to promote women to executive positions, and thus raise the level of fairness in the employment of women.

Table 3. Determinants of Corporate Women-Friendliness: FE Panel Estimates

Variable	*Female worker*	*Female executive*	*Fairness*
KOSDAQ	7.126***	-0.579	-0.019
	(1.664)	(0.469)	(0.032)
Unlisted	2.741*	-0.007	0.008
	(1.640)	(0.503)	(0.035)
Service	-1.555	0.572	0.027
	(2.337)	(0.613)	(0.037)
Firm_age	-0.054	0.012**	-0.001
	(0.053)	(0.011)	(0.001)
Asset	-3.238***	-0.385*	-0.015
	(0.529)	(0.220)	(0.012)
Size_2	3.732**	-0.166	-0.024
	(1.529)	(0.417)	(0.023)
Size_3	11.871***	-0.284	-0.011
	(2.847)	(0.914)	(0.056)
Union	-4.170**	-0.299	0.015
	(1.773)	(0.454)	(0.022)
Female_CEO	-6.369	32.156***	1.526***
	(4.670)	(8.886)	(0.476)
Training	0.289	0.297**	0.017**
	(0.435)	(0.129)	(0.008)
Core	1.730**	0.603***	0.033***
	(0.795)	(0.206)	(0.012)
Promotion	0.987	-0.206	-0.020**
	(0.768)	(0.164)	(0.009)
Piecerate	-1.083	-0.619*	-0.043*
	(0.707)	(0.328)	(0.024)
Comp_diff	1.788***	0.188	0.010
	(0.720)	(0.184)	(0.013)
COLL	-0.172***	-0.034**	-0.002**
	(0.039)	(0.015)	(0.001)
GRAD	-0.488***	-0.046*	-0.002
	(0.146)	(0.026)	(0.002)
Irregular	0.120**	0.000	-0.000
	(0.054)	(0.011)	(0.001)
Y2007	1.682	0.219	0.003
	(1.310)	(0.415)	(0.022)
Constant	82.435***	8.408**	0.389*
	(9.352)	(4.12)	(0.224)
N	694	694	694
R^2	0.22	0.24	0.17

The selective promotion and merit-based compensation systems still demonstrate a negative relationship with the ratio of women executives and the level of fairness even after controlling for unobserved firm-specific characteristics. This may ascribe to the fact that the pool of qualified women candidates for promotion is relatively small. Also, firms still tend to be reluctant to promote women as executives. In addition, it takes time for a proactive HRM to actually lead to a desired outcome. It is noteworthy in the remaining corporate characteristic variables that the ratio of women employees is low whereas the ratio of women executives and the level of fairness are significantly high for unionized firms. The ratio of women executives and the level of fairness are lower when the ratio of college employees is high. This indicates that opportunities for women to enter higher corporate ranks are relatively limited in knowledge-intensive firms.

5. Conclusions

Despite the importance in the efficient utilization of women workers from the perspective of corporate competitiveness, women are substantially under-represented in high-level corporate positions in the labor market of Korea. This study has attempted to seek ways to improve female employment both quantitatively and qualitatively by analyzing determinants of corporate women-friendliness. Corporate women-friendliness was measured by using three indicators, which are the ratio of women employees to regular employees, the ratio of women to executives and the level of fairness in the employment of women. We have used OLS and FE panel analysis for empirically testing HCCP data from 2005 and 2007. The data was collected by KRIVET. This study focused on the role of women chief executives and the effect of corporate HRM in the hiring and promotion of women to executive positions. First, it was hypothesized that women CEO's are less likely than male CEO's to discriminate against women employees. It was further hypothesized that, women CEO's are more likely to be friendly to hire and promote women. Secondly, it was hypothesized that there is less discrimination against women in firms with strategic HRM practices such as selective promotion and merit-based compensation systems. Therefore, firms with these HRM practices are friendly towards women employees.

The results of the empirical analysis support the first hypothesis relating to the role of women CEO's. Although firms with women CEO's are not more active in hiring women employees than those with male CEO's, they were more vigorous in retaining women executives. Such a causal relationship holds even after control for an unobserved heterogeneity of individual firms. While male CEO's are not necessarily more averse to hire women than female CEO's, they do tend to be markedly reluctant when it comes to promote women as executives. It is likely that there are negative attitudes of male CEO's towards female executives, and in the corporate culture of Korea, male employees avoid working under women superiors.

The second hypothesis pertaining to corporate HRM does not hold. The OLS analysis showed that while the ratios of women employees and executives and the level of fairness in the employment are significantly high in companies that expend great effort on the recruitment and development of core talent, such significance disappeared after controlling for unobserved heterogeneity of individual firms. To the contrary, selective promotion and merit-based compensation systems have a negative effect on the ratio of women executives and the level of fairness even after controlling unobserved firm-specific characteristics. This signifies that the benefits of corporate strategic HRM is still not reaching women employees regardless if there is discriminatory attitude towards women or an insufficient pool of qualified women employees.

