Labor Issues in Korea 2012

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Edited by
Hoon Kim

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Foreword

Founded in 1988, the Korea Labor Institute (KLI) is a government-funded public research institute whose mission is to contribute to social development by conducting timely and analytical research on labor policies. Long recognized for its leading role in the development of national labor policies, the KLI has helped the government formulate policies on employment and industrial relations. Its empirical research on the Korean labor market and industrial relations has always been integral to the establishment of these policies. Recently, the KLI has broadened the scope of its research to employment and welfare policies.

Since 2005, the KLI has distributed its English publications to research institutions and organizations abroad in order to help researchers and policymakers around the world better understand labor issues and policies in Korea. Under the initiative of the International Cooperation and Information Office, the KLI has published books in English since 2005 to give a global readership accurate and current information on the Korean labor market and industrial relations. From 2009 to 2012, yearly research findings were compiled and published annually in English in the *Labor Issues in Korea* series. This year's *Labor Issues in Korea 2012* includes papers on issues of industrial relations, care work, informal employment, corporate management performance, employment for baby boomers, and labor dispute resolution.

Seong-Jae Cho (Chapter 1) explores future directions for the development of industrial relations on the basis of an analytical understanding of previous and current Korean labor regimes and industrial relations systems. This chapter combines historical and systemic approaches. Deok Soon Hwang (Chapter 2) looks at the characteristics of Korea's care-worker labor market and examines working conditions and informal employment in this market segment. He suggests policy measures for converting this informal employment to formal employment. Byung-Hee Lee (Chapter 3) analyzes the characteristics and causes of informal employment in Korea that expanded with the rapid increase of labor market flexibility after the 1997 Asian financial crisis. Yoon-Gyu Yoon (Chapter 4) uses results of the KLI Workplace Panel Survey (2005–2009) to empirically analyze corporate employment performance and identify its key determinants. Joyup Ahn and Bogsoon Kim (Chapter 5) compare the employment status of the baby boom generation (those born during the period 1955–1963) with that of the generations immediately before (born during the period 1950–1954) and after (born during the period 1964–1968), based on a number of labor market indicators, to review the intergenerational changes in patterns of economic activity. Kiu-Sik Bae (Chapter 6) reviews how South Korea has developed and institutionalized collective dispute resolution systems during the period of the country's compressed industrialization. Finally, Jae-ho Keum (Chapter 7), using raw data from the Economically Active Population Survey of the National Statistical Office of Korea, analyzes difficulties youths face in gaining employment by gender, age, and level of educational attainment. He examines the impact of such difficulties on the quality of youth employment.

This book introduces readers to pending issues in the Korean labor market and provides in-depth discussions on newer issues and related policies. It also evaluates the effectiveness of these policies. I hope this book will give readers around the world a better understanding of

recent changes in employment and welfare policies in Korea. I ask for your continued interest and warm support for our research efforts.

June 2014
Injae Lee
President, Korea Labor Institute

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1 Diagnosis of the Korean Industrial Relations System and Directions for Future Development*

Seong-Jae Cho**

Introduction

A crisis is looming in the socioeconomic strata of Korean society. On the surface, all is well: Korea's economic growth rate is still higher than that of other developed economies, the largest Korean companies have managed to quickly heighten their competitiveness, and Korean popular culture has gained a massive following in many countries. However, the other side of this success story is harrowing. Korea has the world's highest suicide rate, the world's longest working hours, the OECD's highest ratio of non-regular workers, and the world's lowest birth rate. Why?

The key to understanding this paradox is *polarization*. Economic polarization is closely related to social segregation and social pathology. The very link that connects the economic and the social dimensions of society is labor. Labor is a factor of production that upholds household domestic demand through the provision of wages. Labor also determines the conditions of survival for both individuals and households, for it also acts as an avenue for self-realization. For this reason,

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* This paper is based on Chapters 1 and 6 written by the author in Cho, S.-J. et al. (2013). *Diagnosis of the Korean Industrial Relations System and Directions for Future Development*. Seoul: Korea Labor Institute.

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everyone has the right to work, and it is the responsibility of governments to proactively implement policies that allow their citizens to gain employment in decent jobs.

An examination of labor as the link that holds together the economy and society reveals that the polarization of Korean society is directly connected to the various issues that beleaguer labor. The insecure employment and low income of workers in non-regular positions or in small businesses contrast sharply with the high wages enjoyed by regular workers employed in large firms. A dual labor market – rather a segmented labor market – has been created, in which mobility among the different market segments is quite limited. At the same time, it is important to take a look at whether the primary labor market is indeed that stable, and whether the number of workers in the primary labor market has increased or decreased. Statistics from Korea's Census on Establishments reveal that 21.6% of workers in 1993 worked in establishments with 300 or more employees; however, this proportion dropped to a mere 13.7% in 2009. Assuming that large firms with 300 or more workers generally provide good jobs for their workers, this decrease indicates that the primary labor market has rapidly contracted in Korea to a size smaller than that what is acceptable by international standards. This trend matches the everyday reality in Korean society, in which over a decade of increased outsourcing, greater irregularity in employment, and the mass exodus of middle-aged workers from good jobs toward early retirement are now normal.

At this juncture, it is puzzling what the Korean labor unions, so notorious for their militancy, were doing throughout this process. It turns out that unions were not even able to do anything to safeguard the employment of their own members, let alone ensure decent working conditions for non-regular workers and those working in small businesses (Cho et al., 2008). Managers constantly complain about the rigidity caused by unions, but growth in Korean firms, especially the chaebols (largest conglomerates), has been unhindered. Union

members do not always get treated unfairly, either, for some of them in the chaebols still enjoy wage increases of more than 10 million KRW each year.

All of the foregoing issues require a comprehensive understanding and discussion of the structure of the labor market and the characteristics of the industrial relations system, along with the greater economy with which the labor market and the industrial relations system interact. What were the specific problems in Korea's society and economy that gave rise to such polarization? When did this polarization start progressing so quickly? What individuals are responsible for different facets of this issue? Can the problem be solved, and how?

Polarization can only be overcome in the presence of robust worker organizations that act on behalf of the most vulnerable social classes and workers. It is well known, however, that only about 10% of all workers in Korea are unionized. This small proportion of workers is divided into those aligned with the Federation of Korean Trade Unions (FKTU) and those under the umbrella of the Korean Confederation of Trade Unions (KCTU). Furthermore, the power of these organizations has been further diluted with a recent and rapid increase in nonallied unions. While union density may be just as low at 10% in France, Korea is different because industry-wide unions are not well developed and the unions lack institutions for the extension of industry-level collective bargaining agreements. Therefore, it is estimated that the proportion of Korean workers whose interests are in effect represented by unions is close to the unionization rate of 10%.

Awareness of this reality has been central in the arduous efforts made during the past decade to shift union organization to the industry level and to realize industry-wide bargaining. So far, though, the industry-level organization of workers seems largely superficial and has had a very limited actual effect. Supra-enterprise bargaining has been weakened further with the introduction of multiple unions in individual enterprises. At the same time, measures were implemented that require

a single bargaining unit for each enterprise. Industrial relations remain fragmented into those pertaining to each individual workplace – there negotiations on employment stability and higher income take place mostly in the workplaces of chaebols with the ability to pay or in public corporations with stable businesses. In smaller workplaces, the interests of workers, non-regular workers, and independent contractors are not properly represented. Ultimately there is the face to face criticism that rather than controlling and mitigating polarization in the labor market, industrial relations have served to further intensify this polarization.

Who, then, can save Korean society from the scourge of such polarization? Will the Power of the State, as manifested in the actions of the government, create a new order for industrial relations? Will this new order come embedded with a system that remedies all of the weaknesses and problems? A very objective analysis of the past and present is required if a clearer strategy can be established for the future. Such a strategy must include considerations on the possibility for this new order and the issue of who should lead the process.

In this paper, I seek to explore future directions for development of industrial relations on the basis of an analytical understanding of the past and current Korean labor regime and industrial relations system. A historical approach is therefore taken together with a systemic approach to highlight each element of the industrial relations system and illuminate the way in which the elements are connected. The discussion on the Korean labor regime will essentially create a synergistic effect when combined with the understanding gained on the regime of chaebols in the Korean economy and on the more universal topic of the industrial relations system. Discussions by Hall and Soskice (2001) as well as Hancke, Rhodes, and Thatcher (2007) on the varieties of capitalism provided the theoretical foundations for this paper.

Reevaluation of the Development of Industrial Relations in Korea

Historical Developments: Labor

How have industrial relations changed in Korea in the 60 years since Korea's liberation from Japanese colonial rule, and what is level of development of Korea's industrial relations at this point in history? Is it likely that change will continue in a desirable direction? How can that change be verified? In this section, I seek to answer these questions by utilizing a historical approach. Rather than simply narrating the minute details of how industrial relations developed in Korea, I choose instead to reexamine the significance of major events that influenced the formation and characteristics of the current labor regime and system of industrial relations.

The seeds for Korea's initial system for industrial relations at the enterprise level were most likely first sown by the conflict between left-wing and right-wing activists immediately after Korea's liberation from Japanese rule, by the subsequent triumph of the Korean Labor Federation for Independence Promotion (KLFIP), and by the strategies pursued by this organization. Any potential for industrial relations transcending the boundaries of individual enterprises was effectively extinguished with the demise of the Korean National Council of Trade Unions (KNCTU) that had upheld the ideas of industry-level unions and workplace councils. Enterprises had been allocated as enemy property after liberation, and the internal focus quickly turned to obtaining more aid to facilitate production. While there is a need for detailed case studies and a review of the dynamics of this time period, I take the position that a system of industrial relations at the enterprise level was already quite entrenched in the Korean economy by 1961.

The military seized power in Korea through a coup d'état in 1961. It is interesting to note that the strategy of this new military government

was to tighten control over the economy through the organization of industry-wide unions. Laws were later revised to also allow enterprise-based unions in 1973, increasing the importance of enterprise-level industrial relations. A new military government took power in 1980 and aggressively worked to contain the labor movement within the walls of each individual company by mandating enterprise-based unions and also by enforcing the notorious measures that banned third-party intervention, union participation in politics, and multiple unions. Democratization came to Korea in 1987, but the formation and development of a supra-enterprise labor movement was seriously inhibited by the ban on third-party intervention that remained in effect until 1997.

The unions that existed within this formal framework – with the FKTU at the forefront – had neither the power nor the willingness to develop supra-enterprise industrial relations. While some instances of supra-enterprise bargaining exist in the cotton spinning and bus industries, working conditions were mostly determined at the enterprise level, while industrial unions and union confederations were not able to provide any significant leverage for working conditions.

Along with the officially recognized FKTU, some humanist labor activists supported by religious groups started to appear in the 1970s, while democracy activists who witnessed the 1980 Gwangju Democratic Uprising sought to move beyond a worker-student alliance and empower revolutionary forces within the labor movement. "Students-turned-workers" infiltrated factories to organize workers, and this solidarity between workers and students produced such results as the Guro Alliance Strike in 1985. Strike action was also taken at Daewoo Motors, illustrating the rapid growth of self-reliant and democratic labor activism in the individual enterprises.

The Great Workers' Struggle from July to September 1987 was, however, ignited not in the Gyeonggi and Incheon region where intellectuals armed with revolutionary ideas were allied with workers,

but in Ulsan, Masan, and Changwon, where workers had been amassed in huge numbers with the development in this region of the heavy and chemical industries. While a small number of intellectuals had allied themselves with workers before 1987 and continued to actively support the formation of unions after the Great Struggle, it was difficult to expect that union organization that hinged on voluntary study groups for onsite workers could bring together workers across the boundaries of individual enterprises. Because employers so vehemently attempted to avoid unions back in 1987, for years after, and sometimes even now, 10 years into the 21st century, union organization based upon onsite militancy has naturally sprung forth at the enterprise level. In the struggle against employers who denied workers of their legitimate right to organize and obstructed union formation, the workplace was the most effective unit for mobilizing support.

This enterprise-based union organization was also supported by the FKTU, the only umbrella organization at the time. The self-reliant democratic labor activists also placed priority on union organization and collective bargaining at the enterprise level without any concrete considerations or strategies for industrial unions. For the revolutionary labor activists, regional solidarity was of utmost importance; therefore, efforts were concentrated on strengthening regional alliances by bringing them together in the Korean Trade Union Congress (KTUC).

The organization of the manufacturing industry-based KTUC was severely crippled by the police state of the 1990s but later joined forces with the Korea Congress of Independent Industrial Trade Union Federations (KCIIF) and the Hyundai Group Trade Union Federation to form the Korean Council of Trade Union Representatives. The latter was the precursor of the Korean Confederation of Trade Unions (KCTU) launched in 1995. The emergence of the KCTU was a major turning point in the history of industrial relations in Korea, creating a crack in the 50-year FKTU monopoly on worker representation that had been in place ever since Korea gained its independence; labor had

finally started to push back against the state-led corporatism, right-wing nationalism, and performance-first ideology espoused by the FKTU. In other words, the growth of the KCTU – the positions of which were based on its motto of class-specificity and democracy – into an organization rivaling the FKTU in size implies that the labor movement had grown powerful enough to proactively demand change towards a labor-centric social order, and could no longer be relegated to the role of a subordinate partner in economic growth.

The emergence and growth of the KCTU set forth a new vision for workers, which consequently forced the FKTU to reform itself to prevent groups from leaving the organization. By declaring its support for the April 13, 1987 Government Measures for the Protection of the Constitution, the FKTU had branded itself as an obstacle to the advancement of democracy in Korea and inadvertently provided an opportunity for democratic and self-reliant growth in the labor movement. FKTU Presidents Park Jong-geun and Park In-sang realized the gravity of the situation and pushed for internal reform, which ultimately enabled the organization to regain its relevance in the labor movement. President Park In-sang, for example, led the FKTU to take part in the general strike that lasted from late 1996 to early 1997, clearly indicating that the FKTU refused to be manipulated any longer by the conservatives who had railroaded the Act on the Agency for National Security Planning and the Labor Laws through Parliament.

The establishment and growth of the KCTU and the internal reform of the FKTU ultimately led to the formation of a united labor movement consisting of mutually competing yet cooperating groups, and served as the foundation for labor's participation as an equal partner in social dialogue carried out from 1998. It was ironic, however, that the KCTU consisted mainly of chaebol workplaces and the workplaces of large enterprises with high wages, which heavily influenced the nature of the KCTU. As mentioned previously, the revolutionary forces that led the self-reliant labor movement initially

lacked any foresight or strategies on industrial unions. The labor movement mostly focused on safeguarding the unions in each workplace from the strategies utilized by management to avoid unions. Most of the effort was placed on increasing wages and enhancing welfare at the unit of the individual enterprises, while little progress was made in building solidarity among workers beyond the boundaries of each workplace.

What is interesting is that the KCTU was quite influenced by the ideas and behavior of the militant unionism of the SME manufacturing, industry-based KTUC. Nevertheless, the militancy of unions in the large enterprises did not serve to strengthen association with a certain social class. Instead, it was transformed into a militant pragmatism that was used to gain exclusive benefits and strengthen employees' sense of association with their own workplace. As a result, even from the early 1990s, voices within the democratic labor movement called for efforts to narrow the wage gap between large enterprises and SMEs, leading to the identification of and discussions on unfair business practices in subcontract relationships as one aspect of both the problem and the solution to this issue.

It is also very interesting to note that recent discussions on subcontract relationships and the resulting wage gap had actually been taken up in a similar manner 20 years ago, which essentially reveals that enterprise-level industrial relations have not changed much in structure or behavior over the past 25 years. For instance, the topic of subcontracting in the automobile industry that has emerged recently as a serious social issue goes back all the way to the late 1980s. It is true, of course, that the quantitative and qualitative degree as well as the intensity of subcontractor utilization have deepened over the years. Still, the roots of this current issue can be traced considerably far back in history, which, in turn, imply that the recent issue of polarization is not simply a result of the 1997 foreign exchange crisis and the ensuing spread of neo-liberalism.

The leaders of the labor movement were not ignorant of problems inherent in a labor regime based on enterprise-based unions and thus have been working for quite a while to push for industrial unions. The labor movement at the industrial level only gained traction, however, from 1998 when the malignity of market liberalism and labor flexibility became apparent, and when laws were revised to allow the establishment of multiple unions at supra-enterprise levels. Industrial unions sprang to life, particularly among healthcare workers and metal workers, largely due to recognition that the fragmentation of labor into enterprise-based unions had left labor without the power to rise above the demands of capital and to appropriately respond to corporate restructuring after the foreign exchange crisis.

Early on, in the process of switching over to industrial unions around 2000, however, union members of the large plants refused to join the metal workers' union, under the excuse of not being prepared to do so. This resistance clearly indicated that the unions of the large plants – that were in fact viewed to be most in need of the transformation to an industrial union – did not intend to look beyond their own interests and join the main currents of the labor movement. Unions in such large plants as Hyundai Motors voted twice against amending their by-laws, and were only able in 2006 to finally scrape together the necessary votes to become part of the industrial union. One argument used to persuade union members was that planned legislation banning remuneration for full-time union officers necessitated the move to an industrial union for the sake of achieving economy of scale. It turned out, however, that the original system of maintaining full-time union officers was simply replaced with a time-off system, and Hyundai Motors' labor and management were able to altogether circumvent this issue by increasing allowances and union membership fees. While the Hyundai Motors union and other unions in the large plants have – in form – converted to an industrial union, they have not displayed any solidarity thus far. To the contrary, although they

currently exist as individual branches of the greater industrial union, labor and management in these large workplaces seem to be colluding even more than when they engaged in enterprise-level industrial relations (Cho, 2012b).

Unlike the metal workers' union, the health workers' union has focused on building substantive content for their activities in the industry, and has gained success in addressing the issue of non-regular workers and in adjusting gaps among hospitals in terms of the wage increase rate. Still, the health workers' union faces serious challenges in terms of uncooperative management, by which employer groups have disbanded and strategies are being utilized by management to avoid addressing the industrial union. So here, too, it is difficult to say that the industrial union regime has fully taken root.

The same is true for the FKTU's financial workers' union. This union managed to forge and implement agreements at the industrial level for shorter working hours, high rates of wage increases for non-regular workers, working hour adjustments, and maternity protection, but industry-level bargaining floundered with the launch of the Lee Myung-Bak administration, under which management has increasingly tried to avoid industry-level talks. Moreover, stronger government intervention in industrial relations in the state-invested banks has deepened labor-government conflict.

