

Understanding the Reality of Occupational Gender Segregation in Korea and Japan

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Abstract: This paper examines the Korean and Japanese occupational sex segregation with descriptive statistics. Based on the data, I argue that the feminist VoC theory provides a better explanatory variable for understanding gender segregation in Korea and Japan because gender segregation in both countries resulted from their economic structure – coordinated market economy. Furthermore, I analyze the occupational gender segregation in part-time jobs. The pattern of women’s occupational distribution in part-time jobs is different from that of full-time jobs whereby women are overrepresented in manual sectors. This paper contributes to feminist labor study by examining the previous studies and suggests better women-friendly policies to improve women’s equality in job market.

Keywords: Korean labor market, Japanese labor market, sex segregation, coordinated market economy.

Özet: Bu çalışma Kore ve Japonya’nın mesleki cinsiyet ayrımcılığını tanımlayıcı istatistiklerle incelemektedir. Eldeki verilere göre, feminist Kapitalizm Türleri teorisi Kore ve Japonya’daki cinsiyet ayrımını anlamada daha açıklayıcı bir değişken sunmaktadır, çünkü bu ayrım her iki ülkede de ekonomik yapıdan –eşgüdümlü pazar ekonomisi- kaynaklanmaktadır. Bu çalışma ayrıca yarı zamanlı işlerdeki mesleki cinsiyet ayrımını da irdelemektedir. Kadınların mesleki dağılım paterni, fiziki güç gerektiren sektörlerde fazla temsillerinden dolayı yarı zamanlı ve tam zamanlı işlerde farklılık göstermektedir. Bu çalışma feminist emek çalışmalarına, önceki çalışmaları irdeleyerek ve iş piyasasında kadınların eşitliğini sağlayacak daha iyi politikalar önererek katkıda bulunmaktadır.

Anahtar sözcükler: Kore iş piyasası, Japonya iş piyasası, cinsiyet ayrımı, eşgüdümlü piyasa ekonomisi.

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Introduction

One of the most striking features of the Korean and Japanese modern labor markets is women's active economic participation. Increasing the number of women in labor markets contributes to the elevation of the status of women in economic, political and social spheres in both countries. Nonetheless, occupational gender segregation and discrimination against women still prevail in Korea and Japan. The problems of gender segregation and discrimination against women deserve considerable attention from policymakers and scholars for normative and practical reasons.

Normatively, gender segregation is strongly related to individual equality in that human choices are constrained by cultural, social, or institutional reasons. Gender segregation should be eliminated to improve women's equality. For this normative reason, scholars should find whether institutions, culture, or economic constrains human behavior.

For policy makers, occupational gender segregation is a big problem to solve in the face of a low fertility rate and aging societies. Discrimination against women sometimes forces them to choose between having children or a career. This is highly related to the low fertility rate which both countries suffer from: 1.08 and 1.27 in Korea and Japan respectively.¹ The Korean and Japanese governments have produced women-friendly policies to overcome low fertility rates by solving gender segregation. Both governments understand that occupational gender segregation causes low fertility rates by pushing women to give up childbearing in order to keep their jobs.

I believe that this paper will contribute to theoretical perspectives for understanding gender segregation in both countries by explaining the reality of gender segregation so that better women-friendly policies can be implemented. This paper is designed to serve these goals: first, I would like to answer the question as to why there is severe occupational gender segregation in Korea and Japan. Second, I would like to explain the reality of gender segregation by discussing full-time and part-time distinctions in my analysis. Full and part-time distinctions should be analyzed because the number of women employees is higher in part-time than full-time jobs.

I argue that the Varieties of Capitalism literature provides better insight than other theories to answer my first question, yet the existing VoC-based explanations fail to describe gender segregation in an adequate way because they ignore full-and part-time distinctions. I argue that it is necessary to consider gender segregation by dividing the labor structure into

¹ Source: UN population division (2008)
Data available : http://www.un.org/esa/population/publications/WFD%202008/WP_WFD_2008/Data.html

part-time and full-time jobs because sex-segregation is much more serious in part-time than full-time contexts and the pattern of occupational distribution in part-time jobs differs from in full-time jobs.

My paper has five sections: literature review, introduction of women in the labor market in the two countries, data analysis, my own argument, and conclusion. In the literature review, I discuss three major theories that explain gender-segregation. Then, I will briefly mention characteristics of female employees in Korea and Japan. In the data analysis section, I analyze the data of Korea and Japan and support or reject the previous studies based on these data. Later, I will show why the division of full- and part-time jobs is significant for understanding gender segregation in Korea and Japan. This paper will conclude by suggesting a future research agenda with policy implications.

Background – Women in the labor markets in Korea and Japan

In this section, I will briefly mention women’s demographic changes in the labor markets in both countries. Korea and Japan are both traditional male-breadwinner welfare states that have struggled with the integration of women in their economy. This traditional structure – man as a breadwinner and women as a care giver- has been altered by women’s increased economic participation. Since the 1970s in Japan and in the 1980s in Korea, women’s participation in economic activity has increased remarkably. Both countries have undergone economic boosts those times so that labor markets were expanded and women had chances to get involved in it.

Table 1. Economic activity: relative proportion of men and women

	South Korea				Japan			
	1985		2007 ^a		1975		2008	
	M	W	M	W	M	W	M	W
Total □	46	29	59	42	62	35	62	42
Age (15+) □	67	42	74	50	83	46	73	48

Source: ILO data¹, For Korea: 1985 and 2007, for Japan: 1975 and 2008 a: Korean economic activity rate in 2008 is not available. b: Total economic activity rate for all ages c: Economically active population: persons 15 years old and older.

¹ Data available: <http://laborsta.ilo.org/>

I compare the economic activity rate between men and women in both countries. Since the time of women's integration into the economy differs between the two countries, I show the Korean data from 1985 while the Japanese data starts from 1975. As Table 1 demonstrates, the number of men and women working has increased since 1985 in Korea. In particular, the increase of women's economic participation is remarkable; in 1985, the economic activity rate for women was 29%, and it increased by about 13% by 2007. The share of women's economic participation also increased in Japan from 35% to 42% during the time period (1975-2008).