The empirical results of this study insinuate that while a certain level of consensus exists among firms with respect to the hiring of women, the utilization of women executives is still very limited. Therefore, to enhance the quality of female employment, policy measures that could increase the utilization of women in higher managerial positions are called for. First, in order to promote women's entry into higher management ranks and to use this as a stepping stone to improve corporate performance, support for women's career development is necessary. At the corporate level, HRM must endeavor to reinforce the training of women employees in terms of expertise and administrative/management skills. It is just as important to institutionalize gender-blind HRM systems and to intensify societal pressure against discriminating women employees.

References

Altonji, J. G., & Blank, R. M. (1999). Race and gender in the labor market. In O. Ashenfelter & D. Card (Eds.), *Handbook of labor economics* (Vol. 3, pp. 3143-3259). Amsterdam: Elsevier Science Publishers.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17 (1),* 99-120.

Becker, G. S. (1962). Investment in human capital: a theoretical analysis. *Journal of Political Economy, 70 (5),* 9-49.

_____ (1971). *The economics of discrimination (*2nd ed.). Chicago: The University of Chicago Press.

Blau, F. D., & Kahn, L. M. (2000). Gender differences in pay. *Journal of Economic Perspectives, 14 (4),* 75-99.

_____ (2004). The US gender pay gap in the 1990s: slowing convergence. *NBER Working Paper, 10853.*

Catalyst. (2006). *2005 catalyst census of women board directors of the FP500*, New York.

Conelly, R., & Kimmel, J. (2003). The effect of child care costs on the employment and welfare recipiency of single mothers. *Southern Economic Journal, 69 (1),* 498-519.

Dickens, L. (1998). What HRM means for gender equality. *Human Resource Management Journal, 8 (1),* 23-40.

Forster, N. (1999). Another 'glass ceiling'?: the experiences of women professionals and managers on international assignments. *Gender, Work and Organization, 6 (2),* 79-90.

Gagliarducci, S., & Paserman, M. D. (2009). Gender interactions within hierarchies: evidence from the political arena. *NBER Working Paper, 14893.*

Harel, G. H., Tzafrir, S. S., & Baruch, Y. (2003). Achieving organizational effectiveness through promotion of women into managerial positions: HRM practice focus. *International Journal of Human Resource Management, 14 (2),* 247-263.

Hellerstein, J. K., Neumark, D., & Troske, K. R. (2002). Market forces and sex discrimination. *Journal of Human Resources, 37 (2),* 351-380.

Jung, J. H. (2007). Women's economic activities in Korea: structural changes and challenges. *Journal of Women and Economics, 4 (1),* 83-109. [In Korean]

Jung, J. H., & Choi, K. S. (2004). Gender wage differentials and discrimination in Korea: comparison by knowledge intensity of industries. *International Economic Journal, 18 (4),* 561-579.

Killingsworth, M. R., & Heckman, J. J. (1986). Female labor supply: a survey. In O. Ashenfelter & R. Layard (Eds.), *Handbook of labor economics* (Vol. 1, pp. 103-204). Amsterdam: Elsevier Science Publishers.

Lee, K. W., Cho, K., & Lee, S. J. (2001). Causes of gender discrimination in Korean labor markets. *Asian Journal of Women's Studies, 7 (2),* 7-38.

Liff, S., & Ward, K. (2001). Distorted views through the glass ceiling: the construction of women's understandings of promotion and senior management positions. *Gender, Work and Organization, 8 (1),* 19-36.

Lim, H., Moon, M., & Kim, H. (2007). *The level of women participation in corporate management and what needs to be done*, Seoul: Korean Women's Development Institute. [In Korean]

Morgan, L. A. (1998). Glass-ceiling effect or cohort effect? a longitudinal study of the gender earnings gap for engineers, 1982 to 1989. *American Sociological Review, 63 (4),* 479-493.

Morrison, A. M., & Glinow, M. A. Von. (1990). Women and minorities in management. *American Psychologist, 45 (2),* 200-208.

OECD. (2011). *Education at a glance.* Paris: OECD.

Ribar, D. (1992). Child care and the labor supply of married women. *Journal of Human Resources, 27 (1),* 134-165.

Sung, J. (2006). What makes companies women-friendly?. Proceedings of the 3rd Corporate Panel Symposium, Korean Labor Institute. [In Korean]

UNDP. (2011). *Human development report.* New York: Oxford University Press.

Ural, B., Horrace, W., & Jung, J. H. (2009). Inter-industry gender wage gaps by knowledge intensity: discrimination and technology in Korea. *Applied Economics, 41 (11),* 1437-1452.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5 (2),* 171-180.

Wood, R. G., Corcoran, M. E., & Courant, P. N. (1993). Pay differences among the highly paid: the male-female earnings gap in lawyers' salaries. *Journal of Labor Economics, 11 (3),* 417-441.

Wright, P. M., & McMahon, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management, 18 (2),* 295-320.

Appendix

Table A.1. Correlation Coefficients among Women-Friendliness Measures

Variable	*Female_worker*	*Female_executive*	*Fairness*
Female_worker	1.0000		
Female_executive	0.0910**	1.0000	
Fairness	-0.0309	0.8284***	1.0000