In sum, the industry-level labor movement was viewed to possibly be gaining enough strength to rectify the damage caused by market liberalism, and did in fact achieve some success. Nonetheless, industry-level bargaining has not yet been soundly established, and it is in some cases becoming weaker, such as in the metal industry in which bargaining at the level of the regional branches is losing substance. Now, it will be determined whether or not this narrative can be confirmed through numbers on union membership and union density. Figure 1-1 reveals that the labor movement, which had thus far been repressed under military control, exploded in 1987 with a sharp

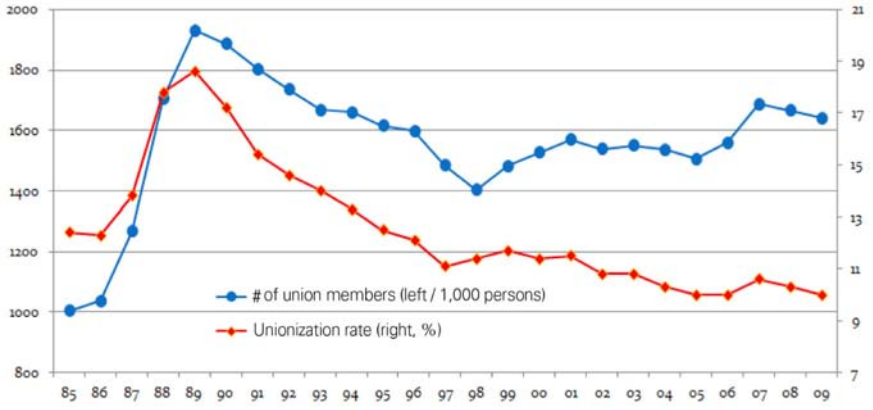

Figure 1-1. Number of union members and the unionization rate. From *Labor Union Database*, by Ministry of Employment and Labor, each year.

increase in the number of union members.

This increase peaked in 1989, however, and started to fall to an eventual low of 1.4 million union members during the foreign exchange crisis in 1998. The number of union members did start to grow again in step with the accelerated recovery of the Korean economy, but union members in the manufacturing industry continued to decrease due to restructuring and automation. The total number of union members later surpassed 1.6 million, however, with the organization of service industry workers (Cho et al., 2008). The number of union members has been maintained at similar levels with the more recent legalization of the civil servants' union, but the increasing rate of union members has not been able to keep up with the increasing rate of all wage workers, causing the unionization rate to remain very low at around 10%.

In the context of Korean industrial relations, it is also important to note the rapid increase of nonallied unions over the past 5 years.[1] Nonallied unions have mostly detached themselves from the KCTU or

[1] Nonallied unions that are not affiliated with either of the two major umbrella groups increased from 914 unions with 3,936 members in 2002 to 1,177 unions with 93,457 members in 2005. The increase in nonallied unions has been even more pronounced since then, and in 2011, 366,746 workers, or 21.3% of all union members, were in nonallied unions.

have been newly organized, and they seem to be acting as an interest group within the enterprise that lacks any allied activities or any ideological or policy direction. This situation reveals that quite a few groups do not agree with the revolutionary ideology calling for the emancipation of labor or the militant style of the KCTU. The fact that these unions are still not willing to join the FKTU also indicates that the FKTU's positioning as a business union is also not perceived favorably among the workers. Both umbrella groups have failed, essentially, to provide ideas and strategies and offer sufficient protection and services to their membership. The low unionization rate of 10% and the just-as-low collective agreement coverage rate provide evidence that Korea's labor unions do not possess the power to countervail the global system of competition and market liberalism that ignites and deepens polarization. Is the Korean labor movement, then, prepared to rise above its tarnished reputation and lead the formation of a new labor regime?

Historical Development: Management

For a very long time since the liberation of Korea, management, the other partner in industrial relations, has essentially been able to take care of its labor affairs quite easily, hiding behind the government and receiving its full support, which is still true in many aspects. When the government steps forth to declare that a strike action is illegal and announces strict measures to address strikes, unions are inevitably weakened, while employers gain more leverage to reach compromises that benefit management and can even completely immobilize unions.

Still, these circumstances do not imply that the resources and strategies available to employers in addressing collective industrial relations have always been the same throughout all periods. Although the FKTU, as a subordinate partner to the state, did not seek to completely change the labor regime, there were some instances when the FKTU did

display militancy and assert hardline positions. Under such circumstances, because military control under martial law was not yet in place, employers needed to form their own association to represent their individual interests.

In 1970, a department of the Federation of Korean Industries (FKI) was established independently as the Korea Employer's Federation (KEF), which subsequently engaged in industrial relations as the representative organization of employers, and it also participated actively in social dialogue and public relations. As labor issues took center stage in 1987, the five leading economic organizations joined forces and founded the Korea Business Federation for which KEF served as the secretariat, demonstrating the central role played by the KEF in addressing industrial relations. There was some incongruity, however, between KEF and FKI, in which the KEF gave relatively more consideration to the positions of labor when engaging in social dialogue for compromise, whereas the FKI and the Korea Chamber of Commerce and Industry (KCCI) often adhered strictly to the fundamental positions of capital.

In any case, KEF, sometimes alone and sometimes together with the FKI, KCCI, or the Korean Federation of Small and Medium Business (Kbiz), coordinated the positions of employers upon which policy input was provided to the government, and dialogue was held with the two major labor-side umbrella organizations. Among the various employers' groups, the groups that were formed from 2005 to engage in industry-level bargaining in the metal, finance, and healthcare industries deserve particular attention. Strong demands from each industrial union forced employers in these industries to form groups and participate in industry-level bargaining. Because this participation was somewhat coerced, individual employers were not willing to empower these employers' groups. It is difficult to expect, under such circumstances, for the employers' organizations to develop in substance. It should be noted, however, that in the local regions, the local

chambers of commerce or the local KEF branches still had the need and the relevance to engage in various activities in the context of local labor-management partnerships.

If HR and labor management under individual employers are examined next, is it not easy to talk about any collective characteristics due to wide variances according to industry and workplace size? Up until 1987, HR and labor management did not seem to have developed systematically, perhaps due to the influence of tight military control. However, the economic boom that started from about 1985 with help from a weak US dollar, a decrease in oil prices, and low international interest rates created a foundation for the development of an internal labor market (Cho, 1993), which led to the subsequent advancement of HR and labor management strategies (Kim, 2003).

The explosive growth of the labor movement in 1987 most likely amplified the need for the systematic management of HR and labor. The seniority-based internal labor market that was established at this time was bolstered by the union effect, thereby shackling the management with a considerable degree of rigidity in terms of their management strategies. Employers attempted to overcome such rigidity in the 1990s by utilizing a New Management Strategy introducing wage and promotion policies that encouraged competition amongst workers. Using this strategy, they also sought to exert greater control over workers through ideological approaches and corporate culture while strengthening the central role of onsite supervisors in the organization of the workplace. This New Management Strategy was first introduced in Daewoo Shipbuilding and was then very effectively applied to other enterprises including Hyundai Heavy Industries, which managed to gradually tame the existing image of its union as an icon of the militant labor movement that was identified strongly with protests on the Goliath Cranes.

Most employers, however, were either not able to gain an upper hand over the unions or build a cooperative labor-management model

such as the one established in LG Electronics. Therefore, they ended up without any clear idea of how to address increased rigidity and confrontation. As a result, employers collectively and individually strengthened their demand for greater flexibility in the labor market, and this demand was inserted as input for the revision of labor laws in the activities of the Presidential Commission on Industrial Relations Reform near the end of the Kim Young-Sam administration. The demand was to allow layoffs, worker dispatch, and flexible work. Layoffs and flexible work were introduced with a grace period in exchange for agreeing to lift bans on multiple unions, third-party intervention, and unions' political participation. However, this process was concluded in the form of an incomplete compromise following large-scale conflict by way of a general strike.

For employers, the 1998 foreign exchange crisis was possibly more significant than the 1997 labor law revision because the crisis triggered radical progress in terms of labor market flexibility. Not just in 1998 but from then onward, businesses have been able to downsize through constant restructuring, and manufacturing has been outsourced, while clerical workers have been encouraged or forced into early retirement. Internal personnel, too, were often converted to non-regular positions, while regular positions were increasingly filled with non-regular workers. Part of the increase in non-regular workers can also be attributed to more prevalent legal and illegal in-house subcontracting that was sparked by the legislation of the Act on Dispatched Workers. Quite simply put, the foreign exchange crisis proved to be an opportunity for capital to collectively launch an all out offensive for market-based flexibility.

The rapid spread of outsourcing and non-regular jobs drastically cut costs and also enabled employers to use market discipline to their advantage in better managing labor affairs. It became much more difficult to organize unions than in the past, and this slack in organizational power has led to increased flexibility in the labor market. This

marketization of labor has also served to spur on the spread of merit-based HR and labor management within workplaces. Under the system of merit-based annual salaries, job and wage security has been weakened, while high income and promotions can only be secured through above average performance and competitiveness. On top of this, employers are mobilizing lawyers and labor attorneys as they seek compensation for damages and sequestration of union assets. Recent incidents demonstrate the extreme marketization of both internally and externally sourced violence against workers.[2]

Employers developed individual tools for addressing industrial relations mostly because they could no longer just rely on government intervention after the 1996 general strike and the 1997 and 1998 labor law revisions that resulted in the strengthening of labor rights and the recognition of labor unions as active partners in social dialogue. Some workplace managers have chosen to step across into unlawful territory and aggressively work to destroy their unions, and each success has encouraged followers. Hyosung and Yoosung are only a few of many similar incidents, and in 2012, the National Assembly harshly criticized both the labor attorneys who served as consultants to the firms and the government for tacitly permitting such aggression.

How far will employers go in terms of their HR management that cares only for core personnel, engages in constant outsourcing and restructuring, increasingly utilizes non-regular workers, and seeks to expand merit-based pay? Merit-based HR management has yet to completely replace the existing seniority-based system, mostly because long-term loyalty decreases under a merit-based system. It will also be difficult for employers to infinitely expand their strategy of retaining a very small number of core personnel while increasing the utilization of outsourcing and non-regular workers. In this sense, it is very meaningful that there was less employment adjustment and more job-sharing

[2] Examples include the 2012 SJM and 2011 Yoosung Enterprise incidents.

during the 2008 global financial crisis, which reveals that there are no more jobs to be rationalized, and that the wages or working hours of the remaining core personnel must be adjusted to address economic downturns.

How, then, are Korean employers utilizing their minimized workforce? Cho (2012a) indicated that workplace innovation will suffer because the union threat effects all but disappear with the weakening of unions. To elaborate, the union threat effect had previously contributed to enhancing productivity and increasing employee engagement through a stronger workplace partnership, but because there is no longer much need for such partnerships, employers may likely choose a more controlling approach or utilize more robots in their production activities.

The only option now left for Korean employers is a low-road strategy centered on costs. A gradual increase in demand for professionals and technicians will also further intensify the need for a US-style labor market based on general skills and tertiary education, which implies that the nature of the labor regime will render it difficult for the time being to resolve the educational issues currently plaguing Korea, for high-income jobs will only be available to those who attain recognition of their high qualifications through college education. This situation is also reminiscent, on the other hand, of Korea's increasingly vulnerable system for socially integrating low-skilled workers through vocational training. Meanwhile, the advance of globalization calls for more new professionals who are proficient in other languages and who are able to quickly adapt to other cultures, particularly because Korean production operations will continue to move overseas, where the peripheral workforce may be hired locally, but the core personnel will most likely have to be dispatched from Korea.

The distinction between core and peripheral personnel in the skills structure is progressing rapidly both within Korea and throughout the world. From the employers' perspective, the behavior of such unions as

the Hyundai Motors union that utilize organizational power to secure high wages for workers with low or stagnant skills cannot escape being regarded clearly as examples of irrationality. Supported by the government and public opinion, employers have not only succeeded in stigmatizing unions in large workplaces as selfish, but have also managed to depict the overall labor movement as anachronistic.

Management now has only a few private-sector labor unions that can cause any problems, while public-sector unions are mostly within the scope of control exerted by the Ministry of Planning and Finance in accordance with the Act on the Management of Public Institutions. Riding on the back of state authority, antiunion violence, favorable public opinion, and a flexible labor market, 25 years after the establishment of the new labor regime in 1987, employers have managed to herald in a golden age for HR and labor management.

History of Industrial Relations as Seen through Strike Action

The explosiveness of the Great Workers' Struggle in July, August, and September 1987 is evidenced clearly in Figure 1-2. A lot of confusion was present in terms of labor action at the time when strikes sometimes preceded any bargaining and some unions were created in the midst of strikes. The number of strikes soon fell sharply, and Korea's strike rate fell close to the OECD average by the mid-1990s (Cho et al., 2008), which indicates that the capacity for labor and management to manage conflicts is actually not as low as it is generally perceived to be.

Both the number of strikes and the number of lost workdays increased, however, from 1998, when strikes occurred frequently in opposition to employment adjustments brought on by the foreign exchange crisis. The continuation of strikes into the 2000s can be attributed to workers demanding the right to participate in various aspects of management as a preventive measure against any further

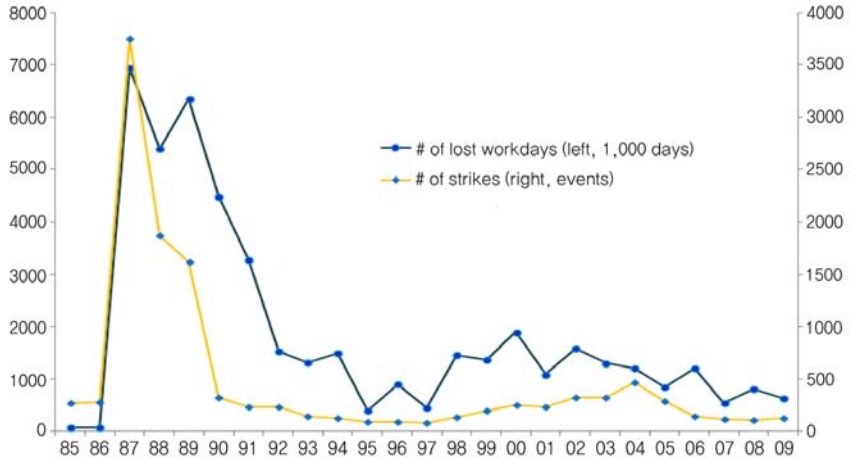

Figure 1-2. Strike action in Korea. From *Industrial Conflict Database*, by Ministry of Employment and Labor, each year.

restructuring. In less than 10 years during the period preceding 1997, Korean labor and management had been able to establish the rules of the game in terms of conflicts that mostly centered on wage increases, but strikes continued to occur after 1998 in the absence of any set practices for addressing the new conflicts surrounding other issues of employment. The decrease in the strike rate from 2007 implies that, as previously mentioned, there was no more room to downsize through restructuring and that labor and management had gotten that much more familiar with the new labor market order and with resolving conflicts related to employment.

The fact that conflicts still exist reveals that industrial relations are defined by more than just regular workers and medium- to large-sized enterprises. Major conflicts from the mid-2000s revolved around in-house subcontracting, the illegal dispatch of workers, independent contractors, and other types of non-regular work, in which some conflicts are not even captured anywhere in official statistics. These conflicts were sometimes more intense because, unlike conflicts involving regular workers, the conflicts were directed at indefinite

employers, with workers pushed by the refusal of employers to recognize their fundamental nature as workers into such extreme measures as illegal labor actions and protests or even suicide.

Meanwhile, criticism of the pseudo-militancy[3] of industrial relations in Hyundai Motors reveals that regular worker unions in large companies are particularly restrained in displaying any strong militancy. In fact, these unions have almost no need for such militancy. Labor and management have no reservations whatsoever in forming collusive relations for pragmatic give-and-take arrangements, while partial strikes or refusals of overtime work are regarded as formalities in concluding negotiations. Regarding the major public corporations, strikes are usually completely out of the question because of the lack of resources and organizational power and the government's forceful labor-management stability policies.

Simply put, amidst the overall weakening of the labor movement, the strike rate in Korea has dropped as it did in the mid-1990s to the level of the OECD average. There are some intense conflicts related to non-regular work, in-house subcontracting, or independent contractors, however, that do not appear in any official statistics, but they are made to appear as if the labor movement is still so militant that it relies solely on strike actions. While these struggles relate to a worker's right to survival, strikes in some unions in large companies seem to occur out of habit even though true militancy has weakened with the ageing of union members. The common view that Korea is the "Republic of Strikes" should therefore be rectified, while deeper thought must be given to the issue of how to reinstate a balance of power between labor and management. Priority should naturally be placed on exploring measures that avoid conflict, and it should not be necessary in this process to go through strikes to gain ground in production and welfare – the ultimate output of the function of industrial relations.

[3] This term was first used by Professor Park Tae-Ju of the Korea Labor Administration Training Institute.

The Structure and Systemic Characteristics of the Korean Labor Regime

Cho et al. (2008) raised the possibility that the foreign exchange crisis may have shifted the Korean economy and labor regime towards a US-style liberal market model from a Japanese-style developmental state model, while also noting that, unlike the United States, the strong normative power of the Korean chaebols stands in the way of full market liberalism. Korea's economy may therefore be closer to a mixed market economy (MME) as can be found in Spain and Italy.

Modes of coordination are particularly emphasized in theories on capitalist diversity, but in Korea, the scope of resources including labor assigned through collective industrial relations has gradually been shrinking. The claim that militant unions in Korea are distorting the allocation of resources can therefore most likely be attributed to the efforts of some chaebols to influence media into magnifying any negative aspect of union activity. The chaebols have been able to harness their enormous capacity for payments to successfully bring strong unions into the circle of labor-management collusion. Any militancy that remains in the unions has been used to secure very practical benefits, and in this respect, "militant pragmatism" as a distortion of militant unionism gives rise to the side effect of very thoroughly blocking any possibility of solidarity across enterprises.

In the early- to mid-1990s, struggles led by unions of large workplaces were copied by SME unions, so the wage gap between large enterprises and SMEs remained quite stable. From the 2000s, however, the more pronounced gap in the payment capacity of large enterprises and that of SMEs has made it impossible for smaller enterprises to keep up with the increase in wages. Despite this fact, it is very difficult to find any sense of solidarity or strategies on the part of the unions in large companies, and the same remains true even when enterprise-based unions are converted to industrial unions.

All in all, it is difficult to say that Korea has shifted in line with the aspirations of its power elite to a US-style liberal market economy (LME), which is in part due to the gradual fortification by chaebols of their monopoly or oligopoly in the market that ensures that they are unaffected by market discipline. Another reason is that labor-management collusion amidst such a monopoly benefits only a small number of regular workers, leading to the entrenchment of a divided labor market in which gaps widen between these regular workers and those such as most SME workers, non-regular workers, and microbusiness owners who are excluded from any benefits and in which labor mobility is restricted. By excluding the majority and embracing the select few, chaebols have been able to successfully secure high profits. However, this strategy actually points to the fact that the discourse criticizing the selfishness of large company unions is only half true. While it is true that these unions deserve to be socially branded as being self-centered and that this egoism has maligned the overall image of the labor movement (Yoo, 2008), it was in fact the chaebols and capital in general that gained the most from this limited embracing and social stigmatizing of regular workers in large enterprises. Images were manipulated to make it seem as though non-regular worker wages are pushed lower because of the high wages that regular workers receive, but the fact of the matter is that the chaebols have been able to reap much higher profits by enticing a small number of regular workers into such collusion with uncapped high wages in turn for increasing non-regular positions and outsourcing.

The US economy best represents the liberal market model, and this model was most likely successfully established in the United States because the country's vast population and landmass make it easier for market principles to work properly. Also, its strong anti-trust tradition ensures the efficiency of market-dependent coordination. This winner-takes-all society, however, naturally lags behind European countries in terms of equality. Korea, meanwhile, does not have many means with

which to remedy the harm caused by the chaebol monopoly. Political democratization in 1987 weakened the government's control over chaebols, which led to excessive investments and the reckless utilization of overseas funds through the nonbanking sector that eventually brought on the 1997 foreign exchange crisis. This crisis necessitated restructuring that caused ownership changes in 14 of the 30 chaebols, the end result of which was the further concentration of economic power in the five largest chaebols. Chaebols now brandish their immensely dominant power not only over the economy but also over laws, institutions, and intellectual society (Kim, 2010).