Interestingly, the ratio of men's economic activity decreased from 83% to 73% in Japan. In both countries, the share of women's economic participation is roughly 50% in 2008. It is noteworthy that the pattern of women's economic participation is similar in both countries. The demographic based on women engaged in work by age was M-shaped in Japan in 1985 and in 2008 as Figures 1 and 2 show, although the M-curve became gentler in 2008 compared to that of 1985. Both Japan and Korea M-shapes have been distorted significantly. I refer to it as "distorted M-curve." The change of M-shape in the Korean demographic is caused by late marriage and child-bearing. Also, the economic activity of women aged 65 and older increased in Korea. Analyzing women's life based on the M-curve, after finishing their education, women enter the job-markets between the ages 20-25. Women get married between 25-30, quit their job and have babies between 30-34. After child-bearing and rearing, women return to the job markets. In Korea, women's economic activity declined between 40-44 while this is delayed until between 50-54 in Japan. This pattern is observable not only in Korea and Japan, but also in many other countries as well.

Figure 1. Women's economic activity by age in Korea

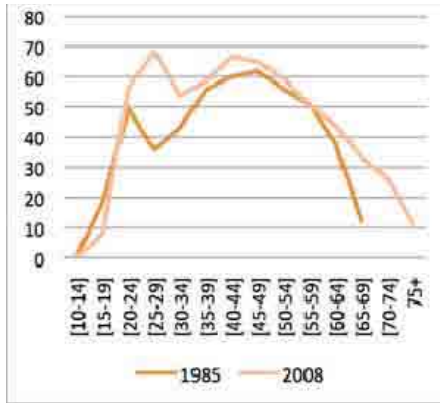
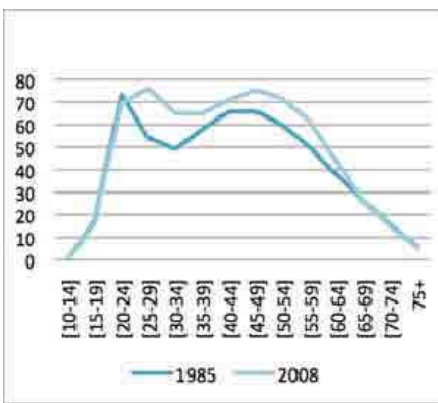


Figure 2. Women's economic activity by age in Japan



Source: ILO data, economically active population from 1985 to 2008.

Literature review

In this section, I will discuss three major theories that explore gender segregation: the feminist VoC model, the feminist post-industrialism model and the sociology model.

1. The Feminist VoC Model

The Varieties of Capitalism literature has emerged to explain the institutional bases of different production systems in developed countries. In the tradition of historical institutionalism, the VoC theories focus on trajectories of development and institutional complementarities in different nations (Hall and Soskice, 2001). Specifically, the VoC theories formulated two distinct types of market economies: Coordinated Market Economy (CME) and Liberal Market Economy (LME). In CMEs (e.g. Germany, Japan, and Korea), firms have close corporate relationships with major suppliers, clients and employees on the one hand, and the state on the other hand. In contrast, LMEs (basically Anglo-Saxon countries such as the U.S. and U.K.) rely less on “institutional support for non-market forms of coordination” (Hall and Soskice: 27); rather, firms operate through more fluid market relations.

Each institution has been developing a different labor structure. In CMEs, because of their close relationships between corporations and employees, firms provide long-term

employment. The job security is very high. Since employees will work at the same firms for long periods of time, employers require firm specific skills in CMEs. In LMEs, firms do not provide any long-term employment; employers do not expect workers to stay in their firms for long. The labor market is more flexible. Also, firms require more general skills such as advanced degrees.

Estevez-Abe (2005) and David Soskice (2005) point out that the VoC literature is “sex-blind.” Estevez-Abe and Soskice shed light on a gender gap which stems from distinctive models of capitalism. Estevez-Abe argues that the characteristics of CME such as firm-specific skills and long-term employment lead to more severe sex-segregation than those of LMEs which rely on general skills. Employers in CME firms make a significant investment for their workers to acquire firm-specific skills. This CME feature places women in a disadvantageous position compared to men because women are more likely to interrupt their career for family needs such as child-bearing and rearing. The work discontinuity makes female employees unattractive to employers. In contrast, LME firms require general skills, which are portable. Employees are more likely to invest in their skills by themselves.

Estevez-Abe and Soskice present two different sex-segregation forms: horizontal and vertical. “[H]orizontal sex segregation refers to gender divisions across the manual-nonmanual divides and vertical sex segregations refer to status distinctions within the manual and non-manual sectors” (Charles, 2005: 294). If women are over-represented in the non-manual sector and men are over-represented in the manual sector, horizontal sex segregation is high. If men are over-represented in high positions in most of the sectors (manual and non-manual), vertical sex-segregation is high. The two kinds of gender segregation do not necessarily occur together. For example, in Slovenia, horizontal sex-segregation is low, while vertical sex segregation is high.

Regarding vertical sex segregation, two interrelated processes should be mentioned. First, since employers in CME firms are reluctant to hire female employees, male employees have a much higher chance of being recruited, trained, and promoted than female employees. Thus, male-dominance prevails in CMEs. Second, the wage setting of CME and LME has distinctive characteristics. In LMEs, “with wage flexibility and general skills, there is high level of class inequality but less gender inequality, [while] in CMEs, with collective bargaining and specific skills, there is more gender inequality but less class inequality” (Soskice, 2005:174). In LMEs, employment flexibility gives employers less incentive to discriminate against qualified female employees. Thus, gender does not become a salient issue in wage setting in LMEs in contrast to CMEs. Instead, education (general skills) is one

of the important factors for employers to discriminate between job-seekers. Education is highly related to social status; people of higher social-economic status are more likely to be educated. Therefore, in LMEs, class inequality is more salient than gender-inequality.

Horizontal sex segregation is also more prevalent in CMEs than LMEs. Because women in CMEs are well aware of the discrimination, they choose non-manual sectors such as clerical, sales, personal service and caring roles which provide more flexibility for domestic responsibilities and require fewer firm-specific skills. Therefore, women are overrepresented in these sectors. Also, women are overrepresented in the public sector. Public sectors such as government administration or government- invested firms consider the overall public good, whereas private firms act merely on self-interest. Even though the public sector requires firm-specific skills, public sector employers bear additional costs to hire, train and retrain women.

In short, the feminist reinterpretation of VoC theory shows that distinctive economic structures of CMEs and LMEs lead to occupational segregation between men and women.

2. The Feminist Post-Industrialism Model

Charles (2005) challenges the argument that sex-segregation stems from distinct types of skill-formation in LMEs and CMEs. Rather, postindustrial economic development, particularly service sector expansion, determines gendered occupational distributions. To reach this conclusion, Charles examines various data from LMEs (e.g. U.K, U.S.), and CMEs (e.g. Belgium, France, Sweden, Germany, Italy, Portugal, Japan and Switzerland).