These powerful chaebols, or conglomerates of large firms, are still controlled by a very small number of families. Once equity investment across affiliated firms is excluded, the actual share held by the controlling families is only about 4%, but these families still maintain control over the conglomerates through chairmen-led corporate governance structures in which the chairman reigns supreme. Then, they avariciously go about finding ways to create more business for their own affiliates, accumulate secret slush funds, and engage in overseas speculative investments, violently repress any opposition and ensure management succession to the third generation. These conglomerates have also violated the territory of independent small business owners by entering into the supermarket and bakery businesses.

The chaebol-centric regime in Korea knows no limits with its feudal style of imperial management within today's neoliberal market. Chaebols exert enormous influence over not only the economy, but also the discourse of intellectuals, public opinion, and the overall society and culture. Under this chaebol-led economic regime, the labor market is polarized by a strategic mechanism that embraces a select few while excluding the majority, the key instruments of which are outsourcing and non-regularization; but even these select few are still subject to merit-based wages and are constantly exposed to the pressure of early retirement. It seems that both the labor movement

and the government have failed in their task of inhibiting and criticizing the high-handedness of the chaebols.

So far, the strong influence exerted by the chaebol-led economic regime over the labor regime has been examined. This influence is all the more powerful because labor is determined by what is called derived demand. If, however, industrial relations can be viewed as a system that applies a certain degree of institutional force on the labor market that thereby affects labor demand and supply, then the power of chaebols to mold the labor market would be filtered through this system of industrial relations in accordance with the characteristics of the system. For instance, Northern European countries are similar to Korea in that they have small open economies, but their institutional buffers ensure that social integration is maintained in their societies. While chaebols are dominant in the Korean economy, the public sector and other sectors that are not affected by the chaebols are also important. It is therefore necessary to examine the system of industrial relations that covers all sectors of the economy.

An industrial relations system is shaped by environmental factors, major participants, and institutions. The preceding explanation on the chaebol regime provides insight into the environmental factors, while in the historical narratives in Section 3 on both labor and management, the major players were described. The remaining task is to examine the institutional mechanisms of industrial relations in Korea including collective bargaining and social dialogue.

In regard to collective bargaining, efforts from the 2000s to convert bargaining to the industry level were not very successful in overcoming the inertia of enterprise-based bargaining. New labor laws that were passed on January 1, 2010 further hindered the shift from enterprise-based to industry-level bargaining, for provisions allowed multiple unions but required a single bargaining channel in which the bargaining unit is the individual enterprise or workplace. Regardless of the intentions, this effectively mandated bargaining at the enterprise level,

and this requirement was made clearer by the inclusion of provisions on requests to split a bargaining unit and the absence of any provisions on combining bargaining units.

These new labor laws essentially leave structural problems that have plagued Korean industrial relations under the enterprise-based industrial relations system untouched, while weakening bargaining that has progressed collectively at the subindustry level and at the regional level. Even the few remaining superficial industry-level bargaining arrangements will inevitably be weakened further. During the year following the introduction of the new labor laws, multiple unions appeared in numerous workplaces, with the majority of the new unions established in workplaces previously represented by a single KCTU-affiliated union. There was also a sharp increase in the number of nonallied unions, while a considerable number of company-dominated unions also surfaced. Multiple unions at the enterprise level had been banned since 1961 and for 13 years after the 1997 lift on the ban on multiple unions at the supra-enterprise level, but with the implementation of multiple unions at the enterprise level at a time when the labor movement was contracting rather than expanding, these multiple unions have ended up adding leverage to employer strategies rather than strengthening the power of labor.

Social dialogue, too, has continued to weaken since its institutionalization in 1999 following the February 6, 1998 Grand Compromise. The emergence of the new Central Labor-Management Council for Mutual Benefits (2012) is now threatening the status of the Tripartite Commission. For social dialogue, too, contrary to the prospects and expectations set forth by Lim (2006), consultations at even the meso-level did not make much progress. However, the Lee Myung-Bak administration did actively seek to vitalize the local tripartite commissions, through which dialogue at least seemed to be taking place at the local level.

One last point to make relates to the time-off system introduced together with the lift on the ban on multiple unions. The time-off

system not only weakened unions onsite, but also ended up weakening the umbrella organizations and the industrial unions due to a decrease in financial and personnel support provided from the enterprise-level unions to the supra-enterprise organizations. While this could be the result of faulty institutions, the countermeasures taken later by labor reveal that this weakening of supra-enterprise organizations can also be interpreted as the result of labor failing to overcome ingrained tendencies of the enterprise-based industrial relations regime. The time-off system was designed to be disadvantageous to large company unions because a regressive rate is applied when calculating the total number of time-off hours to be granted.

In reality, however, unions at Hyundai Motors and Kia Motors bargained with their employers to increase or create allowances to be used to compensate unpaid full-time officers, and the number of full-time officers in these companies has, therefore, not decreased as much as expected. This situation is reminiscent, once again, that large chaebol companies and their unions are very powerful in terms of creating buffers against the impact of institutional change. It is worthy of examination, whether SME unions, on the other hand, have been subject to extremely strict application of the time-off system that obstructs peaceful and productive cooperation with employers, leading to the weakening of unions and onsite industrial relations.

Evaluation of Korea's Labor Regime by Period and Imperatives for the Future

In this section, I now attempt to present a more comprehensive evaluation of the past and engage in a discussion on what the future beyond this rather discouraging present day may or should hold. Table 1-1 outlines environmental changes in terms of international affairs, domestic politics, characteristics of the economy, the structure of the

Table 1-1. *Changes to Environmental Factors Affecting the Industrial Relations System*

	Before the 1987 regime (Historical evaluation)	1987 regime		Beyond the 1987 regime (Imperatives/Goals)
		Term 1 (1987~97)	Term 2 (1998~2012)	
International affairs	Cold War and division	Collapse of Soviet Union and Eastern Europe, establishment of the WTO system	US-led neoliberalism and the rise of China	East Asia-led age of peace and prosperity (G2/multi-polarity)
Domestic politics	Military dictatorship	Procedural democracy	Progress/retreat of substantial democracy	Overall political, economic and social democratization
Basic economic characteristics	Government-led economic development	Transition to private sector-led economy	Chaebol-led market liberalism	Coordinated market economy (stronger horizontal, nonmarket coordination mechanisms)
Economic and social ideologies	Development into advanced nation through catch-up strategies			Post-catch up strategies, innovation and integration
Labor market	Steady mobilization of labor	Virtuous cycle / harmony between growth and distribution	Increased flexibility and dualization	High employment rates and rational distribution
Production and skills structure	Growth dependent on resource inputs	Sharp increase in technology and skill levels	Expansion of labor-exclusive automation and low value-added service sector jobs	Growth led by workplace innovation and technological innovation

labor market, and production and skills. "Catch-up" and "post catch-up" are concepts that are central to this exercise.[4] Over the past several decades, Korea has not hesitated to mobilize the workforce, input massive resources and engage in long working hours to increase factory utilization rates, all in an effort to reach the level of economic development of Western advanced nations or Japan. The guiding principle for individuals and families was to increase wage income rather than enjoy leisure time, while the nation was always on the lookout for overseas models of growth to replicate or for advanced technologies to

[4] An in-depth theoretical discussion of these concepts can be found in Hwang, Choung, & Song (2012).

import. The difference among the periods was that while catch-up strategies were implemented through autocratic power that exerted military control over the economy including tight control over the chaebols before 1987, in the period from 1998 onward, chaebols have stood at the forefront of this process in which the goals of market-based catch-up and international competitiveness have come together. The period from 1987 to 1997 will be recorded as a time when the characteristics of these two aforementioned periods coexisted.

Because the socioeconomy and the daily lives of individuals were all affected by these catch-up strategies that ultimately resulted in polarization and exhaustion, it is now time to create new behavioral, economic and social paradigms. Such paradigms can be achieved through the concept of post catch-up, in which Korean society no longer cries "Charge!" and marches to emulate the success another country's model, but one in which new strategies for innovation are conceived that suit the abilities of the collective community. Creativity should flow in this process that must newly identify community-based principles of behavior. In this context, it will also be necessary to explore the transformation of the environment surrounding production and skills from the 1987 regime to a new participatory production system that harmonizes workplace innovation and technological innovation.

In regard to the main participants in the industrial relations system, labor needs to reflect upon whether the labor movement since 1998 has merely been "punching the air" (i.e. the market) in a futile attempt to respond to the onset of neoliberalism. In the end, labor was unable to move beyond the limitations of the fragmented enterprise-based industrial relations regime. The fate of the labor movement will be determined by the degree of solidarity realized beyond the 1987 regime. In some ways, this issue is directly connected to whether unions of large companies and public corporations will be able to shed the stigma of being "egoists" (Yoo, 2008) and instead play a central role in

Table 1-2. *Changes to Major Players and Institutions*

	Before the 1987 regime (Historical evaluation)	1987 regime		Beyond the 1987 regime (Imperatives / Goals)
		Term 1 (1987~97)	Term 2 (1998~2012)	
Basic union characteristics	Mandated enterprise-based unions	Explosive growth then stagnation of labor movement	Futile struggles against the market, limited political growth	Regain status of labor, practice solidarity
Labor movement strategies and organization	Official recognition as subordinate partner to the state / underground activities	Distribution secured through enterprise-based organization and bargaining	Expansion of industrial unions / limited industry-level bargaining strategies	Develop supra-enterprise level unions and secure political and social support
Social perception of unions	Obstacle to performance-first distribution-later strategies, (potential) communists	Leader in the expansion of labor rights	Symbol of collective egoism	Major player in the construction of a welfare state
Employer strategies against unions	Dependent on police power	Establishment of orderly workplace compromise	Individual battles to weaken unions	Partnership strategies, stronger coordination among employers
Basic principles of HR and labor management	Oppressive labor management + paternalism	Development of internal labor markets, introduction of merit-based pay	Expansion of performance-first ideology, contraction of internal labor markets, increased outsourcing	Stronger employee embracement and CSR
Collective bargaining	Limited bargaining rights	Development of enterprise-based bargaining	Stabilization of enterprise-based bargaining, stagnant attempts for industry-level bargaining	Develop pluralist industry-level bargaining and enterprise-based coordination
Social consultation	State-led unilateralism	Very early development of social consultation	Creation and formalization of the Tripartite Commission	Progress in substantial dialogue, establish multi-level dialogue structure
Industrial conflicts	Very few official strikes, conflicts blockaded	Explosion of conflicts and establishment of game rules	Stability within officially recognized scope of labor movement, extreme conflict with outlawed unions and non-regular workers	Development of social infrastructure to pre-coordinate conflicts

building a welfare state.

As for the employers, I have already examined how employers seem to have successfully restructured the labor market with the support of

the government along with their independent implementation of merit-based wage systems, outsourcing, labor consulting, and sometimes by even resorting to hired violence. This apparent success, however, is accompanied by new risks as the gap between employers' reality and social expectations widens. Enterprises will ultimately need to initiate new embracement strategies, not just to fulfill their corporate social responsibility but also if they wish to secure devoted and capable employees.

Along with such changes both in labor and management, industry-level bargaining must also find a place in the collective bargaining system. The past decade has clearly shown that industry-level bargaining such as that conducted in the Western advanced nations cannot be introduced in a short period of time; thus, it is necessary to contemplate some form of "pluralist industry-level bargaining". Such bargaining would entail more segmented approaches like the facility-type-specific bargaining that is conducted in the hospital industry or the separation of bargaining between the banking and the nonbanking sectors as well as the publicly-held banks and the private banks in industry-wide bargaining for the financial industry. In these cases, meaningful bargaining carried out at the industry level is based on a site-pertinent bargaining agenda in which reaching an agreement is sought that is relevant to the onsite workers. Social dialogue must also take on a multilevel structure through which labor and management can foster substantial dialogue both centrally and regionally and across the many industries. Now is the time to bring these efforts together to develop social apparatuses and work on social positioning needed to realize the model of decentralized coordination that I, as well as many other researchers, have promoted.[5]

[5] Refer to Lee and Lee (2004), Lim (2008), Kim et al. (2009), et cetera.

Conclusion

I will have somewhat fulfilled the purpose of this paper if it provides fodder for further discussions on the future of industrial relations. Work is needed on many of the research topics that have been touched upon and on the details of many ideas, but the following are some areas that particularly require additional attention.

First, the main players in industrial relations must look into long-term strategies. It is extremely difficult to change the social order and mindset that has developed over many years and has become deeply rooted in society as a result of a path-dependent process. Also, in consideration that different institutional factors interact in a mutually complementary manner, it is clear that change occurring in industrial relations in the narrow sense will not be enough to change the whole labor regime.

Second, there is a need to review existing discussions on industrial relations and labor issues to determine whether enough research has been conducted on the wage system, jobs, and skills; whether both labor and management possess sufficient policy capacity to address these topics; and whether the strategies employed so far have been valid. Meta discourse and the rebuilding of values are of course important in the transformation of industrial relations, but micro-level topics such as the wage system are equally important.

Third, measures should be explored to balance multi-level social dialogue, parliamentary politics, and the work of neutral and professional public servants. A very detailed and careful examination is needed on how these three sociopolitical processes can appropriately keep one another in check while contributing to the development of a prosperous workfare state that ensures individual freedom. The collapse in the balance among these three processes left Korean society incapable of preventing the status of labor from plunging, which will ultimately create a backlash against employers or boomerang back at

employers in the form of clean up costs. At this point in time, it is crucial to maintain a discerning attitude that places great emphasis on trust and mutual respect.

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2 Study on Working Conditions and Informal Employment in the Labor Market for Care Workers

Deok Soon Hwang*

Introduction

In this study, the basic characteristics, working conditions, and status of the informal employment for care workers within the Korean labor market are examined. Moreover, numerous stylized facts that are already well known about the general labor market for care workers are also apparent within the Korean context. For example, the wage level of workers responsible for the rather supplementary task of providing direct care services is quite low, and years of consecutive service or career experiences do not translate into higher remuneration (Colombo et al., 2010). One pillar of care work is domestic service, the transition of which from informal to formal employment has been gaining attention as a very significant policy task.

Many previous studies have examined the status of care workers in Korea. Some utilized data obtained through separate surveys instead of official statistical data (Chang et al., 2007; Kang, 2010; Park & Kang, 2010), while others analyzed a much broader scope of care workers with data from the Korean Labor & Income Panel Study (Yoon et al., 2011). The most representative qualitative study on care work is the analysis on the working conditions of domestic service workers by

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Choi et al. (2011).

In this study official statistical data from the "Regional Employment Survey" are utilized to examine the characteristics and working conditions of medical and welfare service workers and domestic and childcare helpers who comprise lower-level care workers in the narrow sense compared with higher-level care workers that consist of social welfare professionals and kindergarten teachers. Data from the Korean Longitudinal Survey of Women & Family (KLoWF) conducted by the Korean Women's Development Institute (KWDI) are then used to analyze the status of informal employment within the labor market for care workers to explore policy measures for the conversion of this informal employment into more formal employment.

This paper consists of the following sections. In the second section, the scope of care workers in this study is defined and a description is given of the characteristics of the Regional Employment Survey and the KLoWF. The third section provides an analysis on the characteristics and working conditions of care workers in Korea based upon data from the Regional Employment Survey. Particular attention is given to women in an examination of occupational differences in working conditions such as wage and working hours and also in terms of the structural characteristics of the labor market including age, years of experience, and years of consecutive service. In the fourth section, KLoWF data are then utilized to examine the status of informal employment in the labor market for care workers as determined on the basis of enrollment in social insurance programs. Lastly, the final section briefly summarizes the major findings of this study and sets forth some policy implications for the expansion of formal employment and the improvement of working conditions in the labor market for care workers.

Care Workers: Scope and Data

Scope of Care Worker Jobs

In this study, workers categorized as medical and welfare service workers are regarded for analysis purposes as well as those who perform domestic work and help with infant rearing (hereafter, domestic and childcare helpers). To identify differences in workforce characteristics and informality of employment compared to that of higher-level care workers, this research was also engaged in analyzing social welfare-related professionals (hereinafter, social welfare professionals) and kindergarten teachers.

The four occupational groups analyzed in this study mainly exist in the industry subsectors of business support services; public administration, defense, and compulsory social security: education; health services; social work activities; and other personal services

and activities of households as employers. Most of the workers in the aforementioned four occupations work in these industry subsectors, and the 2-3% of the workers who have been determined to be working in an industry that is not exactly related to care services have been excluded from the analysis of this study.

While the scope of workers who are domestic and childcare helpers and kindergarten teachers is clear-cut, many different occupations can be included in the scope of social welfare professionals and medical and welfare service workers. First, social welfare professionals could be social welfare specialists, childcare teachers, vocational counselors, counseling professionals, NGO workers or other social welfare-related workers. Meanwhile medical and welfare service workers comprise aides, postpartum care workers, therapist assistants, veterinary assistants, welfare facilities assistants, and other medical and welfare related service workers. Of the general health and medical services workers, medical doctors, nurses, medical technologists and physical therapists

and nursing assistants are classified as professionals, other lower-level care workers among the health and medical services workers are included in medical and welfare service workers in this study.

With the exception of health and medical professionals and education professionals at the elementary school level and above, almost all social service-related workers are included in these four occupational groups, of which social welfare professionals and kindergarten teachers are high-level occupations, while medical and welfare service workers and domestic and childcare helpers are low-level occupations. Most domestic and childcare helpers in this study are employed by households.

Data Characteristics

The data utilized in this study are obtained from the Regional Employment Survey and the KLoWF, which contain information on 3 digit-level industry and occupation. The Regional Employment Survey was conducted from 2008 as an annual Q3 survey, but was subsequently conducted on a quarterly basis from 2010 Q3. The sample for the Regional Employment Survey consists of 174,000 households, making it the largest and most representative national employment-related statistical survey. Data from this survey can therefore be used to draw a relatively accurate picture of recent trends in the employment of care workers. The 3-digit occupation and industry variables are used to examine the distribution of certain occupations by industry and employment status and to look at working hours, wages, and other working conditions for waged workers. Data are utilized in this study from 2008 to 2011 Q3 to calculate total employment for care workers over the past few years, and 2010 Q3 data are used to analyze the personal characteristics and working conditions of care workers. Data from 2011 are not considered in the analysis of personal characteristics because the survey period included the major Korean holiday of

Chuseok, which may possibly have skewed the distribution of employment by personal characteristics.

The first wave for KLoWF was conducted in 2007, followed by additional waves in 2008, 2010 and 2011, when data from the first three waves were available for use. The sample size for this survey is 8,500 households and 10,000 women. While the survey is limited by its design in that the sample consists only of women, it is useful in that a wide variety of job-related information that is not collected in the Regional Employment Survey is collected in the KLoWF. This survey is particularly useful in examining the causes of informal employment since it collected detailed information on enrollment in social insurance programs – the criteria used for determining informality in employment – with separate questions on whether the employer provides social insurance coverage and on whether individual workers make the choice to enroll or not enroll in social insurance programs. Through this survey, public, private for-profit, and private nonprofit employers can be examined separately, making it possible to observe the effect that the nature of the business has on informal employment. Data in this study are from the third wave, for the samples of the first and second waves include much fewer care workers.