She finds that “women are overrepresented in the non-manual sector and underrepresented in the manual sector” in both CME and LME countries (Charles: 297). This cross-national similarity in occupational distributions and sex segregation is derived from ideologies of “gender essentialism” and “male primacy.” Gender essentialism refers to the idea that men and women are naturally different, so men are better suited for jobs requiring physical strength while jobs related to service, nurturance, and social interactions are better for women. Therefore, horizontal segregation is produced because norms of gender essentialism affect choices of employers and employees.

‘Male primacy’ refers to the idea that men’s traits are more valuable and men are “more status worthy and accordingly better suited for positions of authority and domination” (Charles: 301). Vertical segregation is generated by the idea of male primacy. The prevailing ideology of male primacy affects women’s under-representation in wage and promotion within both manual and non-manual sectors.

With the cultural beliefs about gender roles, the level of occupational gender segregation has increased and been reinforced by the development of post-industrialism. Post-industrial sectors are mainly non-manual, and require traditionally female labeled skills such as service, care and interpersonal interactions. Since employers understand these skills to be female tasks, they are willing to fill these post-industrial positions with women. Charles sees that women's occupational distributions, especially post-industrial economic structure, are associated with "increased female labor force participation and the consolidation of pink-collar occupational ghettos" (Charles: 290).

Charles's findings suggest that sex segregation is more severe in the postindustrial service societies such as France, U.K., U.S., Germany, Belgium, Sweden, and Switzerland than low-level post-industrial countries such as Italy, Japan and Portugal. Thus, Charles argues that "a country's level of post-industrial economic development is a more powerful predictor" (Charles: 291) than economic institutions to measure gender-segregation.

In short, Charles argues that the debates about sex segregation based on institutional differences should shift toward industrial economies and ideologies of gender essentialism and male primacy.

3. The Sociological Interaction Model

Webb (2009) examines the Feminist VoC model and the Feminist post-industrialism model with two LME countries (U.K. and the U.S.) and two CME countries (Sweden and Japan). Webb's findings go against the gendered post-industrial arguments because the share of men in the service sector has increased in all three countries except for Japan. Also, neither CME nor LME countries follow the dichotomous prediction of the feminist VoC theory. For example, the share of women increased in managerial and administrative roles in the U.S. and Sweden: the U.S. and Sweden have higher proportions of women than men in professional, technical, and associated occupations; in the U.K. women are overrepresented in clerical work and men are overrepresented in production. These examples run counter to the prediction of the feminist VoC model.

Webb argues that both VoC and post-industrialism models need "further sociological analysis of the interactions of gender and markets, where the key concepts are treated as mutually constituted." (Webb: 107) Gender and markets are culturally and historically constructed, therefore they are mutually constitutive.

Data and Its Limitations

The aim of this section is to examine the three previous studies with two CME countries: Korea and Japan. I collected data mainly from the International Labor Organization, the Korean Ministry of Labor, and the Japanese Ministry of Information and Communication. I tried to collect the most recent data to incorporate the recent occupational changes in the two countries. My data show occupational changes and distributions between men and women over a long period of time.

However, since I focus on two CME countries, the lack of LME countries data would be a weakness to reject the feminist VoC literature. Nevertheless, this data is designed to understand labor structure, especially sex segregation in Korea and Japan, rather than understanding overall gender-segregation in LME and CME countries. For this purpose, I believe the data presented here serves this goal. This section is designed with three major parts to support or refute the previous studies: post-industrialism, horizontal gender segregation, and vertical gender segregation.

1. Post-industrialism data analysis

In this section, I will examine post-industrialism theory as it applies to the Korean and Japanese cases. Charles argues that the expansion of post-industrialism reinforced vertical and horizontal gender segregation because of the supremacy of ideologies of male primacy and gender essentialism. She argues that since women are better suited for post-industrial skills, women are overrepresented in service sectors. In her paper, Japan is categorized as a low postindustrial society, and Korea is not included in her study. Table 2 shows the changes in the relative share of employment in extractive and transformative¹, and service industries. Extractive and transformative sectors have significantly declined in both countries whereas the service sector² has increased 26% in Korea and 24% in Japan compared to 1985. Yet, the proportion of employees in the service sector is higher in Japan (78%) than Korea (64%). If Charles' prediction was right, the share of women in the service sector should be higher in Japan than in Korea because the share of the service sector is higher in Japan than Korea.

Post-industrialism Hypothesis: The share of women in the service sector should be higher in Japan than Korea

¹ Extractive and transformative industries include agriculture, forestry and fishing, mining and quarrying, manufacturing, electricity, gas and water, and construction

² Service sector includes wholesale, retail and repairs, hotels and restaurants, transport, communications and storage, finance, real estate and business services, community, social and personal services, and employees in private households, public administration and defense, education, health and social work.

Table 2. Change in the relative proportions of employment in extractive and transformative industries and in service in Korea and Japan.

Year	Korea		Japan	
	1985	2007	1985	2007
Extractive & Transformative (%)	58	33	42	20
Service (%)	38	64	54	78
Other (%)	4	3	4	1

Source: ILO data, Employment for detailed occupational groups by sex (1985 and 2007)

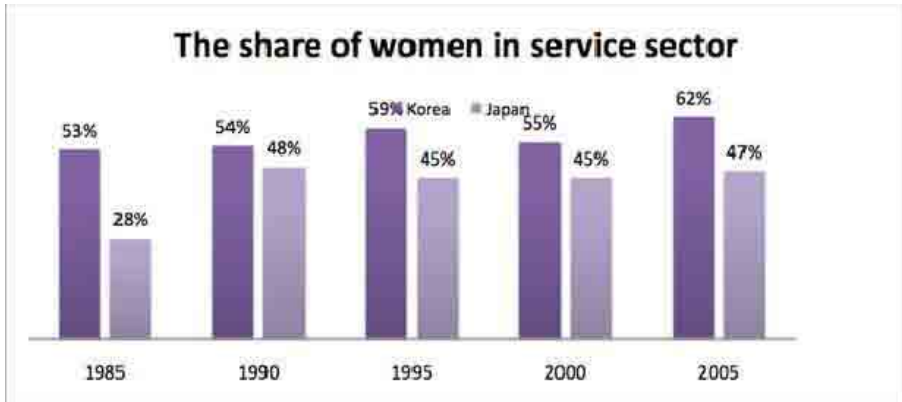
Extractive and Transformative industries are agriculture, forestry and fishing, mining and quarrying, manufacturing, electricity, gas and water, and construction.

Service includes wholesale, retail and repairs, hotels and restaurants, transport, communications and storage, finance, real estate and business services, community, social and personal services, and employees in private households, public administration and defense, education, health and social work were added in 2007 service sector.

Other is defined as “not classifiable by economic activity.”

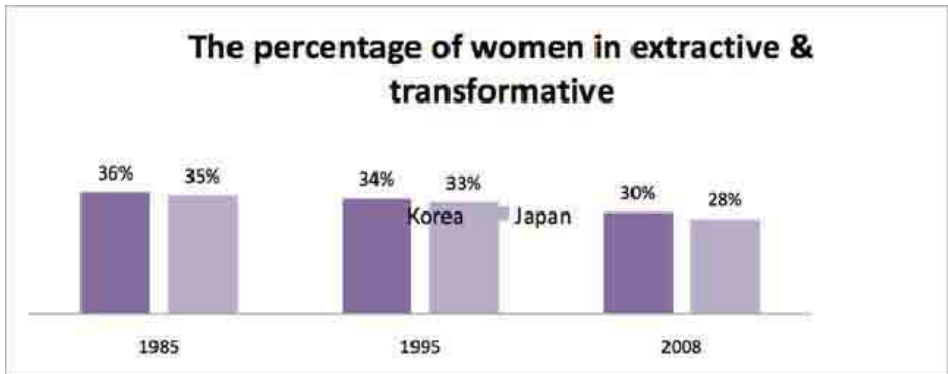
Yet, my data shows the opposite outcome as shown in Figure 3. Even though there is no big difference in the share of women in the extractive and transformative sectors in Korea and Japan, the percentage of women in the service sector has always been higher in Korea than in Japan. In the data, the share of women in the service sector in Korea has been more than half, and has been increasing since 1985, whereas in Japan, the ratio of women has always been less than half, although it has increased. The Korean and Japanese cases refute Charles’ gendered post-industrialism argument that the expansion of post-industrial economies leads to a higher level of gender segregation by increasing the number of women in the service sector. Thus, I reject post-industrialism hypothesis of Charles’ theory.

Figure 3. Percentage of women in service sector



Source: ILO data, Employment for detailed occupational groups by sex (1985, 1990, 1995, 2000, and 2005). ILO data categorized service workers separated from sales workers in Japan until 1992. But I calculated sales and service together.

Figure 4. Percentage of women in extractive & transformative sectors

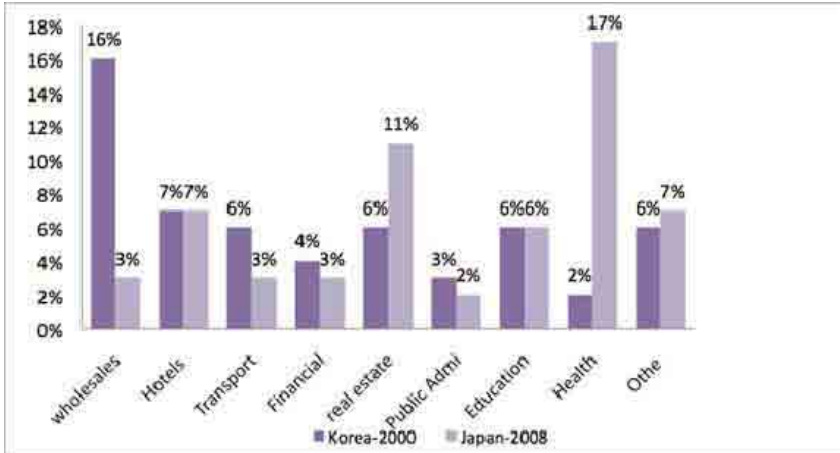


Source: ILO data, Employment for detailed occupational groups by sex (1985, 1995, and 2008).

Still, I would like to point out that the distribution of women employees within the service sector differs between the two countries. As Figure 5 shows, there are some major differences between Korea and Japan within certain industries of the service sector such as wholesale, transportation and health. Unfortunately, the data on Korea since 2001 is not available, so I compare the Korean data from 2000 to the Japanese data from 2008. The number of employees at wholesales related jobs in Korea is more than five times that of Japan

whereas the share of women employees in the health industry in Japan is almost nine times more than in Korea. However, the different pattern of female employment within the service sector does support Charles' theory because she does not argue how the pattern of employment in the service sector affects gender-segregation; rather the expansion of the service sector has an impact on gender segregation by increasing women employees

Figure 5. The distributions of women employees within service sector



Source: ILO data, Employment for public sector (2000 and 2008).

Wholesales: Wholesale and retail, repair of motor vehicles, motorcycles and personal and household goods. Hotels: Hotels and restaurants. Transport: transport, storage and communications. Financial: Financial intermediation. Real estate: Real estate and business. Public Admi: Public administration and defense. Health: Health and social work. Other: Other community, social and personal service activities.

This section is designed to examine the feminist VoC model by Estevez-Abe and Sockkice, since the feminist VoC theory discusses horizontal and vertical segregation. I will divide data into two: horizontal and vertical segregation.

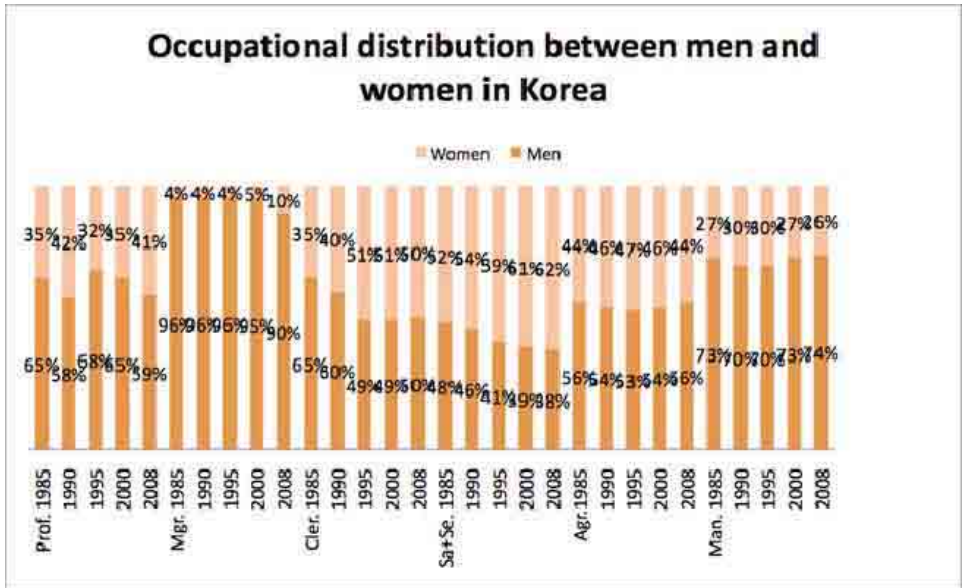
2. Horizontal segregation

This section aims to examine the horizontal segregation by showing occupational distributions among males and females. According to the feminist VoC model, horizontal gender segregation is highly likely in both countries: women are overrepresented in non-manual sectors such as clerical, sales and services, while men are overrepresented in manual sectors. I collected the data from 1985, 1990, 1995, 2000 and 2008 for two purposes: (1) I