Characteristics of Persons Employed as Care Workers and Working Conditions of Female Care Workers

Total Employment and Employment Type

Total employment for the care service occupations analyzed in this study increased steadily from 567,000 in 2008 Q3 to 761,000 in 2011 Q3, accounting for 2.5% of all employed persons in 2008 and a higher 3.2% in 2011. Some differences are observed, however, in the trends for each occupation. While social welfare professionals and medical and

welfare service workers have continuously increased, kindergarten teachers and domestic and childcare helpers have decreased. Administrative data from 2010 on kindergarten teachers puts their number at 36,461, which is much lower than the number obtained through the Regional Employment Survey. Thus, this decrease in the number of kindergarten teachers may be a result of better accuracy in statistical data. Domestic and childcare helpers include domestic workers in private households, and the decline of this premodern occupation is aligned with the direction of change in the employment structure. The decrease in the number of domestic and childcare helpers may also be due to the conversion of some of these workers into medical and welfare service workers as pubic social welfare services have expanded. The fact that the increase in the employment of care workers was led by growth in the number of social welfare professionals and medical and welfare service professionals also reflects this reality.

The distribution of care workers by industry subsector differs substantially by occupation. Most social welfare professionals are employed in social work activities (83.3%), while 6.2% work in business

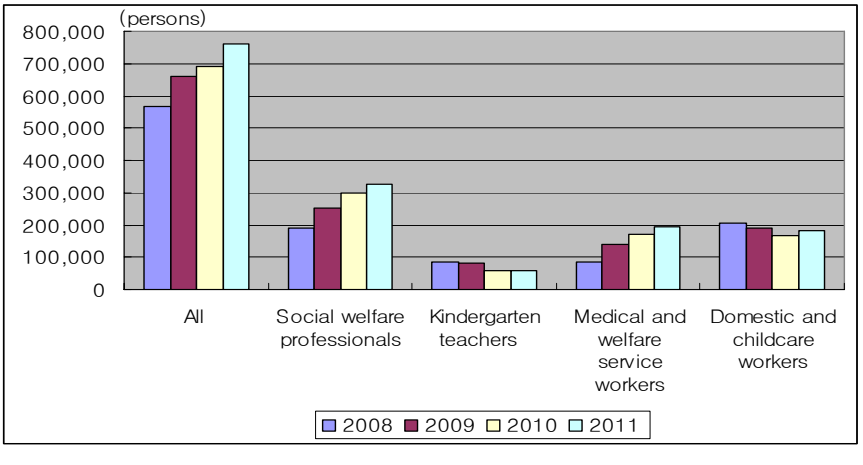


Figure 2-1. Total employment in care service occupations (2008～2011). From *Regional Employment Survey*, by National Statistical Office of Korea, each year Q3 raw data.

support services and 5.8% in education. This distribution can be attributed to the fact that the job placement activities carried out by vocational counselors are categorized as business support activities while childcare teachers and counseling teachers are categorized as social welfare professionals. Most kindergarten teachers work in the education subsector (97.8%). For medical and welfare service workers, 70.2% work in the industry subsector of social work activities, while 11.7% engage in health activities, 9.1% in other personal services, and 6.1% in business support activities. This industry distribution of medical and welfare service workers most likely reflects that private nursing-aid services provided by caregivers are categorized as other personal services and that worker dispatch falls into the category of business support activities. Of all domestic and childcare helpers, 81.0% are employed in the private household activities subsector, while 7.1% are employed in social work activities and 6.7% in business support activities. This distribution of domestic and childcare helpers may stem from their employment not only by private households but also by child care facilities in the social work activities subsector and by worker dispatch agencies in the business support activities subsector.

The distribution of care workers by employment status also differs very significantly by occupation. Table 2-2 sets forth the distribution of

Table 2-1. *Care Worker Distribution by Industry (2010 Q3)*

(Unit: 1,000 persons, %)

	Business support	Public administration	Education	Health	Social work	Other personal	Private household	Total
Social welfare professionals	6.2	3.1	5.8	1.5	83.3	0.1	-	(100.0)
Kindergarten teachers	-	-	97.8	2.2	-	-	-	(100.0)
Medical and welfare service workers	6.1	1.9	0.6	11.7	70.2	9.1	0.4	(100.0)
Domestic and childcare helpers	6.7	1.7	1.4	0.1	7.1	2.0	81.0	(100.0)

Note. From *Regional Employment Survey*, by National Statistical Office of Korea, 2010 Q3 raw data.

Table 2-2. *Care Worker Distribution by Employment Type and Proportion of Women (2010 Q3)*

(Unit: %)

	Care worker distribution by employment status				Proportion of women for each employment status			
	Social welfare profes-sionals	Kinder-garten teachers	Medical and welfare service workers	Domestic and childcare helpers	Social welfare profes-sionals	Kinder-garten teachers	Medical and welfare service workers	Domestic and childcare Helpers
Regular workers	69.5	88.5	38.5	4.1	86.6	99.0	92.5	99.7
Tempo-rary workers	16.7	10.1	46.0	34.3	93.3	100.0	94.4	99.0
Daily workers	0.2	-	13.0	27.1	96.3	-	91.7	98.7
Employ-ers	11.0	0.9	0.8	0.6	79.0	90.5	48.7	97.4
Self-employed	2.1	0.4	1.7	33.4	38.3	100.0	93.8	97.9
Unpaid family workers	0.5	-	0.2	0.6	82.3	-	100.0	80.2
Total	100.0	100.0	100.0	100.0	85.9	99.1	93.0	98.5

Note. From *Regional Employment Survey*, by National Statistical Office of Korea, 2010 Q3 raw data.

care workers by employment status for each of the four care worker occupations along with the proportion of female care workers employed in each employment type. A large proportion of higher-level social welfare professionals and kindergarten teachers are regular workers, while lower-level medical and welfare service workers and domestic and childcare helpers represent a higher proportion of temporary and daily workers.

Among the higher-level occupational groups, there is a higher proportion of employers among social welfare professionals than for kindergarten teachers, most likely because social welfare facility director positions are frequently filled with social welfare professionals. The proportion of regular workers is much higher for kindergarten teachers than for any other occupation examined in this study at 88.5%, while 10.1% of the kindergarten teachers are temporary workers and none

are daily workers. Only a very small proportion of kindergarten teachers were found to be employers or self-employed. The highest proportion of temporary workers consists of medical and welfare service workers at 46.0%, which is higher than the proportion of regular workers for this occupation. Medical and welfare service workers are engaged in daily work at 13.0%, a proportion that is only lower than that for domestic and childcare helpers. As for the latter, temporary workers and self-employed persons each account for more than one-third of all workers in this occupation and daily workers account for 27.1%, while the proportion of regular workers or employers is extremely low. These circumstances exist because over 80% of all domestic and childcare helpers work in private households that categorize them as being self-employed.

The most prominent characteristic of care workers jobs is that the proportion of women in these jobs is very high. Table 2-2 also sets forth data on the proportion of women for each employment status in the helping occupations. The overall proportion of women is lowest at 85.9% among social welfare professionals, while kindergarten teachers are predominantly female at 99.1%. The proportion of women by employment status for each of the occupations differs, however, from overall proportions. Here, the proportion of women among social welfare professionals who are employers is 79.0%, and women account for only 38.3% of self-employed social welfare professionals. For kindergarten teachers, too, the data show that there are some men among the kindergarten teachers who are employers.

For medical and welfare service workers, the overall proportion of women is 93.0%, which reveals that this occupation has the highest proportion of men after social welfare professionals. Still, here, too, there are not many men in this occupation as a whole, as was the case regarding the other occupations, in which the proportion of men is relatively higher among those who are employers. Domestic and childcare helpers are also overwhelmingly female with the overall

proportion of women at 98.5%, and with the exclusion of the small number of unpaid family workers, the proportion of women in this occupation exceeds 90% for all other employment statuses.

Personal Characteristics and Working Conditions of Female Care Workers

So far, it was revealed that the proportion of women in social services is predominantly high. When the scope of examination is narrowed to include only wage workers, this phenomenon is all the more pronounced. In the Regional Employment Survey, only wage workers were considered in a specific survey on wages, working hours, years of consecutive service, and other employment characteristics. Thus, only female wage workers are focused on in analyzing the characteristics of this workforce and their working conditions.

Age, years of experience, and years of consecutive service. In a single table, Table 2-3 brings together data on indicators related to personal characteristics and working conditions for female care workers and also for all female workers. Average age, average years of consecutive service, and average years of experience are used as indicators for personal characteristics, while the working conditions indicators include monthly average wage, hourly wage, usual weekly working hours, and the proportion of workers who are employed for fewer than 30 hours per week. First, the personal characteristics of these female workers are discussed.

There is quite a large difference in the average age for female workers in the higher-level and in the lower-level care service occupations. The average age of domestic and childcare helpers is 53.2 years, while that of medical and welfare service workers is also above 50 at 50.1. Meanwhile, the average age for the higher-level occupations consisting of social welfare professionals and kindergarten teachers is very low at 34.6 and 29.7, respectively.

A more detailed analysis reveals that the average age of social welfare professionals is higher for temporary and daily workers than for regular workers, which demonstrates that while regular workers are hired from among younger workers through formal channels of recruitment, the same cannot be said for temporary and daily workers. Workers in the other higher-level occupation of kindergarten teachers are, on average, in their twenties. That total employment for kindergarten teachers has not been increasing indicates, however, that many kindergarten teachers start working while they are young right after they graduate from school or obtain necessary qualifications, but then exit from this labor market upon marriage or during the early years of childbirth and child rearing.

In the lower-level occupations, it can be observed that most medical and welfare service workers are middle-aged or older and, as was the case for other occupations, the average age is higher for temporary and daily workers than for regular workers. The average age is highest for domestic and childcare helpers among the four occupational groups of interest to this study. For temporary workers in this occupation, in particular, the average age is 55.7 years, which is even higher than that of daily workers.

In contrast to the much higher average age in the lower-level occupations vis-à-vis the higher-level occupations, experience and consecutive service in the lower-level occupations are much shorter than in the higher-level occupations. The Regional Employment Survey measured years of experience through the question, "How many years in total have you worked in this occupation, in all your workplaces combined?" Therefore, the number for years of experience is usually higher than that for years of consecutive service. Kindergarten teachers, who are lowest in terms of average age, are highest when it comes to average years of experience and years of consecutive service, and social welfare professionals come in second. Regarding the lower-level occupations, the data reveal that average years of experience and years of consecutive service are higher for domestic and childcare helpers than for

Table 2-3. *Employment-related Characteristics and Working Conditions for All Female Workers and for Female Care Workers*

(Unit: years old, years, 10,000 KRW, KRW, hours, %)

Occupation	Employment status	Average age	Average years of consecutive service	Average years of experience	Monthly average wage	Hourly wage	Usual weekly working hours	Proportion of workers who work for fewer than 30 hours per week
All female workers	Regular	36.5	5.3	6.6	180.7	9481.0	44.9	2.0
	Temporary	42.0	2.2	3.6	107.2	6663.9	41.1	19.5
	Daily	46.9	1.7	4.3	70.4	5032.7	35.8	35.8
	Total	39.3	4.0	5.4	146.5	8140.8	42.8	10.9
Social welfare professionals	Regular	34.0	3.2	4.8	136.3	7136.1	44.6	1.3
	Temporary	36.7	1.5	3.1	95.9	6538.4	37.7	20.9
	Total	34.6	2.9	4.5	127.7	7011.1	43.1	5.4
Kindergarten teachers	Regular	29.6	4.0	5.4	158.4	8305.9	45.9	0.9
	Temporary	30.6	1.3	2.8	119.4	7009.0	37.9	13.8
	Total	29.7	3.7	5.1	154.3	8179.6	45.1	2.2
Medical and welfare service workers	Regular	48.6	2.3	2.9	104.7	5945.1	42.7	16.6
	Temporary	50.8	1.5	2.0	76.8	5421.4	35.3	41.7
	Daily	51.9	0.9	2.1	75.9	5114.4	38.6	45.1
	Total	50.1	1.7	2.4	87.6	5586.9	39.6	32.3
Domestic and childcare helpers	Regular	45.7	2.4	2.8	111.3	7089.6	41.5	17.6
	Temporary	55.7	2.1	3.3	71.9	4632.5	38.4	29.3
	Daily	51.2	2.3	4.6	77.4	6100.5	33.0	42.9
	Total	53.2	2.2	3.8	76.6	5395.3	36.4	34.2

Note. Data have been left out from the table when total employment is less than 0.5% for any particular occupation's employment status. From *Regional Employment Survey*, by National Statistical Office of Korea, 2010 Q3 raw data.

medical and welfare service workers. This difference can, in part, be explained by the recent rapid growth in employment for social welfare professionals and medical and welfare service workers. Compared to other occupations with relatively stable total employment, this influx of new workers has pulled down the average number of years of experience and years of consecutive service in these two occupations.

A comparison of age, experience, and consecutive service for medical and welfare service workers and domestic and childcare helpers reveals that workers in the lower-level occupations have usually not

worked in these occupations for long periods of time. Instead, they have moved into this occupation from other jobs or have reentered the labor market after previously retiring, which indicates that positions in these occupations very often serve as dead-end jobs for middle-aged and older women. Years of consecutive service and experience differ according to employment status. The number of years of consecutive service is higher for regular workers in all four occupations, while the number of years of experience, in some cases, is higher for daily workers. In particular, daily workers among social welfare professionals and domestic and childcare helpers have significantly more experience than have their regular and temporary counterparts. For medical and welfare service workers, too, daily workers have more experience on average than have temporary workers, which demonstrates, with the exception of kindergarten teachers, that a layer of insecure employment involving long-term daily work has formed amidst all other care service workers.

While differences do exist among the four social service occupations, overall, these workers have fewer years of experience and consecutive service than the average for all female workers. Compared to the data on average age, experience, and consecutive service on all female workers set forth in Table 2-3, it is revealed that workers in all four occupations have fewer years of experience and consecutive service. Meanwhile, the average age of social welfare professionals and kindergarten teachers is lower than the average age of all female workers, whereas that of medical and welfare service workers and domestic and childcare helpers is much higher.

Wage and working conditions for female care workers. The poor working conditions of female care workers can be very clearly seen in their wage levels. Kindergarten teachers, who in Table 2-3 were shown to have the highest level of wages among care workers, receive a monthly average wage of 1.54 million KRW, while social welfare professionals receive a mere 1.27 million KRW. The monthly average

wage for medical and welfare service workers is 870,000 KRW, and for domestic and childcare helpers, the monthly average wage is 760,000 KRW. It can be seen that the monthly average wage level for all female workers is 1.46 million KRW, so the average wage for even social welfare professionals who are in a higher-level occupation falls far below the average for all women.

Monthly average wage is determined by hourly wage and working hours. In terms of hourly wage, the results were aligned with those for monthly average wage, in which kindergarten teachers have the highest hourly wage, followed by social welfare professionals, medical and welfare service workers, and then domestic and childcare helpers. Those in occupations with a higher hourly wage also worked more hours per week. While some differences do become apparent in a more detailed examination of the different employment statuses for each occupation, overall, hourly wage and working hours both are attributed to the gap in monthly income among the four care worker occupations.

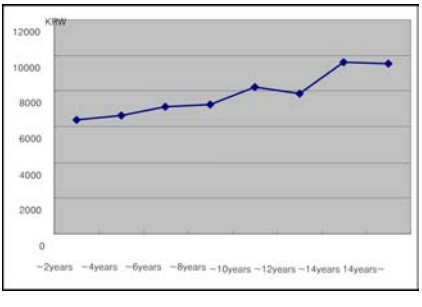
Within each occupation, wages and working conditions also differ slightly by employment status. For social welfare professionals and kindergarten teachers, regular workers receive a higher hourly wage than their temporary counterparts and also work more hours, which is also true for medical and welfare service workers and domestic and childcare helpers. In these cases, regular workers have a higher hourly wage and more usual working hours than temporary or daily workers in these occupations. It should be noted, however, that there is a slight difference between temporary and daily workers.

Among medical and welfare service workers, temporary workers have a higher hourly wage than do daily workers, but daily workers have more usual working hours. As a result, there is barely any difference between the monthly wages for temporary and daily workers in this occupation. Domestic and childcare helpers are unique in that the hourly wage for daily workers is much higher than that for temporary workers. However, temporary workers work more hours, so the

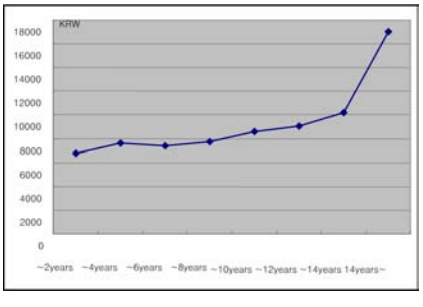
monthly wage gap between temporary and daily workers in this occupation somewhat narrows. This discrepancy implies that there is a substantial difference in the labor market for temporary workers and for daily workers among domestic and childcare helpers. Temporary workers in this occupation have relatively longer working hours at a wage level that is close to minimum wage, while daily workers are paid at an hourly wage level that is about 15% higher than the wage level for temporary workers, but work fewer hours. As a result, both groups receive similar amounts in terms of monthly wages.

Low hourly wages as well as a small number of working hours push down income levels for care service workers, which reveals that the task

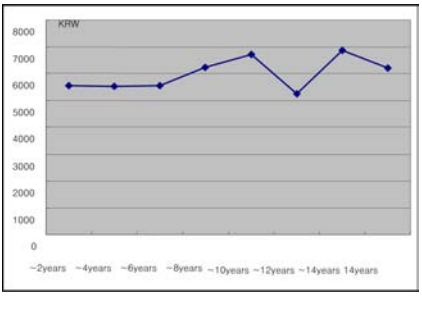
A. Social welfare professionals



B. Kindergarten teachers



C. Medical and welfare service workers



D. Domestic and childcare helpers

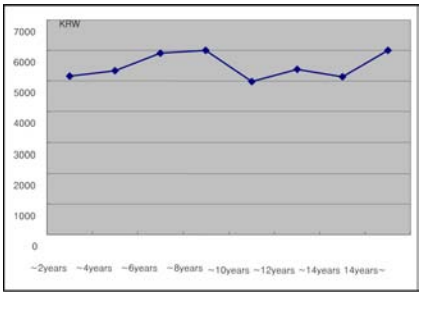


Figure 2-2. Hourly wage trends for care workers by years of experience. From *Regional Employment Survey*, by National Statistical Office of Korea, 2010 Q3 raw data.

of improving working conditions in this industry is very complex. While differences do exist among the industry subsectors, short working hours mostly affect lower-level occupations. The proportion of workers who work for fewer than 30 hours per week is 6.7% among the social welfare professionals and only 3.0% for kindergarten teachers, whereas this proportion jumps to 33.1% for medical and welfare service workers and 35.7% for domestic and childcare helpers. This high proportion of temporary and daily workers further exacerbates problems faced by the two lower-level occupations. While there is some variance among the different occupations, the proportion of workers who work fewer than 30 hours a week is much higher for temporary and daily workers than for regular workers. Even when compared with the average for all female workers as shown in Table 2-3, it can be observed that the average number of working hours is much lower for medical and welfare service workers and for domestic and childcare helpers, and that there is a very high proportion of these employees who work fewer than 30 hours per week.

The low income of the lower-level care service occupations is not just a result of low wage levels, but also because is no remuneration for experience or years of consecutive service for these occupations. The hourly wage trend for each occupation by years of experience is set forth in Figure 2-2, which reveals that the hourly wage for social welfare professionals and kindergarten teachers increases with experience, while that for medical and welfare service workers, and for domestic and childcare helpers remains stagnant at about 6,000 KRW and 5,500 KRW, respectively, due to the perception that medical and welfare service workers and domestic and childcare helpers do not perform jobs that require any special experience or skills. As a result, workers have less incentive in these occupations to build skills while working for the longer term, and these jobs simply continue to exist as low-wage low-quality jobs.

Informal Employment of Female Care Workers Based on Social Insurance Enrollment

Do More Care Workers Engage in Informal Employment?

As has been seen, care workers endure much poorer working conditions than all female workers on average. In terms of social insurance enrollment, however, the enrollment rate for female care workers is found to be higher than that for all female wage workers. Table 2-4 sets forth data obtained through the KLoWF on the social insurance enrollment rates for all female wage workers and for all female care workers. The KLoWF separately asked whether the employer offers social insurance coverage and whether the individual has taken up this employer-offered social insurance coverage. Table 2-4 provides data on enrollment rates in which social insurance coverage is offered by the employer and taken up by individual workers.[1]

Among the care service occupations, the issue of social insurance enrollment, the indicator of informality, is problematic mostly in terms of the domestic and childcare helpers, for whom the social insurance enrollment rate is a mere 6.2%. These workers are mostly employed in private households, so if the issue of informal employment is to be resolved in all care services, it is necessary to approach these domestic and childcare helpers with a different set of policies than those directed at the other occupational groups. The next section on policy tasks provides a detailed discussion on such approaches.

[1] Indefinite-term regular workers in the public administration and defense and compulsory social security industry and indefinite-term regular workers in government, local autonomies and national and public schools (where "all wage workers" includes private school employees) are covered not by the National Pension Plan but by separate pension schemes, and are also excluded from employment insurance. Therefore, these workers have been excluded from this analysis on social insurance enrollment while workers in private households are included in this analysis, for the purpose of this study is to examine the informality of employment.

Table 2-4. *Social Insurance Enrollment Rates for All Female Wage Workers and All Female Care Workers*

(Unit: %)

			Employment insurance	Health insurance	National Pension Plan	Industrial Accident Insurance	1 or more
All female wage workers	All		61.3	61.4	60.3	56.7	62.7
	Employment type	Indefinite-term regular	73.9	74.2	73.2	69.9	75.0
		Indefinite-term non-regular	55.3	55.5	54.4	49.7	56.9
		Temporary or daily	29.9	28.8	27.9	28.5	32.2
	Part-time?	Full-time	74.8	74.9	74.7	70.4	76.0
		Part-time	34.0	34.0	31.4	29.7	36.0
All female care workers	All		68.5	67.9	66.0	58.7	70.0
	Occupation	Social welfare professionals	83.1	82.5	80.5	71.9	83.1
		Kindergarten teachers	91.8	92.8	92.8	84.8	92.8
		Medical and welfare service workers	67.0	65.0	60.7	53.2	71.9
		Domestic and childcare helpers	6.2	6.2	6.2	6.2	6.2
	Employment type	Indefinite-term regular	78.0	76.0	75.6	65.3	78.4
		Indefinite-term non-regular	72.3	72.9	69.2	63.6	75.2
		Temporary or daily	22.8	22.8	21.7	19.1	22.8
	Part-time?	Full-time	78.3	77.6	75.9	68.5	79.0
		Part-time	41.3	40.6	37.8	31.1	44.8

Note. From *KWDI, KLoWF Third Wave*.

Causes of Informal Employment: Employer Noncompliance or Workers' Choice?

When social insurance subscription is used as the criterion for determining informality of employment, it is usually argued that workers themselves may be making the choice either to enroll or not enroll in social insurance programs. These arguments are based on the perception that workers may avoid enrolling in such programs to bring more money

home in the short-term, that potential pension payments are expected to be lower in comparison to the high premiums for the National Pension Plan, and that health insurance coverage can be accessed while maintaining informal employment by subscribing to the health insurance program as a dependent of someone else in the household. Such claims are often heard during onsite visits to care service organizations or construction sites, and there is no denying that, logically, these strategies are quite possible. There are indeed some examples of such attempts to avoid enrolling in social insurance programs. It is difficult, however, to explore policy directions on the basis of a "possible" explanation. What must first be done is to use data to verify the degree of workers' avoidance of social insurance enrollment due to the aforementioned reasons and then look for appropriate solutions.

The KLoWF can be used as the basis for answering the question of whether social insurance enrollment is indeed being avoided by the workers, for the survey has separate questions regarding whether the employer offers social insurance coverage and whether the individual has taken up this coverage. Table 2-5 and Table 2-6 provide information on social insurance coverage offers and on worker enrollment in offered coverage for each care service occupation.

A comparison between Table 2-4 and Table 2-5 reveals that the social insurance offer rates in Table 2-5 are slightly higher than the enrollment rates in Table 2-4. By occupation, we find that there is no difference in the rates for kindergarten teachers and not much of a difference in the rates for social welfare professionals, while there is a slight difference between the offer rate and the enrollment rate for medical and welfare service workers and for domestic and childcare helpers. Looking just at those workers enrolled in one or more social insurance programs, the difference between the offer rate and the total enrollment rate is 0.4%p for social welfare professionals, 4.6%p for medical and welfare service workers, and 3.0%p for domestic and childcare helpers. In terms of workers in different employment types

Table 2-5. *Social Insurance Offer Rates for Each Care Service Occupation by Employment Type and Part-time/Full-time Status*

(Unit: %)

			Employ-ment insurance	Health insurance	National Pension Plan	Industrial Accident Insurance	1 or more
All	All		70.3	69.9	67.7	60.8	71.7
	Employment type	Indefinite-term regular	78.0	77.4	76.5	67.2	78.8
		Indefinite-term non-regular	74.2	73.8	70.2	65.7	76.4
		Temporary or daily	31.2	31.2	30.1	22.3	31.2
	Part-time?	Full-time	79.3	79.3	77.3	70.2	80.1
		Part-time	46.2	43.7	41.0	34.5	48.8
Social welfare professionals	All		83.1	83.5	80.9	74.3	83.5
	Employment type	Indefinite-term regular	84.8	85.6	83.6	77.1	85.6
		Indefinite-term non-regular	84.3	84.3	81.0	74.1	84.3
		Temporary or daily	29.6	29.6	29.6	29.6	29.6
	Part-time?	Full-time	89.4	89.8	86.8	80.4	89.8
		Part-time	45.8	45.8	45.8	39.3	45.8
Kindergarten teachers	All		91.8	92.8	92.8	84.8	92.8
	Employment type	Indefinite-term regular	98.2	100.0	100.0	85.8	100.0
		Indefinite-term non-regular	96.1	96.1	96.1	96.0	96.1
		Temporary or daily	0.0	0.0	0.0	0.0	0.0
	Part-time?	Full-time	92.8	93.9	93.9	85.3	93.9
		Part-time	78.3	78.3	78.3	78.3	78.3
Medical and welfare service workers	All		72.8	69.9	65.6	55.7	76.5
	Employment type	Indefinite-term regular	82.7	74.9	74.9	60.4	82.7
		Indefinite-term non-regular	71.9	70.4	63.6	59.2	78.5
		Temporary or daily	60.1	60.1	57.1	36.8	60.1
	Part-time?	Full-time	84.8	82.8	79.7	69.1	86.9
		Part-time	59.7	55.1	49.6	39.7	65.0

(table continues)

			Employ-ment insurance	Health insurance	National Pension Plan	Industrial Accident Insurance	1 or more
Domestic and childcare helpers	All		9.2	9.2	9.2	9.2	9.2
	Employment type	Indefinite-term regular	2.4	2.4	2.4	2.4	2.4
		Indefinite-term non-regular	10.6	10.6	10.6	10.6	10.6
		Temporary or daily	13.6	13.6	13.6	13.6	13.6
	Part-time?	Full-time	8.8	8.8	8.8	8.8	8.8
		Part-time	10.6	10.6	10.6	10.6	10.6

Note. From *KWDI, KLoWF Third Wave.*

and those engaging in part-time work, the figures for workers in this variety of situations are rather similar to those of Table 2-4, with the exception of domestic and childcare helpers, for whom the social insurance offer rate is quite higher than the overall enrollment rate for part-time workers. It is difficult, however, to place particular significance on this apparent anomaly, for the sample size becomes far too small in further detailed subgroups.

Enrollment rates and offer rates are pretty much similar because most workers enroll in social insurance programs if enrollment is offered by the employer, as is shown clearly in Table 2-6. While the social insurance take-up rate (when offered by the employer) is lower for some temporary and daily medical and welfare service workers and for some part-time domestic and childcare helpers, it can even be found, overall, that over 90% of domestic and childcare helpers enroll in social insurance programs when coverage is offered by the employer.

Of the total social insurance nonsubscription rates, the difference between the offer rate and the take-up rate represents the portion of nonsubscription that can be attributed to workers' choice, while the total nonsubscription rate minus this difference represents nonsubscription due to institutional exclusion, in which workers are

Table 2-6. *Social Insurance Take-Up Rates (When Offered by Employer) for Each Care Service Occupation by Employment Type and Part-time/Full-time Status*

(Unit: %)

			Employ-ment insurance	Health insurance	National Pension Plan	Industrial Accident Insurance	1 or more
All	All		97.7	97.5	97.8	97.9	99.4
	Employment type	Indefinite-term regular	100.0	98.1	98.9	97.1	100.0
		Indefinite-term non-regular	97.5	98.9	98.8	98.7	98.9
		Temporary or daily	78.9	78.9	78.0	96.7	97.2
	Part-time?	Full-time	98.9	97.8	98.2	98.4	100.0
		Part-time	91.8	95.8	95.5	94.4	96.2
Social welfare professionals	All		100.0	98.8	99.5	97.9	99.5
	Employment type	Indefinite-term regular	100.0	97.6	99.0	96.1	99.0
		Indefinite-term non-regular	100.0	100.0	100.0	100.0	100.0
		Temporary or daily	100.0	100.0	100.0	100.0	100.0
	Part-time?	Full-time	100.0	98.7	99.5	97.7	99.5
		Part-time	100.0	100.0	100.0	100.0	100.0
Kindergarten teachers	All		100.0	100.0	100.0	100.0	100.0
	Employment type	Indefinite-term regular	100.0	100.0	100.0	100.0	100.0
		Indefinite-term non-regular	100.0	100.0	100.0	100.0	100.0
		Temporary or daily	-	-	-	-	
	Part-time?	Full-time	100.0	100.0	100.0	100.0	100.0
		Part-time	100.0	100.0	100.0	100.0	100.0
Medical and welfare service workers	All		92.2	93.3	92.9	96.1	92.6
	Employment type	Indefinite-term regular	100.0	96.5	96.5	95.7	100.0
		Indefinite-term non-regular	91.9	96.4	96.0	95.5	92.6
		Temporary or daily	76.3	76.3	75.1	100.0	76.3
	Part-time?	Full-time	94.4	92.6	92.3	98.0	94.6
		Part-time	88.7	94.5	93.9	92.0	89.6

(table continues)

			Employ-ment insurance	Health insurance	National Pension Plan	Industrial Accident Insurance	1 or more
Domestic and childcare helpers	All		92.2	92.2	92.2	92.2	92.2
	Employment type	Indefinite-term regular	100.0	100.0	100.0	100.0	100.0
		Indefinite-term non-regular	100.0	100.0	100.0	100.0	100.0
		Temporary or daily	80.2	80.2	80.2	80.2	80.2
	Part-time?	Full-time	100.0	100.0	100.0	100.0	100.0
		Part-time	63.3	63.3	63.3	63.3	63.3

Note. From *KWDI, KLoWF Third Wave*.

excluded from coverage by law, and employer noncompliance. The fundamental issue for workers employed by private households is the issue of institutional exclusion, while noncompliance is a greater issue for other workers.

Table 2-7 presents the proportion of informal employment in each occupation and the degree to which this informal employment is due to institutional exclusion, employer noncompliance or workers' choice. The table indicates that most informal employment does not stem

Table 2-7. *Proportion of Care Workers Engaging in Informal Employment in Each Occupational Group (Workers Excluded from all Social Insurance Programs)*

(Unit: %)

	Social and welfare professionals	Kindergarten teachers	Medical and welfare service workers	Domestic and childcare helpers	Total
Proportion of informal employment	16.9	7.2	28.1	93.8	30.0
Informal employment due to institutional exclusion[(a)] and employer noncompliance	16.5	7.2	23.5	90.8	28.3
Informal employment due to workers' choice	0.4	0.0	4.6	3.0	1.7

Note. (a) For domestic and childcare helpers who work mostly in private households, institutional exclusion is a major factor, while employer noncompliance is the major factor in the informal employment of other occupations. From *KWDI, KLoWF Third Wave*.

from workers' choice, but rather from institutional exclusion and employer noncompliance. Of all care workers, 30.0% are engaged in informal employment; 28.3% do so because they are institutionally excluded from social insurance coverage or because their employers are neglecting their obligations, while only 1.7% of care workers engage in informal employment by their own choice. The highest proportion of workers who choose not to subscribe to social insurance programs are medical and welfare service workers, but even here, the proportion of workers excluded from social insurance coverage either institutionally or by employer noncompliance is more than five times higher.

Determinants of Social Insurance Enrollment for Care Service Occupations

It has been seen that occupation, employment type, and part-time/full-time status all strongly influence social insurance enrollment (i.e., informal employment). The characteristics of care worker jobs can also impact informal employment. It is already well known that informal employment is affected significantly by workplace size and also by industry. Additionally, KLoWF collects information on who owns the workplace. Because care workers are particularly concentrated in the public sector, nonprofit organizations, and private households, it is also necessary to examine how job characteristics affect informal employment.

Table 2-8 reveals how care worker social insurance enrollment rates differ according to job characteristics. As is the case for social insurance enrollment rates for all workers, industry, workplace size, and workplace characteristics all do impact social insurance enrollment rates for care worker jobs, but aside from the impact of industry, the findings are quite different from general expectations. In terms of industry, the social insurance enrollment rate is clearly lower in the personal services subsector and is "0" in private households. Meanwhile, in education,

Table 2-8. Social Insurance Enrollment Rates of Care Service Occupations According to Job Characteristics

(Unit: %)

		Employment insurance	Health insurance	National Pension Plan	Industrial accident insurance	1 or more
Industry subsector	Education	78.9	79.5	79.5	74.3	79.5
	Social work	80.8	78.8	75.8	66.3	82.9
	Personal services	25.2	25.2	23.9	17.3	25.2
	Private households	0.0	0.0	0.0	0.0	0.0
	Other	76.0	81.3	76.0	74.1	81.3
Workplace size	Fewer than 5	46.5	47.2	46.7	40.1	47.2
	Fewer than 10	84.4	84.1	81.3	75.9	85.7
	Fewer than 30	80.8	75.8	71.6	61.5	85.0
	30 or more	60.7	60.7	60.7	52.5	60.7
Workplace ownership type	For-profit business	71.6	71.5	69.2	60.6	73.3
	Public sector	61.6	58.5	55.1	54.3	65.0
	Nonprofit organization	79.2	77.6	77.6	71.0	79.2
	Private household	0.0	0.0	0.0	0.0	0.0

Note. From *KWDI, KLoWF Third Wave.*

social work activities, and other industry subsectors (the business services, public administration and defense, and compulsory social security subsectors are combined as "other industry subsectors" due to sample size), the social insurance enrollment rates are higher than the average for all care worker jobs.

By workplace size, the social insurance enrollment rate is lowest for small workplaces with fewer than five workers. It is interesting that the enrollment rate for workplaces with 30 or more workers (all workplaces with 30 or more workers are combined into one category in consideration of sample size) is lower than that for workplaces with five to 29 workers. This phenomenon may be due to the influence of other variables related to workplace size and will therefore be validated by analyzing determinants of social insurance coverage provision and

social insurance enrollment (in which the offer rate and enrollment rate are considered respectively).

The findings also slightly diverge from expectations for enrollment rates in terms of workplaces with different types of ownership. As expected, when households are the employers (i.e. for domestic work in private households), the social insurance enrollment rate is "0", while the enrollment rate is highest in nonprofit organizations. It is surprising, however, that the social insurance enrollment rates are quite low in public sector workplaces owned by the government, local autonomies, government-invested and government-funded organizations and public corporations, and in national and public schools. The low enrollment may be because this analysis excludes survey data on public sector indefinite-term regular workers and only analyzes public sector indefinite-term non-regular workers and temporary and daily workers.

For a more comprehensive analysis that takes into account all such considerations, all of the aforementioned worker characteristics can be observed including occupation, employment type and part-time/full-time status, and all job characteristics through a logit analysis that examines factors that impact social insurance coverage offerings and enrollment (Table 2-9). The dependent variable for social insurance offerings is set at "1" when employers offer at least one social insurance program and "0" when no social insurance program coverage is offered at all; and the dependent variable for enrollment is "1" when the worker enrolls in at least one social insurance program and "0" when the worker enrolls in none. The effect of each independent variable is presented in this analysis in the form of a marginal effect, which can be interpreted as the difference in social insurance offer rates and enrollment rates between each independent variable and the reference group with which it is compared. Unlike in the previous technical analysis, this particular analysis excludes domestic work and work performed in private households for which the social insurance enrollment rate is 0%.

Table 2-9. *Logit Analysis Results on Social Insurance Offerings and Enrollment (Marginal Effects)*

Variable	Social insurance offerings		Social insurance enrollment	
(Reference group: Social and welfare professionals)				
Kindergarten teachers	0.073	(0.077)	0.0794	(0.086)
Medical and welfare service workers	-0.166	(0.089)*	-0.1631	(0.094)*
Domestic and childcare helpers	-0.501	(0.153)***	-0.5808	(0.143)***
(Reference group: Indefinite-term regular workers)				
Indefinite-term non-regular workers	-0.053	(0.058)	-0.0444	(0.064)
Temporary and daily workers	-0.169	(0.115)	-0.2035	(0.125)
(Reference group: Full-time workers)				
Part-time workers	-0.179	(0.070)**	-0.2304	(0.077)***
(Reference group: Workplaces with 30 or more workers)				
Workplaces with 1~4 workers	-0.299	(0.132)**	-0.1669	(0.121)
Workplaces with 5~9 workers	-0.053	(0.082)	0.0590	(0.073)
Workplaces with 10~29 workers	0.031	(0.072)	0.1045	(0.062)*
(Reference group: Social work activities)				
Education				
Other personal services	-0.182	(0.113)	-0.1932	(0.122)
Other	-0.104	(0.110)	-0.2059	(0.141)
(Reference group: Public sector employers)	-0.037	(0.106)	-0.0067	(0.100)
For-profit business	0.018	(0.083)	0.0420	(0.090)
Nonprofit organization	0.053	(0.075)	0.1262	(0.066)*
Number of observations	260		260	
pseudo-R^2	0.263		0.314	

Note. Significant at p = 0.1 for *, p=0.05 for **, p=0.01 for ***. From *KWDI, KLoWF Third Wave.*

While the overall pattern in Table 2-9 is similar to that found in the previous technical analysis on the impact of individual variables on social insurance enrollment, there is a distinct difference in terms of the statistical significance of the findings. Looking first at occupation, which is the main interest, it was found that the social insurance offer rate is 50.1% lower for domestic and childcare helpers in comparison to that for social welfare professionals, and it is 16.6% lower for medical and welfare service workers. There is no statistically significant difference in the social insurance offer rate for kindergarten teachers as compared with that for social welfare professionals. The effect of

occupation on social insurance enrollment rates slightly differs in size with the effect of occupation on the offer rates, but the two are essentially quite similar.