would like to show changes in the women’s occupational distribution over time and (2) to incorporate the most recent labor breakdown in two countries.

H-Horizontal segregation: it is highly likely that women are overrepresented in the non-manual sector and underrepresented in the manual sector, while men are overrepresented in the manual and underrepresented in the non-manual sector

Figure 6. Occupation by male and female in Korea

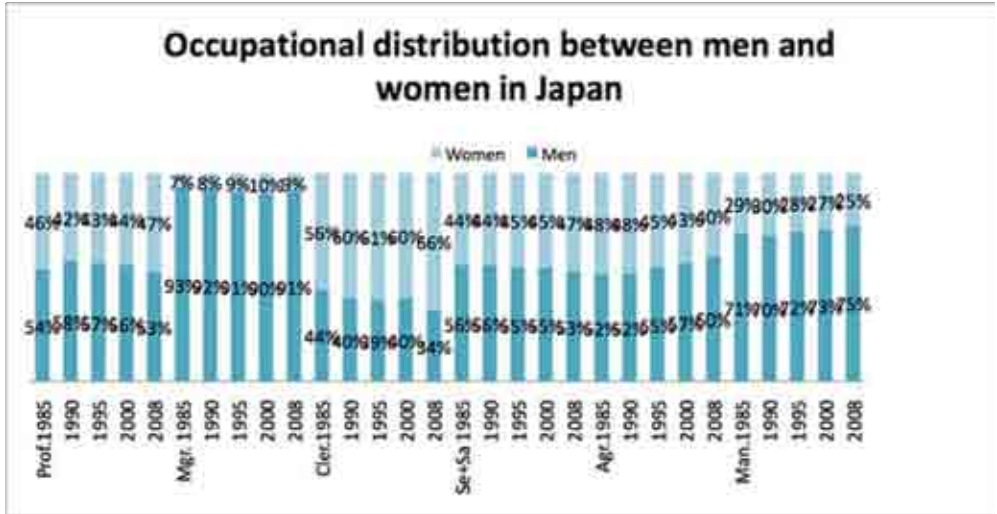


Source: ILO data, Employment for detailed occupational groups by sex (1985, 1990, 1995, 2000 and 2008).
 Note: Prof; all professional, technical and associated; Mgr.: all managerial, legislative and administrative; all clerical and secretarial; sa+se: all sales and services; Man.; all manual

Figure 6 shows the occupational distribution between male and female employees in Korea. Although the number of women has increased overall in every sector except for manual, women are still severely underrepresented in professional, managerial, and manual sectors. Male employees hold the largest share of managerial jobs: 96 % in 1985, 95% in 2000, and 90% in 2008.

Also, male employees’ second largest share is in the manual sector: 73% in 1985, 70% in 1995, and 74% in 2008. Female employees continue to dominate sales and service work: 52% in 1985, 59% in 1995, and 62% in 2008. The increasing number of women employees in the clerical sector is striking: 35% in 1985, 51% in 1995, and 50% in 2008.

Figure 7. Occupation by male and female in Japan



Source: ILO data, Employment for detailed occupational groups by sex (1985, 1990, 1995, 2000 and 2008).

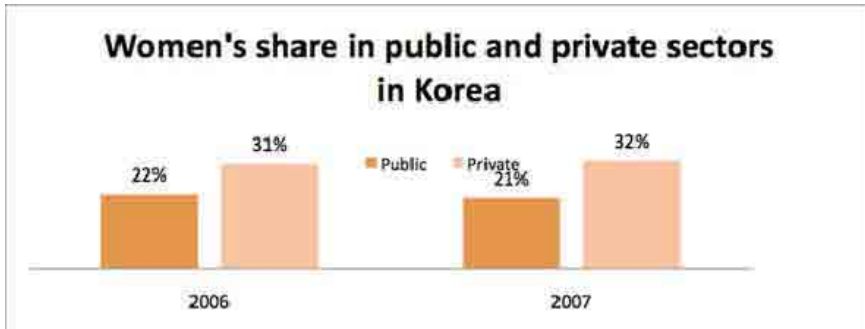
Figure 7 shows the occupational change between men and women from 1985 to 2008. Japanese occupational change is similar to that of Korea. In Japan, women employees are remarkably underrepresented in managerial and manual sectors, while women are overrepresented in the clerical sector. Men dominate the managerial sector: 93% in 1985, 91% in 1995, and 90% in 2008. The intriguing feature is that the share of women in professional occupations has slightly declined since 1985: 46% in 1985, 43% in 1995, and 39% in 2008. Yet, the percentage of women in the professional sector gradually increased in Korea (35% in 1985, 32% in 1995, and 41% in 2008).

Overall, both countries show severe horizontal sex segregation in that women are overrepresented in the non-manual sector and service sectors in Korea, and the clerical sector in Japan. Males are overrepresented in manual and managerial sectors in both countries. Thus, I accept the hypothesis of horizontal segregation by the feminist VoC theories based on these two countries. This phenomenon also shows vertical segregation by showing male dominance in managerial sectors. Though I believe vertical segregation is well incorporated in wage setting, which I will discuss later in this paper.

Estevez-Abe also expected higher percentages of women in the public sector than in the private sector because employers in public sectors can bear the costs to train and retrain women who interrupt their careers with child-bearing and rearing. Yet, the data refutes

Estevez-Abe's argument in that the number of women employees in the private sector has always been higher than in the public sector in the two countries. I could not find enough data for the Korean case so it is hard to understand change overtime. But, based on my limited data, the percentage of women in the private sector is 31% in 2006 while the share of women is 21% in 2007 in Korea.

Figure 8. Percentage of women in public and private sectors.