It was surprising to find that employment type does not have a significant effect on the social insurance offer rates and enrollment rates, especially because the previous technical analysis revealed a considerable difference between the offer rates and the enrollment rates for workers with indefinite-term contracts and those for temporary and daily workers. This is perhaps due to the close relationship between employment type and part-time/full-time status. In fact, when the variable for part-time/full-time status is excluded from the estimation, the social insurance offer rate and enrollment rate for temporary and daily workers is found to be significantly lower than the rates for indefinite-term regular workers.

It seems, therefore, that with respect to employment status, it is part-time/full-time status that has the greatest impact on the informality of employment. For medical and welfare service workers and domestic and childcare helpers, in particular, the proportion of part-time work is much higher and the social insurance offer rates and enrollment rates are much lower. With all other factors controlled, the offer rate for part-time workers is 17.9% lower than that for full-time workers, while the enrollment rate is 23.4% lower. In the previous technical analysis, the effect of workplace size slightly contradicted expectations, but in this statistical analysis it was found that, with the exception of workplaces with fewer than five workers in which the offer rate is 29.9% lower than the offer rate for the reference group, the findings on social insurance offer rates do conform to general expectations.

For the enrollment rates, however, it is surprising to find that the social insurance enrollment rate is significantly higher for workplaces with 10 to 29 workers than that for those with 30 or more workers. The effect of industry is not statistically significant when other factors are controlled. As for the effect of the job characteristic variable of

workplace ownership, it was found that the social insurance enrollment rate is significantly higher by 12.6% for nonprofit organizations in comparison to the public sector. There is no significant difference between for-profit businesses and the public sector.

In sum, the variables that have a substantial impact on the informal employment of care workers are occupation, part-time/full-time status, and employer type. Thus, policy tasks should address issues related to these variables. Of course, the most significant policy task would be to resolve the issue of workers employed by private households who are completely excluded from enrolling in social insurance programs.

Summary of Major Findings and Policy Tasks for Better Employment Relations for Care Workers

Summary

The major findings of this study are summarized in this section. Care workers are increasing rapidly, and among the four care worker occupational groups addressed in this study, this growth in the number of care workers has been led by social welfare professionals and medical and welfare service workers. By industry, growth in care worker employment is most prominent in the social work activities subsector. Meanwhile, the number of domestic and childcare helpers has decreased; most of them engage in a premodern type of employment within private households.

The composition of care workers is affected by the expansion of public care services through the implementation of long-term care insurance, the introduction and expansion of social services vouchers and the expansion of childcare services. As for the employment status of care workers, the higher-level social welfare professionals and kindergarten teachers enjoy relatively good stability, while the lower-

level medical and welfare service workers and domestic and childcare helpers mostly engage in insecure temporary and daily employment. In particular, among the domestic and childcare helpers who work in private households, over one-third of them are self-employed.

Because most care workers are women, indicators such as age, years of experience, and years of consecutive service were observed that reflect the labor market structure as well as wages, working hours, and other working conditions for female wage workers. While the average age of kindergarten teachers is 29.7 and that for social welfare professionals is 34.6, the average age is much higher for medical and welfare service workers and for domestic and childcare helpers (50.3 and 53.7 years, respectively). Years of experience and years of consecutive service are quite short for all occupational groups, although slight differences do exist among the four occupations.

Wage level is the most important working condition, and it was found in this study that for both hourly wage and monthly average wage, wages are highest for kindergarten teachers, followed by social welfare professionals, medical and welfare service workers, and finally for domestic and childcare helpers. With the exception of kindergarten teachers, wage levels for female care workers are lower than the average wage levels for all female workers. The fact that even the average wage for the relatively higher-level social welfare professionals is lower than the average wage level for all women clearly demonstrates the low overall wage level for care workers.

Working hours also increase with wages, and the proportion of medical and welfare service workers and domestic and childcare helpers who work for fewer than 30 hours a week reaches 33.1% and 35.7%, respectively. The low level of income for lower-level care workers is attributed not only to the low hourly wage, but also to their short working hours. Medical and welfare service workers and domestic and childcare helpers who comprise the lower-level care worker occupations also do not receive any remuneration in terms of wages for their

experience in the labor market. One reason that workers in these occupations have very few years of experience and consecutive service is that, due to the low wage level and the lack of remuneration for experience and consecutive service, many workers enter this labor market only to make ends meet, but they soon become discouraged and exit the labor market.

The KLoWF was used in this study to examine whether care workers tend to engage more in informal employment and whether this informal employment is due to workers' choice, institutional exclusion, or employer noncompliance. It was found that the social insurance enrollment rate for female care workers is higher overall than that for female workers in general. Among the domestic and childcare helpers, however, only 6.2% were enrolled in at least one social insurance program. The source of this extremely low enrollment rate is that most of these individuals working in private households are institutionally excluded from social insurance coverage. Medical and welfare social workers also have relatively lower level occupations, but the social insurance enrollment rate is high for these workers because most of the services provided by them are publicly funded services that mandate the enrollment of these service providers in the social insurance programs. The KLoWF also asks whether social insurance coverage is offered by the workplace and whether workers have chosen to enroll in social insurance programs when offered by the employer.

The data collected through these questions provide insight on whether workers' choice, institutional exclusion, or employer noncompliance is the most important factor behind nonenrollment. In all four occupational groups, it was found that institutional exclusion and employer noncompliance are clearly the main problems, in which institutional exclusion mostly affects domestic and childcare helpers, while employer noncompliance is the major factor for the other three occupational groups. Among the many determinants of the social insurance enrollment rate, occupation, part-time/full-time status, and

workplace characteristics were found to be statistically significant. It was particularly interesting to find that the social insurance enrollment rate is especially high for nonprofit organizations.

Policy Tasks to Resolve Informal Employment and Improve Working Conditions for Care Service Workers

Designing measures for conversion from informal employment to formal employment that reflect the characteristics of policy recipients. Different groups engage in informal employment for a variety of reasons; thus, it is necessary to distinguish the different groups when approaching the issue of identifying policy tasks to resolve informal employment for care workers. The first step is to examine workers separately in general employment relations and then look at workers who are employed by private households. For workers engaging in general employment relationships, policies should place priority on strengthening existing institutions that support social insurance enrollment or resolving social insurance blind spots by implementing integrated social insurance coverage and fee collection. In addition, because many of these general employment relationships are based on public funds and because these care services are provided not only by for-profit businesses but also by public organizations and various nonprofit organizations, efforts must be made to develop policies that are similar to the characteristics of such care services. A discussion on this topic is set forth in greater detail later on in this paper, while the issue of work in private households is now addressed.

In line with the basic goal of this study, to focus on the formalization of employment through the formation of general employment relationships, work in private households can be categorized according to the number of households to which service is provided by one worker and by the location in which the work is performed. First, workers can either provide domestic services for multiple households,

or they may work exclusively for a single household. Those who work for multiple households will provide domestic services, perhaps one or two days per week to a number of homes, or look after the children of multiple households on a part-time basis for each household. While private household work in advanced countries mostly consists of the first type in which one worker provides services for multiple households, the second type in which one worker provides services exclusively for one household is more typical in the less-developed countries (Tomei, 2011). The second type used to be more prevalent in Korea, but there has been a gradual increase in the first type of private household care services.

A distinction can also be made between private household work that is performed within the home and that which is performed outside of the home. While most domestic and childcare helpers provide services within the home, hospital-based private nursing-aid services differ by nature from general private household work in that the work is performed at hospitals. Aside from publicly-funded nursing-aid services provided in support of low-income individuals, however, the employment of most care workers who provide hospital-based private nursing-aid services are arranged and paid for by the individual families, while the hospitals that instruct and supervise these services and the agencies that are involved in the placement of these caregivers try their best to avoid taking much responsibility as an employer. Most caregivers provide services for a single household. Meanwhile, examples of care services provided for multiple households outside of the home include transportation services for disabled persons and support services for the transport of outpatients to and from hospitals. The public sector has taken on responsibility for some transportation services for disabled persons, but universal access to this service is not yet available. Table 2-10 outlines the four types of private household work as categorized on the basis of the number of households served by one worker and the location in which services are provided. The

Table 2-10. *Types and Examples of Private Household Workers by Number of Households Served and Location of Work*

# of households / Location of work	One	Multiple
Within the home	Type ①: Exclusive domestic services Exclusive childcare services	Type ②: Part-time domestic services Part-time childcare services
Outside of the home	Type ③: Hospital-based private nursing-aid services	Type ④: Disabled persons transportation services Hospital commuting services

direction of policies for the formalization of employment may differ for each type.

As noted in the example of France discussed by Tomei (2011), work in private households can be formalized either by ensuring that the household acts as a responsible employer, or by identifying a new employer apart from the household to take care of all responsibilities pertaining to these employment relations. The private household work type determines which approach would be more appropriate. In some situations, it may also be appropriate to incorporate an employment brokerage model.

Type ① private household work is usually found in less-developed countries and is arranged by word-of-mouth through relatives or neighbors or through job placement agencies. Once a contract is in place, there is a tacit agreement that employment will continue in the long-term, barring any unexpected circumstances. This agreement does not, of course, provide much security, for it can be broken at any time by the household that is the employer.

Despite such instability in this type of employment, it is not easy to form employment relations based on third-party intervention in this type of private household work. Third-party intervention could in fact end up increasing costs for both the service-providing workers and the service-recipient households when long-term employment relations are in place. For this type of private household work, it would be wise to

pursue policies that seek to formalize employment relations by ensuring that the households fulfill all the employer's responsibilities required of them. Overseas examples of such policies include the French example of recognizing private households as employers and providing incentives for the formalization of work in private households and the Swiss example of reducing transaction costs associated with formalization, as discussed by Tomei (2011). The prerequisite here would be to extend social insurance coverage to all private household workers. Each household should then be able to create an account with the social insurance agencies for the payment of their portion of social insurance fees. At the same time, ways to minimize any inconvenience in terms of separately reporting the income of household workers to the National Tax Service must be actively explored, possibly through the introduction of personal bank checks such as those that are used in other countries. In terms of the feasibility of policy implementation and the benefits gained through the creation of additional jobs, the French or the Belgian approach of providing monetary incentives may be more desirable than the Swiss approach. The method here would be to provide a tax refund in the amount of "employer-portion of social insurance premiums + α". An annual limit on this refund should be established to deter any abuse of this incentive.

Types ② and ③ are mostly arranged through job placement agencies unless these services are publicly funded through the provision of service vouchers. Because of the difference in the number of households served and the location in which services are provided, however, different approaches for formalization may be required. For type ② work, services are provided to multiple households, usually through a single third-party entity, in a manner that is similar to that for the provision of existing voucher services or services provided under long-term care insurance. The only difference is that vouchers and long-term care insurance are publicly funded. The priority for these two types of private household work should therefore be placed on converting the

current job placement agencies into employers. In consideration of the characteristics of the employment relations for types ② and ③, the job placement agencies would become dispatch business owners, while each household would become the user-employer. As is the case for type ① work, a monetary incentive could also be provided for the formalization of type ② and ③ work, in which a certain proportion of the service purchase cost could be eligible for tax deductions or credits.

Different approaches are required for the formalization of type ③ and type ① work, not only because the services are provided in different locations but also because there are different expectations regarding the period of employment. While for type ① work, the tacit expectation is that employment will last for a long period, the expected period of employment for type ③ work is rather short. For type ①, therefore, third-party intervention occurs only at the very beginning, while the rest of the relationship is based on a bilateral relationship between the worker and the household. For type ③ work, however, the operation of the labor market hinges upon this third-party intervention through which workers are matched with households. In addition, a fourth party enters the picture in the form of the hospitals that, in reality, instruct and supervise the activities of these workers. In this case, therefore, either the hospitals that have actual supervisory authority over the workers or the third-party employment brokers could be identified as the employer in formal employment relations. In principle, it would be better to have the hospitals function as employers because they actually instruct and supervise these workers, but this may realistically be difficult for small hospitals.

It would be possible, though, to consider the formation of dispatch-type employment relations as a complementary approach for the small- and medium-sized hospitals. One other point to consider is that the strongly public nature of nursing-aid services makes it inappropriate for these services to continue to be left as the responsibility of individuals. In addition to the formalization of employment relations

for these carers, it is also important, at the same time, to work to expand public social services. This issue is addressed in its own right later in this paper.

Type ④ services, excluding those that are publicly provided, have not expanded A full-fledged market for these services does not yet exist, and services are mostly provided for a fee through social welfare organizations or by volunteers. In the long term, these services should be developed as universal services that are publicly funded, while measures should be implemented to formalize employment relations in a manner similar to that applied to the current voucher system and long-term care services.

The formalization of employment cannot be accomplished in a short period of time and will require long-term policy efforts. It is therefore imperative that work be done quickly to strengthen social protection for private household workers. As outlined in ILO (2010), many countries already apply social security and minimum wage laws to workers in private households. Korea should pursue the early ratification the ILO Convention on Domestic Workers and strengthen social protection for these workers.

Stronger supervision on compliance to labor standards and social insurance coverage regulations. The fundamental prerequisite for better working conditions is for employers to comply with the Labor Standards Act that regulates the minimum standards for working conditions along with the obligation to provide social insurance coverage. Many home-based childcare facilities remain in the blind spot of the Labor Standards Act, however, and many care workers still have no access to social insurance coverage, which reveals that behavioral norms impelling compliance have not yet been established in the labor market for care services. Resolving this issue of noncompliance inevitably turns to classic carrot and stick approaches. If the introduction of the Durunuri social insurance premium support program introduced in 2012 is the carrot, then strong penalties for noncompli-

ance would be the stick. Building the basic infrastructure for stronger regulation is also needed through integrating social insurances' premium collection into a single channel and linking them with the tax administration system.

Furthermore, organizations that participate as providers of publicly-funded social services should be required to conclude contracts with the government or local governments to meet registration requirements that obligate compliance with social insurance coverage rules, to provide for minimum wage or appropriate wage levels that exceed minimum wage, and to commit to compliance with the Labor Standards Act. To this end, improvements must be made to the contents and procedures of public contracts, while criteria should be established to determine the eligibility of service providers that register as public service providers. The voucher program is the most representative means of delivery for public social services, and since converting in August 2012 to a registration-based system, service providers have been required to submit work contracts (that clearly identify employer obligations related to social insurance enrollment) signed between the service providers and the workers they hire to deliver services along with lists of workers enrolled in the four major social insurance programs.

Because care workers tend to have fewer years of consecutive service and frequently change jobs, it cannot be sufficient to require submission of such documents at the time of registration as public service providers. Stronger supervision is required on a regular basis to ensure that registered service providers continue to comply with these registration requirements. To this end, it would help if the regular inspection visits that are currently implemented were to be complemented with unannounced visits.

Expansion of public social services and public sector employment. Public social services that are publicly funded are expanding rapidly in the realms of childcare and elderly care. The care of seniors,

the disabled, and children was traditionally accomplished by women within their own homes, but much of this work has been formalized into public social service jobs based on formal employment relations. While the level of remuneration is still not very high for these jobs, this process has at least served to ensure that workers in these jobs are guaranteed a minimum level of working conditions and are provided with protection offered in the form of social insurance.

However, private nursing-aid and various other care services are still provided as a form of domestic work in private households or remain in a blind spot in which limited services are provided in the formal labor market. Care services for long-term inpatients, the limited transportation support currently only offered to low-income severely-disabled persons, and the hospital commuting service provided for seniors and the disabled are all examples of services that urgently need to be converted into public services. The conversion of domestic work into public services automatically leads to the formation of formal employment relations, changing these jobs into more decent ones in which compliance with labor standards and social insurance enrollment obligations is guaranteed. The conversion of informal care services provided by family members into public social services also leads to the creation of new jobs that ensure at least a minimum level of working conditions.

Policies to expand direct employment in the public sector also need to accompany these efforts. Care services are social services that require interaction between people and are public goods by nature. A typical approach to resolving issues related to the externalities of care work and the asymmetry of information between care service providers and service recipients is to have the services provided through the public sector. Social services are rarely provided directly by the public sector in Korea.

There have been ongoing discussions on the task of creating sufficient public medical facilities and childcare facilities, but not much

progress has been made. The increased demand for senior care has led to a rapid increase in for-profit organizations offering these services. As such, the traditional model of delivering public social welfare services through nonprofit social welfare corporations is quickly disintegrating. In consideration of the characteristics of care services, this haphazard increase in for-profit service providers cannot be desirable. Therefore, at least a certain portion of care services should be provided directly by the public sector, which should work to establish service standards and regulate the market to ensure that the market is operating as it should.

Greater roles for social enterprises and the social economy. There has been wider interest in strengthening the role of social enterprises and other key players in the social economy in addition to strengthening the role of the public sector. Numerous social enterprises have already jumped into care services, and with the implementation in December 2012 of the Framework Act on Cooperatives, many social enterprises that engage in care services have sought to become cooperatives. As seen in the case of Italy, where the cooperative movement is very developed (Borzaga et al., 2010), social cooperatives are expected to play an important role in the area of care services.

The nature of the services provided by care workers may be more suited to social enterprises or nonprofit organizations than for-profit businesses, as can be seen in case studies of other countries, even though differences do exist among the countries, where the third sector plays an important role. Working conditions will also benefit from the expansion of social enterprises and nonprofit organizations, as is indicated by the analysis on welfare benefits provision and social insurance enrollment by employer type in the third section, demonstrating that working conditions are better in nonprofit organizations than in for-profit businesses, all of which can be attributed to the fact that social enterprises and the greater social economy seek to secure benefits simultaneously for the service providers while also attaining social goals.

Protection of labor rights and a greater role for collective bargaining. Eurofound (2011) confirmed that collective agreements play a very important role in the determination of working conditions for care workers in many European countries. Even in the UK, where labor unions play a relatively weaker role, the public sector, in which protection is guaranteed through collective agreements, offers better working conditions than does the independent sector (which includes the private for-profit and nonprofit sectors).

In Korea, labor unions and collective agreements play hardly any meaningful role whatsoever in the determination of working conditions for care workers, for union density is extremely low and collective bargaining is not conducted level for these workers. Also, even when nonprofit organizations are included in considerations, care service providers consist predominantly of small businesses, making it difficult to guarantee even the most basic labor rights, such as the right to organize. Amidst these dire working conditions, most care workers choose to move to different jobs rather than calling for better working conditions.

Should the public sector and the social economy sector play a greater role in care services, it is likely that progress will also be made in terms of protecting labor rights. The public sector could be the "good employer" role model, while the basic attributes and premises of the social economy sector would encourage worker participation in the operation of the organizations through democratic decisionmaking processes.