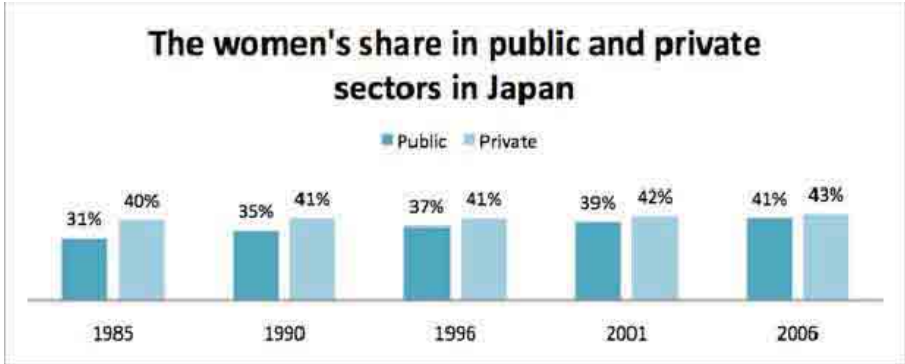
Source: National statistical office¹, (2006 and 2007)

Note: This data is based on 106 public companies and 414 private companies.

In Japan, the percentage of women in the public sector has gradually increased from 1985 to 2006. Still, the percentage of women employees in the private sector is larger than the percent of women in the public sector. Therefore, Korean and Japanese cases run counter to Estevez-Abe's prediction.

¹Korean national statistical office:
<http://lib1.kostat.go.kr/search/tot/result?st=KWRD&si=TOTAL&q=%ED%86%B5%EA%B3%84%EB%A1%9C+%EB%B3%B4%EB%8A%94+%EC%97%AC%EC%84%B1%EC%9D%98+%EC%82%B6>

Figure 9. Percentage of women in public and private



Source: ILO data, Employment for public sector (1985, 1990, 1996, 2001 and 2006)

Yet, I do not reject the feminist VoC theory fully based on the private and service sector distinction. Most women employees in the public sector are full-time workers, while female employees in the private sector are mostly part-time workers. Considering only full-time female workers in both sectors, the proportion of women in both sectors might be affected. Unfortunately, the distinction between part-time and full-time employees in private and public sectors is beyond my research goal in this paper. Yet, it is worth paying attention to future research. Later on, I will look at how patterns of gender segregation differ from gender segregation in general (without full-time and part-time distinction) confusing. However, I will leave the analysis of the full and part time distinction for future considerations.

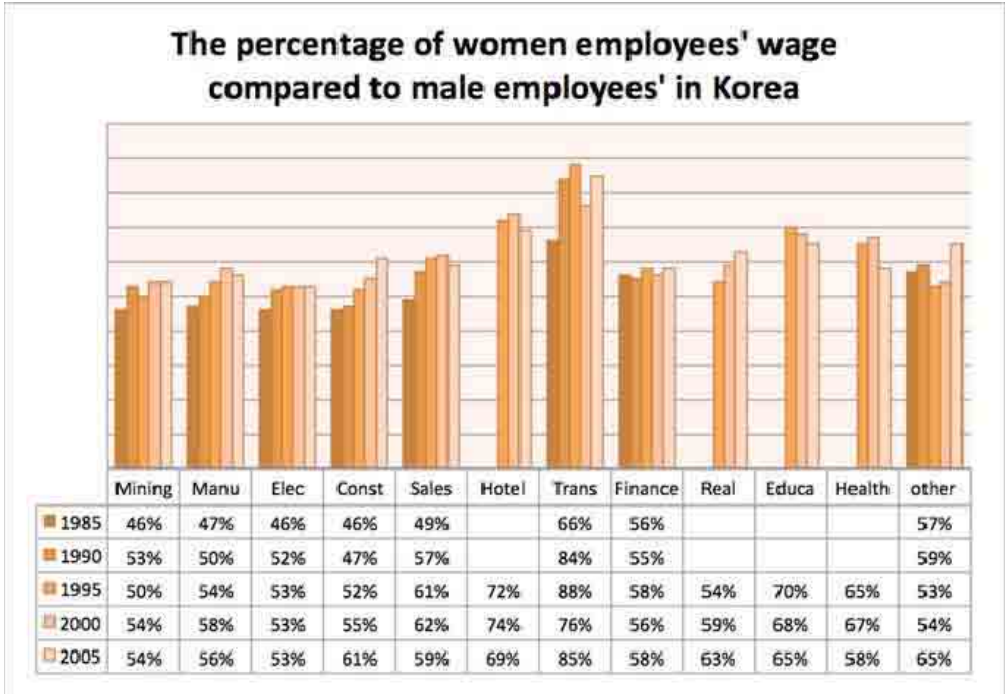
3. *Vertical segregation*

Earlier in the paper, I show vertical sex-segregation via occupational distributions between men and women. The male employees hold more than 90% of the jobs in managerial sectors. Now, I add wage differences between men and women to judge vertical sex-segregation. Scholars did not analyze the wage differences between male and female employees; yet, I believe the wage setting can be one of the most definitive indicators of vertical gender-segregation. Discrimination can occur in several ways such as promotions, wage setting and opportunities for training. Wage is a very sensitive issue that is related to individual well-being and equality.

According to the feminist VoC theory, as CME countries, vertical gender segregation prevails in Korea and Japan. Thus, a high wage gap between male and female workers is expected.

Hypothesis- Vertical segregation: the wage differences between male employees and female ones should be significant

Figure 10. Women employee's wage in Korea



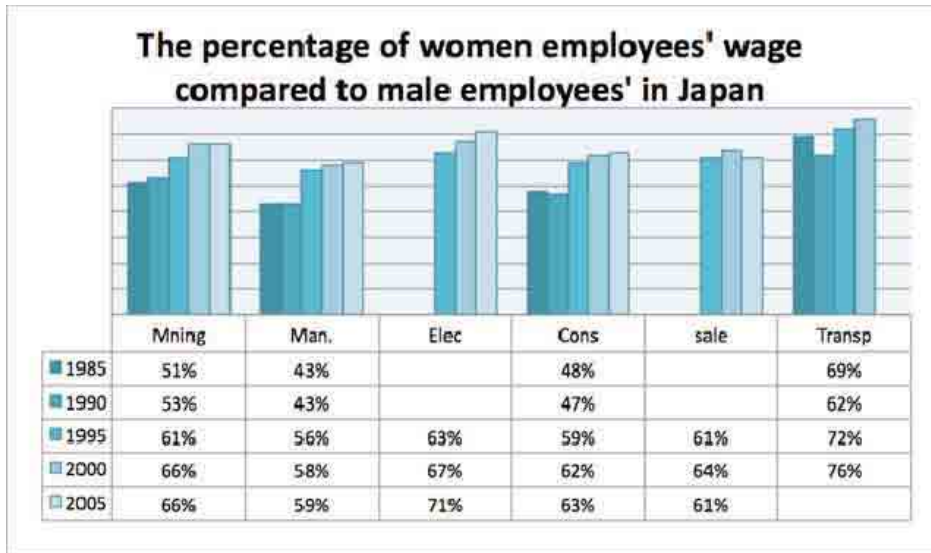
Source: ILO data, Wages by economic activity (1985, 1990, 1995, 2000 and 2005).

Note: Mining, Man.; manufacturing, Elec.; electricity, Hotel; hotel and restaurant, Fin.; finance
Real: real estate Edu.; education. Heal; health other: not classified by other jobs

Discrimination against women in terms of wage setting has improved over time, but vertical segregation is severe in both countries. Figure 7 presents the ratio of women’s wage to men’s wage by jobs. Vertical sex segregation is the most serious in jobs related to mining and electricity. Jobs in transportation discriminate against women less than any other jobs. Women get paid about 85% of men’s salary in transportation.

Japan also shows a similar pattern to Korea. Overall, discrimination against women in terms of wages is a little lower in Japan than in Korea. Vertical segregation has been improved in all jobs; yet, women are critically discriminated against in manufacturing jobs. Similarly to Korea, the most women- friendly jobs are related to transportation. Women’s salary is about 76% of men’s salary within the transportation sector. Therefore, I accept the vertical segregation hypothesis based on the two countries wage setting.

Figure 11. Women's wage in Japan



Source: ILO data, Wages by economic activity (1985, 1990, 1995, 2000 and 2005).

In short, my data on horizontal and vertical segregation supports the feminist VoC theory on CMEs in three ways: women are overrepresented in nonmanual jobs and underrepresented in manual sectors; women’s share in managerial sectors is significantly small in both countries; the wage of female employees is much lower than that of males within the sector. Yet, I postpone concluding that the women’s share in the public sector is higher than in the private sector in both countries because it is necessary to see the full-time and part-time division.

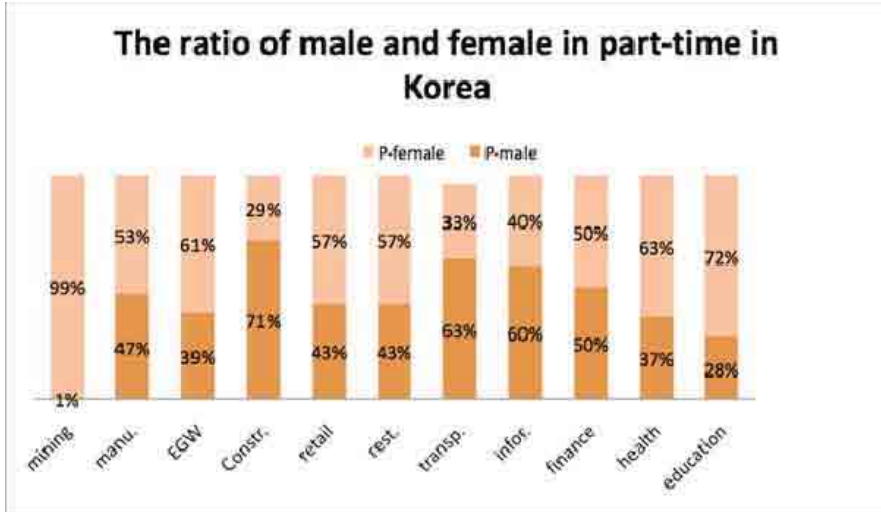
Broadening the scope of gender and market

This section is designed to understand the distribution of part-time jobs in Korea and in Japan. I will discuss the pattern of women's occupational distributions in part-time jobs. But, I only cover the general pattern of the distributions because this is not major purpose of this paper.

The feminist VoC model, the gendered post-industrialism model, and sociological model understand sex-segregation based on the absolute number of employees in overall sectors. I argue, however that the absolute number of employees in overall sectors may not accurately reflect the reality of sex-segregation in both countries. To confirm gender segregation, researchers should analyze sex-segregation within full-time and part-time jobs separately because discrimination against women is much more serious in part-time jobs than full-time jobs. Both countries, as CMEs, provide long-term employment to employees, yet job security is only applicable to male employees. Firms' costs for training for long-term employment is high, thus, female employees who are more likely to quit their jobs are unattractive to employers. Firms guarantee job security to males and invest in male workers. On the other hand, they hire woman employees as part-time workers to reduce their costs. Female part-time workers are unable to get social welfare benefits because government welfare policies are for full time working women only. Therefore, I put employment status into the analysis to reveal the reality of sex-segregation in labor markets in both countries.

Figures 12 and 13 show the occupational distribution between male and female employees in part-time jobs in Korea and in Japan respectively. Employers in most sectors prefer women employees to men employees in the part-time sphere except for construction, transportation and information related jobs in Korea.

Figure 12. Distribution between man and women in part time in Korea



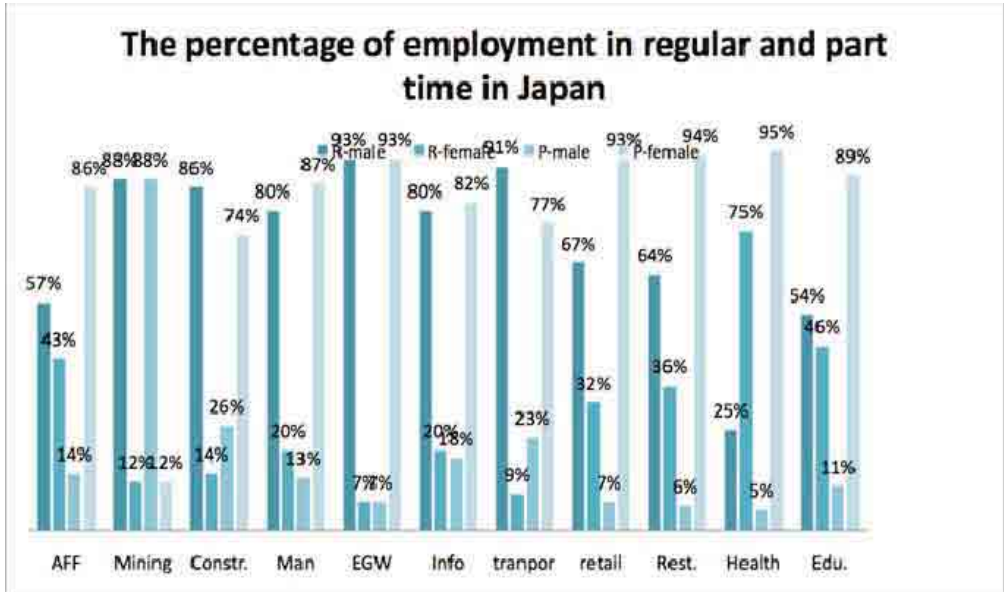
Source: The Korean Ministry of Labor¹ (2009).