Professionalization of care workers. Case studies of other countries commonly point to professionalization of care work as the direction for future policies. This professionalization entails the establishment of skills standards and the development of career paths that, in turn, make jobs more decent. With regard to the improvement of working conditions for domestic workers, the European Economic and Social Committee (2010) defined professionalization as follows:

> Professionalization means enabling employees to have rights and protection that are equivalent to those held by employees working in offices or factories, including: a decent wage that also covers travelling time between employers' homes, set weekly hours, the right to paid leave, respect for health and safety rules, a decent pension, maternity protection, paid sick leave, compensation in the event of invalidity, rules covering dismissal or termination of the employment contract, means of redress in the event of abuse and real access to vocational training and career development, as exist for other professions.

Furthermore, "Professionalization means turning such jobs into careers and combating the stereotypes that today suggest this is only women's work. Progress on professionalization can be measured against progress on gender balance."

Professionalization has gained attention as an important topic in other countries because it is difficult to hire care workers, and worker turnover is very high. Social services have not yet expanded fully in Korea, but still, the recent rapid increase in demand for childcare services has made it difficult to hire childcare teachers. Care worker demand is also expected to rise with the rapid ageing of the Korean population, pointing to the imminent need for policies toward professionalization. To transform care worker jobs from the current low-income low-skill jobs into decent jobs that provide for career development, a shift must occur in the social valuation of care work, while a general agreement must be reached on the allocation of more public funds in support of an appropriate remuneration system for such work.

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3 Informal Work in Korea: Causes, Characteristics and Consequences

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Introduction

Since the financial crisis in the late 1997, the labor market flexibility has been pursued in ways that shift the burden of flexibility to vulnerable groups of workers, thus increasing low wage or non-regular work and deepening the segmentation of the labor market (Lee and Yoo, 2008). Policy efforts has been also tried to reduce inequality and insecurity in the labor market. A series of policies including minimum wage, labor standards were sought to protect the vulnerable groups, while the scope of social insurance coverage has continued to expand (Hwang and Lee, 2012). Nonetheless, a considerable number of workers engage in informal work and are protected neither by labor laws nor social insurance. This paper addresses the puzzling question for why informal work is widespread in Korea despite protective policies. We will show that informal work represents a policy failure as well as a market failure.

Labor market dualization is not an issue that is unique to Korea. Advanced countries have also sought to restructure their social security system in response to the dualization of their labor markets. The corporatist welfare states of Germany and France, in particular, responded to the dualization of their respective labor markets by creating a dual structure within their social security systems through which peripheral workers receive support in the form of social assistance or subsidies

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that are based on taxation (Chang, 2011; Emmenegger et al., 2012). Korea, on the other hand, chose not to differentiate according to the status of the worker within the labor market, but rather to expand the scope of policies under a strategy to apply labor laws and social insurance programs universally. The Korean experience will show that the framework for social protection that may appear to be more equal can in fact give rise to widespread informal employment when relevant policies are not implemented effectively. The importance of policy enforcement through labor administration and inspection will be emphasized throughout this analysis.

Defining and Measuring Informal Employment

There is no universally accepted definition for informal work. The ILO (2003) stated that workers have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.). This definition based on social protection perspective poses various difficulties when measuring informal employment is involved. The definition of informal employment in empirical research depends thus on the availability of data and the purpose of the research.

Hussmanns (2004) and ILO (2012) proposed that a labor force survey would be useful by including several questions on such issues as the existence of written labor contracts, subscription to social insurance, availability of paid leaves, requirements for advance notice of dismissal, and the application of labor standards as provided for by labor laws. Previous empirical studies adopted operationally various definitions, for example, the existence of written labor contracts, subscription to social insurance programs, income tax payment requirements, and so on.

It is problematic, however, to bring these empirical definitions of informal employment that were utilized in other countries into the Korean context. Written contracts are not very common in Korea, even for regular workers.[1] Korea also has quite a few tax-exempt workers who are not required to pay income tax, but lacks reliable survey data on whether individuals do in fact pay taxes on their income.

In this study, jobs which are not subject to minimum wage legislation, mandatory retirement allowance[2], and public pension at the main job among employees are defined as a proxy for informal work. Three policies are, in present, characterized by their universal application across all workplaces.

The following is a brief description of the development of each policy. The minimum wage system was first introduced in 1988 for permanent workers in manufacturing workplaces with 10 or more workers and was gradually expanded from October 2000 to cover all workers in all workplaces across all industries. The mandatory retirement allowance system stipulates that when a labor relationship is terminated after a worker works consecutively for a certain number of years, the employer must pay him (her) the equivalent of 30 days' average pay for each year of tenure. Retirement allowance was introduced as a voluntary program in the 1953 legislation of the Labor Standards Act, but was made mandatory for workplaces with 30 or more workers from 1961. Later, in 1989, it was gradually expanded to smaller workplaces with five or more workers. Finally, it was expanded to workplaces of all sizes, including those with fewer than five workers from December 2012. To be eligible for a retirement allowance, a worker must have

[1] In its comparison of informal employment in seven middle-income economies including Korea, the OECD (2008) uses non-subscription to social insurance programs and the absence of written labor contracts as proxy variables for informal employment, but is unable to provide statistics on the proportion of workers without written labor contracts in Korea.

[2] The important provisions in the Labor Standard Act, for example, overtime pay, and paid leave, advance notice of dismissal do not apply to workplaces with fewer than five workers, This paper looks only at the universal requirement for the payment of retirement allowance when determining compliance with labor standards.

worked consecutively at the workplace for at least 1 year for 15 or more contractual working hours each week. All Korean nationals from the ages of 18 to 59 who engage in income earning activities are required to subscribe to a public pension scheme – either the National Pension Scheme (either workplace-based or individually insured) or a Special Occupational Pension Scheme for public servants or teachers. The National Pension Scheme was first introduced in 1988 in workplaces with 10 or more workers, and was expanded to include workplaces with five or more workers in 1992, farmers and fishermen in July 1995, and all urban residents in April 1999 to provide coverage for all citizens. From 2006, all workers in workplaces with more than one employee have been required to subscribe to the National Pension Scheme as workplace-based insured persons.

This paper uses data from two surveys: the Supplementary Survey of the Economically Active Population Survey (conducted by National Statistical Office of Korea) is used to analyze trends and characteristics of informal employment, while Korean Labor and Income Panel Study (conducted by Korea Labor Institute) is used in the dynamic analysis of informal employment.

Key Trends of Informal Employment

Figure 3-1 shows the share of informal employment among all workers. In 2011, 40.2% of all wage workers were excluded from social protection provided under the minimum wage system, labor standards, or the social insurance system. Of all waged workers, 10.8% received less than minimum wage, while 35.3% of all waged workers were not eligible for mandatory retirement allowance, and 31.7% of all waged workers were not able to subscribe to workplace-based public pension schemes.

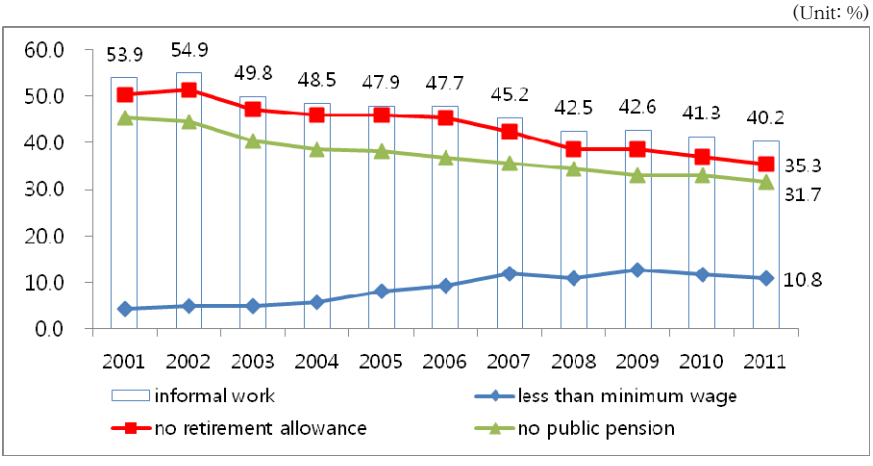

Figure 3-1. Trends in the incidence of informal work. From *Supplementary Survey of the Economically Active Population Survey*, by National Statistical Office of Korea, August each year.

The incidence of informal employment has been steadily declined over the past decade from 53.9% in 2001 to 40.2% in 2011. This decline is because those who are eligible to receive a retirement allowance or subscribe to a public pension have been increasing. The proportion of workers not receiving minimum wage increased significantly, however, to 10.8% in 2011 from 4.3% in 2001. Although the relative level of the minimum wage has been increasing to curb low-wage work in the 2000s, the policies ultimately failed due to this large increase in the proportion of non-compliance to minimum wage system.[3]

[3] Hwang and Lee (2011) noted that although Korea is equipped with institutions and policies such as collective bargaining, minimum wage, unemployment benefits, and in-work benefits for the purpose of improving conditions in the low-wage labor market, the proportion of low-wage workers in Korea is highest among the OECD economies and has continued to increase over the past decade, indicating that such institutions and policies have not been helpful in improving conditions in the low-wage labor market. The existence of a policy menu does not, therefore, guarantee that policies will be effective.

Causes of Informal Employment

Figure 3-2 illustrates the distribution of informal workers in terms of their exclusion from the three criteria – minimum wage, retirement allowance, and public pensions – that define informal employment in this study. Only 20.2% of the informal workers are excluded from just one of these criteria, while 79.8% of them are excluded from two or more.

In Table 3-1, a more detailed look is presented into the extent of this overlap in exclusion from three criteria. More than 80% of workers who do not receive minimum wage are excluded from both retirement allowance and public pension coverage. Among workers who cannot receive a retirement allowance, one fourth receive less than the minimum wage, while 87.7% are excluded from subscribing to workplace-based public pension scheme. Regarding workers who are excluded from public pension, 27.3% do not receive minimum wage while 88.7% are excluded from retirement allowance benefits. These results imply that exclusion from one policy usually entails exclusion from the others.

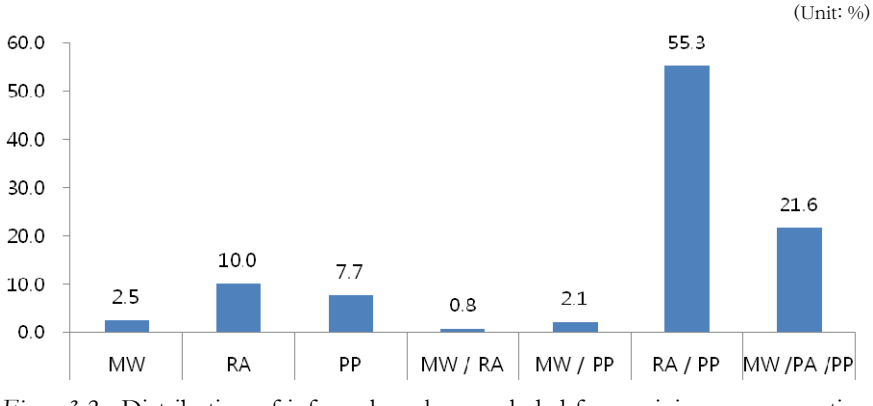

Figure 3-2. Distribution of informal workers excluded from minimum wage, retirement allowance, and public pensions. MW=minimum wage; RA=mandatory retirement allowance: PP=public pension. From *Supplementary Survey of the Economically Active Population Survey*, by National Statistical Office of Korea, August 2011.

Table 3-1. *Overlap in Exclusion from Minimum Wage, Retirement Allowance and Public Pensions*

(Unit: %)

	Minimum wage		Retirement allowance		Public pension	
	Equal or above	Less than	Yes	No	Yes	No
Less than minimum wage			16.9	83.1	12.1	87.9
No retirement allowance	74.5	25.5			12.3	87.7
No public pensions	72.7	27.3	11.3	88.7		

Note. From *Supplementary Survey of the Economically Active Population Survey*, by National Statistical Office of Korea, August 2011.

Informal employment occurs either due to non-regulation, in which workers are exempted from application of the law, or to non-compliance, in which workers are covered by law but excluded from protection in practice. One type of informal employment due to non-regulation is 'independent contractors' who are excluded by law from coverage because they are not viewed as workers, even though they may be economically dependent upon the employer. Many of them provide labor in a manner that is identical or similar to other workers, but because they sign service contracts with employers, they are not recognized as workers who are protected by law. The second type of informal employment due to non-regulation involves domestic workers, who are indeed workers but are specifically exempted from labor laws and the social insurance. Third, workers with less than 1 year of tenure are excluded from retirement allowance benefits; and fourth, part-time workers who work for less than 15 contractual hours per week are excluded from retirement allowance benefits and subscription to workplace-based public pensions.[4] Any other cases of informal employment are categorized as those caused by non-compliance.

[4] Daily workers are excluded from workplace-based subscription to health insurance and the National Pension Plan, but are included in employment insurance and industrial accident compensation insurance. Because this study determines informal employment on the basis of compliance to social insurance requirements, it does not classify the informal employment of daily workers as being caused by non-regulation.

In Table 3-2, informal employment is presented by causes.[5] Of the workers who receive less than minimum wage, only 7.4% were informal workers because of non-regulation, while most were receiving less than minimum wage due to employer non-compliance with minimum wage laws. Among workers excluded from retirement allowance benefits, a high proportion engaged in informal work as a result of non-regulation, where 64.3% of these workers had less than 1 year of consecutive service. Regarding workers excluded from subscription to workplace-based public pension schemes, 81.0% were excluded from coverage even though the law requires that they have such coverage. When informal employment due to non-compliance is defined as employment in which the employer does not comply with one or more of the statutory requirements for fully eligible workers, 79.4% of all informal workers are in informal employment situations due to non-compliance on the part of the employer, while 20.6% are engaged in informal employment due to non-regulation.

It is neither realistic nor desirable to look towards labor-management collusion as the cause of informal employment due to non-compliance,

Table 3-2. *Distribution of Informal Employment by Cause*

(Units: 1,000 persons, %)

	Less than minimum wage	No retirement allowance	No subscription to public pension	Informal employment
Non-regulation	7.4	73.2	19.0	20.6
· Independent contractor	3.9	9.8	9.7	
· Domestic service industry	3.5	2.4	2.4	
· Less than 1 year of tenure		64.3		
· Part-time work		7.3	7.4	
Non-compliance	92.6	26.8	81.0	79.4

Note. From *Supplementary Survey of the Economically Active Population Survey,* by National Statistical Office of Korea, August 2011.

[5] Due to limitations in data on domestic workers, information in this table represents the situation for waged workers in the domestic services industry. Part-time workers with less than 15 contractual working hours per week have been replaced by workers with usual weekly working hours of less than 15 hours.

because in most cases, informal employment simply occurs because employers neglect their obligations (Bailey & Turner, 2001; Perry et al., 2007).[6] Meanwhile, Kanbur (2011) claimed that the issue of informal employment must be examined through the lens of government intervention. If it is highly unlikely that non-compliance will be detected, or if the penalty for non-compliance is lower than the cost of compliance, it is quite natural for employers to choose not to comply with the law. Therefore, it is primarily the responsibility of the government to detect and discipline employer non-compliance, and, for the large part, the occurrence of informal employment is linked to the level of policy enforcement.

Labor administration and inspection system is the primary government efforts to block informal employment due to non-compliance. Labor inspection refers to the process in which labor inspectors act as judicial police officers in the labor field to safeguard standards for working conditions by inspecting compliance to statutes on labor relations and then ordering corrective measures for violations, levying fines, or taking judicial action.

Table 3-3 reveals the current state of labor inspections in Korean workplaces. In 2009 each labor inspector was responsible for 1,176 workplaces. Only 16 were actually inspected (i.e., only 1.4% of all workplaces potentially subject to labor inspections were actually inspected), which indicates that it is quite likely that labor inspection administration does not reach workplaces with high concentrations of informal workers.

[6] In the case of social insurance programs, employers are obligated to withhold social insurance premiums from workers' pay, report eligibility for insurance coverage, and pay the social insurance premiums on behalf of their workers. However, if income sources are disclosed, employers are responsible not only for social insurance premiums, but also for income tax and VAT payments. There is an incentive, therefore, to evade taxes by neglecting to report the hiring a worker, under-reporting the income of workers, reporting the income of only some workers while processing the income of other workers as unearned income, or even completely avoiding all responsibility as the employer by employing workers through subcontractor agreements rather than through direct labor contracts.

Table 3-3. *Status of Workplace Labor Inspections*

(Units: workplaces, %)

	Workplaces potentially subject to labor inspection	Labor inspectors	Workplaces to cover per each inspector	Inspected workplaces[1)]	Workplaces inspected by each inspector	Proportion of inspected workplaces
	(A)	(B)	(A/B)	(C)	(C/B)	(C/A, %)
2007	1,401,784	1,276	1,099	26,976	21.1	1.9
2008	1,432,812	1,227	1,168	21,546	17.6	1.5
2009	1,422,261	1,209	1,176	19,873	16.4	1.4

Note. From *White paper in Employment and Labor,* by Ministry of Employment and Labor, each year (cited from Kim, 2012).

Table 3-4 demonstrates that violations are rampant. In the 3 years from 2007 to 2009, 70.3% of the inspected workplaces were found to be in any violation of the Labor Relations Act, with an average of 3.7 violations in each noncompliant workplace. The data reveal, however, that only 1.1% of these workplaces were disciplined through judicial action, fines, or administrative measures. This low level of policy enforcement and the negligible disciplinary measures are leading to higher non-compliance.

Table 3-4. *Workplace Labor Inspection Implementation and Status of Noncompliant Workplaces*

		2007	2008	2009	Total
Inspected workplaces[1)]		26,976	29,173	31,467	87,616
Violated workplaces by inspection		16,281	21,828	23,465	61,574
(%)		(60.4)	(74.8)	(74.6)	(70.3)
Violated workplaces by self-inspection			4,323	6,352	10,675
Number of violations		41,803	89,008	96,964	227,775
Measures	Corrective order	16,002	17,308	16,894	50,204
	(%)[2)]	(98.3)	(99.1)	(99.1)	(98.9)
	Judicial action	58	79	46	183
	Fine	46	18	24	88
	Administrative measures	175	100	149	424

Note. 1) Including self-inspection workplaces
2) Workplaces where non-compliance is detected through self-inspection are regarded as having received corrective orders

From *White paper in Employment and Labor*, by Ministry of Employment and Labor, each year (cited from Kim, 2012).

Characteristics of Informal Employment

It is critical to examine the status of informal employment vis-à-vis different job characteristics. Table 3-5 outlines the incidence and the composition of informal work by job characteristics.