Note: mining: Mining; Manu.: manufacturing; EGW: electricity: gas and water; Constr.: construction; retail: retail and wholesales; rest.: restaurant and hotels; transp.: transportation; infor.: information; finance.: Finance; Health: health; education: education.

The Japanese case is much more severe. Except for mining related jobs, employers hire more women than men in part-time jobs. The difference between male and female in part-time is remarkable; the differences range from 50 to 86% depending on the jobs. As the two figures show, women employees are hired for part-time jobs rather than full-time jobs. The finding that women are more likely working at part-time jobs is conventional wisdom. It is widely known that gender-segregation is much more severe in part-time rather than full-time jobs. Yet, my research suggests that the pattern of occupational distribution of female workers in part-time jobs in Korea and Japan differs from that of full-time jobs.

¹ The Korean Ministry of Labor:
http://www.moel.go.kr/view.jsp?cate=3&sec=2&mode=view&bbs_cd=4&bbs_cd=106&state=A&seq=1274771035187

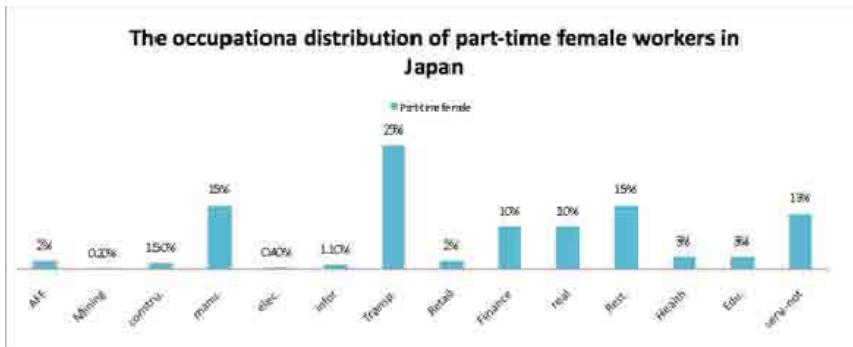
Figure 13. Regular and part time employment in Japan



Source: The Japanese ministry of information and communication

Note: mining: Mining; Manu.: manufacturing; EGW: electricity: gas and water; Constr.: construction; retail: retail and wholesales; rest.: restaurant and hotels; tranpor.: transportation; infor.: information; finance.: Finance; Health: health; education: education

Figure 14. Women's occupational distribution at part-time jobs in Japan



Source: The Japanese Ministry of Communication and Information

Women are over-represented in manual sectors such as manufacturing, transportation and construction in Korea and Japan. Considering women’s occupational distribution without the full-time and part-time distinction, women are over-represented in non-manual sectors. This is significant because policy makers base their policy recommendations on the gender segregation statistics for fit jobs.

Figure 15. Women's occupational distribution at part-time in Korea



Source: The Korean Ministry of Labor (2009).

Yet, the government should improve women’s status in part-time rather than full-time jobs; women employees in full-time jobs get welfare benefits from firms and government such as maternity leave and parental leaves. Women employees working at part-time jobs are excluded from these welfare benefits. Since the number of women in part-time jobs is significant, governments should generate welfare policies for women employees in part-time jobs.

Future research and policy implications

In this paper, I find that (1) the post-industrialism theory does not explain gender segregation in Korea and in Japan, though there are some differences between the two countries within the service sector, (2) the feminist VoC theory is valid in understanding gender-segregation in Korea and Japan because the horizontal and vertical segregations follow the theory’s prediction: women employees are overrepresented in the non-manual sector and under-represented in the manual sector and the wage differences between men and

women are also high, (3) the women's occupational distributions in part-time jobs differ from the overall jobs in that women are overrepresented in manual sectors.

I think that this research has a lot of room to improve especially concerning the part-time and full-time division. In the future, it is necessary to consider wage differences among women employees within the same jobs, and opportunities for promotion in full-time jobs. To conduct this research, we need more sophisticated data on part-time jobs in both countries.

Furthermore, this paper has significant policy implications for women friendly policies. This paper suggests that women in part-time jobs need more government support than women in full-time jobs because the number of women engaged in part-time jobs is high. This paper shows that women are overrepresented in the manual sector in part-time jobs, thus governments should try to make better policies for manual-sector workers.

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Üniversite-Sanayi İşbirliğinde İşveren Beklentileri

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Abstract: University-industry cooperation is one of the most useful methods of technological transfer for national development. In order to meet the requirements of that cooperation and the flow of university research outcomes through different mechanisms, researchers and scholars in universities must have enough knowledge of expectations and requirements on industrial development. Perceptions and expectations of the industry side of that cooperation should be known. In this study employee expectations are studied from different sectors operating in İstanbul İkitelli Industrial Area.

Keywords: university-industry cooperation, employee expectations, İkitelli Industrial Area

Özet: Üniversite-sanayi işbirliği ulusal kalkınma için en yararlı teknoloji transfer yöntemlerinden birisidir. Bu işbirliğinde beklentilerin karşılanabilmesi ve değişik mekanizmalarla üniversite araştırma sonuçlarının sanayiye kullanılabilir çıktılar olarak akışı için, üniversitelerdeki araştırmacı ve akademisyenlerin sınai gelişim için yapılması gerekenler ve beklentiler konusunda yeterli birikime sahip olmaları şarttır. Bu nedenle sanayi kesiminin beklenti ve algılamalarının bilinmesi gerekmektedir. Bu çalışmada İstanbul İkitelli Sanayi bölgesinde faaliyet gösteren farklı sektörlerden örnekler alınarak işveren beklentileri incelenmiştir.

Anahtar Kelimeler: üniversite-endüstri işbirliği, işveren beklentileri, İkitelli Sanayi Bölgesi

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