First, with respect to enterprise size, the proportion of informal work is higher in the smaller businesses. Informal employment accounts for more than half of all employment in workplaces with 30 or fewer workers, and these informal workers in workplaces with 30 or fewer workers comprise 82.8% of all informal workers. Informal employment is particularly concentrated in workplaces with fewer than five workers, where 78.5% of all workers are informal workers who comprise 37.4% of all informal workers. It is needed to note that three policies in this study – minimum wage, retirement allowance, and subscription to public pension plans – are compulsorily applied even for workplaces with fewer than five workers. In these places, 66.3% of the workers are engaged in informal employment as a result of non-compliance to legal requirements, accounting for 39.8% of all informal work due to employer non-compliance. Even though this phenomenon can in part be attributed to the low level of profit in small firms, it is also closely related to the fact that other major labor law provisions do not apply to these small workplaces. The core provisions of the Labor Standards Act (such as those restricting layoffs or those regulating overtime, night, . holiday work and paid annual leaves), the Act on the Protection etc. of Fixed-Term and Part-Time Employees, and other important regulations including those mandating a 40-hour workweek do not apply to workplaces with fewer than five workers. This discrepancy in the application of laws and regulations has led to greater non-compliance to requirements for minimum wage, retirement allowance, and public pensions – the subjects of analysis in this study.

In terms of employment type, it can be found that 68.6% of all non-regular workers engage in informal employment, which is much higher

than the 25.4% of regular workers. Informal employment as a result of non-compliance to any one of the three criteria accounts for 48.4% of all non-regular workers. It is also important to note that the proportion of informal employment is 89.6% and 100.0%, respectively, for temporary and daily workers, despite the fact that these workers are categorized as regular workers, accounting for 36.8% of all informal workers. These data imply that the issues of informal and non-regular employment are quite closely correlated yet are still very distinct.[7]

In order to identify the determinants of informal employment by job characteristic, logit regression analysis is applied. The "informal employment" and "informal employment due to employer non-compliance" are set as the two dependent variables. The explanatory

Table 3-5. *Proportion and Composition of Informal Employment by Job Characteristics*

(Unit: %)

		Incidence			Composition		
		Total	non-regulation	non-compliance	total	non-regulation	non-compliance
All workers		40.2	8.3	31.9	100.0	100.0	100.0
Firm size	1-4	78.5	12.1	66.3	37.4	28.1	39.8
	5-9	55.3	6.7	48.6	23.4	13.7	25.9
	10-29	39.1	9.7	29.4	22.0	26.6	20.9
	30-99	23.4	9.6	13.8	11.5	23.0	8.5
	100-299	12.8	3.4	9.4	3.2	4.2	3.0
	300-	8.8	3.3	5.5	2.5	4.5	1.9
Employment type	Regular	25.4	2.1	23.4	41.6	16.6	48.1
	(permanent)	3.9	0.0	3.9	4.8	0.1	6.0
	(temporary)	89.6	9.1	80.4	32.9	16.3	37.3
	(daily)	100.0	1.0	99.0	3.9	0.2	4.8
	Non-regular	68.6	20.2	48.4	58.4	83.4	51.9

Note. From Supplementary Survey of the Economically Active Population Survey, by National Statistical Office of Korea, August 2011.

[7] It is noted in the July 2002 agreement by the Special Committee on Non-regular Workers of Tripartite Commission that "in recognition of the widespread existence of a class of workers who are not non-regular workers yet still experience insecure employment and who are excluded from protection offered by the Labor Standards Act and from various social insurance benefits and thus need social protection, this Committee agrees that there is a need to identify such workers as 'vulnerable workers' and to implement measures for the protection of such workers."

variables used in this analysis are variables related to job characteristics such as workplace size, employment type, industry, occupation, and union dummy. The personal characteristics of workers are not taken into consideration in this analysis, because compliance to minimum wage, labor standards, and social insurance requirements is compulsory irrespective of personal characteristics. "Less than 1 year of tenure" is added to this analytic model as a control variable to reflect the reality that employers are not required to provide a retirement allowance to workers who have worked for less than 1 year.

First, it can be seen that informal employment is more likely in the smaller businesses. In particular, the likelihood for a worker who should legally be protected from relevant law to engage in informal employment due to employer non-compliance is 48.8%p higher in firms with fewer than five workers than in firms with 300 or more workers. Compared to firms with 300 or more workers, the probability of informal employment due to non-compliance is 36.7%p higher in firms with 5-9 workers, 20.9%p higher in those with 10-29 workers, and 7.1%p higher in workplaces with 30-99 workers.

Regarding employment type, the probability for non-regular workers to engage in informal employment is 33.8%p higher than for regular workers, and with all other variables controlled, the probability of workers to engage in informal work due to employer non-compliance is 9.1%p higher for non-regular workers than for regular workers. It may be because there is a class of workers who is categorized as regular but excluded from social protection, such as "regular, but temporary or daily workers".

By industry, it is more likely for workers in construction, personal services, and distributive services to engage in informal employment due to employer non-compliance. It is interesting to note that although the probability for informal employment in social services is significantly higher than that for the manufacturing industry, there is no statistically significant difference between the two in terms of informal

Table 3-6. Marginal Effects in Logit Analysis of Determinants of Informal Employment

		Sample characteristics		Informal employment		Informal employment due to non-compliance	
		Mean (SD)		Marginal effect (SE)		Marginal effect (SE)	
Firm size	1-4	0.192	(0.320)	0.519	(0.018) ***	0.488	(0.023) ***
	5-9	0.170	(0.305)	0.339	(0.022) ***	0.367	(0.025) ***
	10-29	0.227	(0.340)	0.206	(0.023) ***	0.209	(0.023) ***
	30-99	0.198	(0.324)	0.093	(0.023) ***	0.071	(0.022) ***
	100-299	0.101	(0.245)	-0.012	(0.025)	0.026	(0.024)
Employment type	Non-regular	0.342	(0.386)	0.338	(0.010) ***	0.091	(0.009) ***
Industry	Agriculture, forestry and fishing	0.011	(0.083)	0.372	(0.037) ***	0.369	(0.038) ***
	Construction	0.080	(0.220)	0.167	(0.021) ***	0.156	(0.017) ***
	Producer services	0.213	(0.333)	0.006	(0.017)	-0.018	(0.012)
	Distributive services	0.161	(0.299)	0.072	(0.018) ***	0.070	(0.014) ***
	Social services	0.204	(0.328)	0.117	(0.018) ***	-0.002	(0.013)
	Personal services	0.126	(0.270)	0.331	(0.019) ***	0.087	(0.017) ***
Occupation	Managers	0.022	(0.118)	-0.108	(0.035) ***	-0.055	(0.027) **
	Professionals	0.220	(0.337)	-0.128	(0.017) ***	-0.073	(0.013) ***
	Clerks	0.215	(0.334)	-0.188	(0.015) ***	-0.141	(0.011) ***
	Service workers	0.090	(0.232)	0.051	(0.023) **	0.188	(0.022) ***
	Sales workers	0.083	(0.224)	0.228	(0.024) ***	-0.007	(0.017)
	Skilled agriculture, forestry and fishery workers	0.004	(0.048)	0.109	(0.069)	0.128	(0.064) **
	Craft and related trades workers	0.092	(0.235)	0.061	(0.021) ***	0.110	(0.018) ***
	Elementary occupations	0.168	(0.304)	0.288	(0.019) ***	0.228	(0.018) ***
Unions	Non	0.760	(0.347)	0.123	(0.012) ***	0.092	(0.009) ***
Tenure	Less than 1 year	0.359	(0.390)	0.255	(0.010) ***	0.132	(0.008) ***
Pseudo R2				0.412		0.314	
N				26,522			

Note. 1) Reference group was regular, assembly workers with 1 or more year of tenure in unionized workplaces with 300 or more workers in the manufacturing and electricity, gas and water supply industries.
2) *** denotes significant at the 1% level, ** significant at the 5% level.
From *Supplementary Survey of the Economically Active Population Survey*, by National Statistical Office of Korea, August 2011.

employment due to employer non-compliance. This difference is most likely because of the high number of care service workers in the social

services industry who, by law, are excluded from protection under labor laws.

By occupation, the data tell us that informal employment due to employer non-compliance is significantly higher for blue-collar workers and service workers.

Meanwhile, the likelihood of informal employment due to employer non-compliance is 9.2%p higher in nonunionized workplaces than in unionized workplaces, pointing to the role that unions play in limiting informal employment.

Lastly, there is a significantly higher probability that workers who have worked for less than 1 year will engage in informal employment.

In Table 3-7, the working conditions of informal workers are compared with that of formal workers. While there is almost little difference in the working hours, the wage level for informal workers was only about half of that for formal workers. Informal workers only served an average of 2.1 years of tenure, compared to 7.1 years for formal workers, indicating the highly insecure nature of informal employment. The compliance rates for written labor contracts and the 40-hour workweek, which are required for all workplaces with five or more workers, also remained below 30% for informal workers. Opportunities to move to better jobs through career development were also quite limited for informal workers because only 17.4% of the informal workers participated in job training programs in the past year. Informal workers are already excluded from protection by labor laws and social insurance programs, yet only 1.0% of these workers are union members, indicating that these workers are also excluded from any protection offered by the unions.

Data on job choice motives give an even clearer clue of causes of informal employment. While 14.9% of formal workers reported that their job choice was involuntarily motivated, 61.7% of informal workers reported that involuntary motivation had determined their job choice. With respect to the contrasting perspectives on whether this

Table 3-7. *Comparison of Working Conditions for Formal and Informal Workers*

(Unit: %)

		Formal employment	Informal employment
Usual weekly working hours (hours)		43.2	42.1
Hourly wage (1,000 KRW)		14.0	7.1
Monthly average wage (1,000 KRW)		257.0	123.3
Tenure (years)		7.1	2.1
Workers with written labor contracts (%)		66.3	27.3
Implementation the 40-hour workweek (%)		70.9	27.8
Job training in the past year (%)		47.6	17.4
Union membership (%)		17.6	1.0
Job choice motive (%)	Voluntary choice	85.2	38.3
	Involuntary choice	14.8	61.7

Note. From *Supplementary Survey of the Economically Active Population Survey*, by National Statistical Office of Korea, August 2011.

informality of employment should be viewed as an involuntary exclusion from state-provided protection or a voluntary exit from formal employment because benefits of formality do not outweigh the involved costs (Perry et al., 2007), the fact that many workers are involuntarily engaging in informal work suggests this exclusion of informal workers from social protection can likely be attributed to the very nature of informal employment.[8]

Persistence of Informal Employment

If workers experience informal work only temporarily in their working lives, it may be of little concern. However, if the prospect of making an upward movement appears grim they are likely to experience the difficulties associated with repeated spells of informal work. We analyzed mobility between different types of employment over a one-year period by using the Korean Labor and Income Panel Study.

[8] In its comparative analysis of the size and causes of informal employment in 30 European countries, Hazans (2011) also noted that exclusivity and discrimination are the major causes of informal employment in the context of waged work.

In Table 3-8, it is shown that the likelihood for an informal worker to transition to formal employment in the next year is only 15.3%, while 65.3% remained in informal jobs. Informal workers face a much higher risk of job loss than their counterparts. For examples, 15% of informal workers became non-employed, which is more than two times higher than that for formal workers. For persons who are not employed, the probability that they will be employed as an informal worker in following year is 7.4%, which is more than two times higher than the probability that they will gain formal employment. Informal workers also have a 4.5% chance of transitioning into self-employment, which is again higher than that of formal workers. And when non-waged workers transition to waged work, it is more likely that they will move into informal work than formal work. All these data reveal that it is highly likely that workers will become entrenched in informal employment or – because of the high risk of moving back and forth between informal employment and a state of non-employment.

We further analyze how long informal work would persist. Figure 3-3 reports the number of years spent in informal jobs over the seven-year period 2002-2008 according to each person's type of employment activity in 2002. This measure is better than simple transition rates because it takes into account work intermittence and repeat spells of informal employment. Informal workers in 2002 experienced 4.0 years of informal jobs and 1.3 years of non-employment over seven years, while the number of years spent in formal jobs was merely 1.0. This indicates

Table 3-8. *Yearly Transition Probability (2002~2008)*

(Unit: %)

t \ t+1	Formal employment	Informal employment	Self employment	Non employment
Formal employment	81.4	10.7	1.5	6.4
Informal employment	15.3	65.3	4.5	15.0
Self-employment	1.0	3.3	88.9	6.8
Non-employment	3.6	7.4	2.0	87.0

Note. From *Korean Labor & Income Panel Study*, by Korea Labor Institute, 2002-2008.

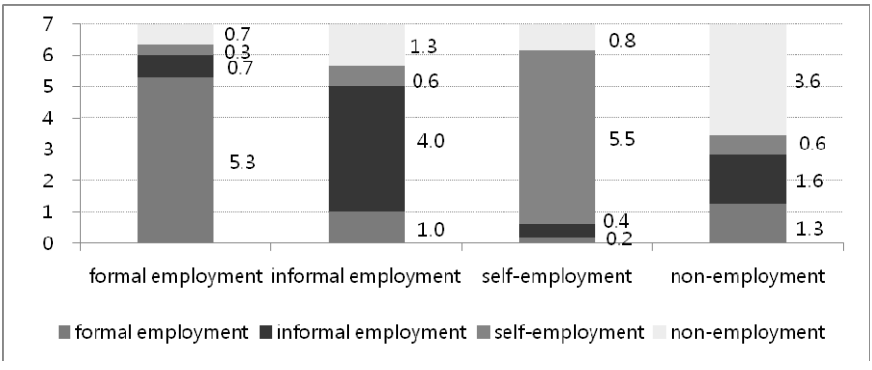

Figure 3-3. Cumulative years of informal employment over seven years for persons engaged in informal jobs at the beginning of the period. From *Korean Labor & Income Panel Study*, by Korea Labor Institute, 2002-2008.

that informal employment has indeed become entrenched over a long term.

The persistence of informal work is caused by two different mechanisms. First, individual heterogeneity may make informal work increase the likelihood of informal work in the future. Heterogeneity refers to observable human capital or unobservable properties like making an effort to work. Second, state dependence occurs if informal work in a particular period has a directly causal effect on the probability of informal work over the subsequent period. State dependence takes place when there is a low level of labor policy enforcement within a segmented labor market structure. In this case, employers have all the more incentive to offer informal employment; thus, it becomes more difficult for workers who have already been excluded from social protection to break away from informal employment (Akay & Khamis, 2011; Perry et al., 2007).

Heterogeneity that affects low pay is controlled in order to identify genuine state dependence.[9] Because low-paid work status is a discrete dependent variable, the dynamic random effects probit model of equation (1) is used:

$$I_{it}^{*} = \gamma I_{it-1} + x_{it}^{'}\beta + \epsilon_i + u_{it} \qquad (i = 1, \ldots, N;\ t = 2, \ldots, T) \tag{1}$$

I_{it}^{*} is a latent variable of an individual *i* being in a informal job at the time *t*. I_{it-1} is the informal job status of an individual *i* in the previous period. x_{it} is a vector of explanatory variables. Error terms are comprised of two terms. Individual specific error term ϵ_i captures time-invariant, unobserved heterogeneity. The u_{it} is a usual error term which the properties are zero mean, uncorrelated with itself, uncorrelated with x_{it} and ϵ_i, and homoscedastic.

The assumption that ϵ_i is uncorrelated with x_{it} is frequently thought of as unrealistic. According to the Mundlak (1978) method, a correlation between ϵ_i and x_{it} is allowed by assuming a relationship in the form $\epsilon_i = \overline{x_i^{'}}\delta + \alpha_i$, where $\alpha_i \sim iid\ N(0, \sigma_\alpha^2)$. Substituting in equation (1), we get the following equation:

$$I_{it}^{*} = \gamma I_{it-1} + x_{it}^{'}\beta + \overline{x_i^{'}}\delta + \alpha_i + u_{it} \tag{2}$$

Even when heterogeneity is well controlled using panel data, an initial conditions problem may arise, which is why the initial observation of a dependent variable I_{i1} may have a correlation with unobserved heterogeneity ϵ_i. If a correlation exists, the estimation result of equation (2) overestimates state dependence. As proposed by Wooldridge (2005), we specify $\alpha_i = a_0 + a_1 I_{i1} + a_2\overline{x_i} + \xi_i$, $\xi_i \sim N(0, \sigma_\xi^2)$ independent of I_{i1}, x_i.

If put into equation (2), we end up with estimation equation (3) as follows:

$$I_{it}^{*} = \gamma I_{it-1} + \alpha_1 I_{i1} + x_{it}^{'}\beta + \alpha_2\overline{x_i} + \xi_i + u_{it} \tag{3}$$

[9] For the estimation method, we refer to Stewart (2007) and Clark and Kanellopoulos (2009) and Akay and Khamis (2011).

γ is the magnitude of genuine state dependence.

Table 3-9 presents the characteristics of the samples used in the analysis. Here the sample is restricted to waged workers over two consecutive years. In the estimation model, job characteristics such as firm size, employment type, industry, and unionization are controlled, while personal characteristics are also included such as gender, age, level of educational attainment, and marital status to control individual heterogeneity.

Table 3-9. Sample Characteristics

		All		Formal employment		Informal employment	
		Mean	(SD)	Mean	(SD)	Mean	(SD)
Informal employment		0.453	(0.453)				
Informal employment at t-1		0.470	(0.470)	0.151	(0.359)	0.853	(0.354)
First-time informal employment		0.498	(0.498)	0.228	(0.420)	0.823	(0.382)
Gender	Female	0.358	(0.358)	0.289	(0.454)	0.441	(0.497)
	15-29	0.141	(0.141)	0.159	(0.366)	0.119	(0.324)
Age	50-59	0.164	(0.164)	0.138	(0.345)	0.197	(0.397)
	60 or more	0.063	(0.063)	0.010	(0.102)	0.126	(0.332)
	Middle or lower	0.263	(0.263)	0.138	(0.345)	0.413	(0.492)
Education	Technical college	0.124	(0.124)	0.172	(0.377)	0.067	(0.250)
	University or higher	0.213	(0.213)	0.301	(0.459)	0.107	(0.310)
	Unmarried	0.201	(0.201)	0.217	(0.412)	0.181	(0.385)
Marital status	Divorced / widowed	0.080	(0.080)	0.037	(0.189)	0.131	(0.338)
	1-4 persons	0.164	(0.164)	0.056	(0.229)	0.296	(0.456)
Firm size	5-9 persons	0.153	(0.153)	0.104	(0.305)	0.213	(0.409)
	10-29 persons	0.224	(0.224)	0.244	(0.429)	0.200	(0.400)
Employment type	Non-regular work	0.259	(0.259)	0.143	(0.350)	0.399	(0.490)
	Agriculture, forestry and fishing	0.008	(0.008)	0.003	(0.051)	0.015	(0.123)
	Construction	0.082	(0.082)	0.038	(0.192)	0.135	(0.342)
Industry	Producer services	0.157	(0.157)	0.164	(0.370)	0.149	(0.356)
	Distributive services	0.204	(0.204)	0.210	(0.407)	0.198	(0.399)
	Social services	0.112	(0.112)	0.126	(0.332)	0.096	(0.294)
	Personal services	0.085	(0.085)	0.029	(0.166)	0.154	(0.361)
Unions	Unionized workplaces	0.219	(0.219)	0.361	(0.480)	0.048	(0.214)
Number of workers		2,980		1,886		1,838	
Number of jobs		11,223		6,134		5,089	

Note. From *Korean Labor & Income Panel Study*, by Korea Labor Institute, 2002-2008.

Table 3-10 reveals the marginal effects of explanatory variables on the probability of informal employment persistence. Column (1) presents results by using pooled probit model. γ has a significant positive

Table 3-10. *Estimation of Informal Employment Persistence*

	Pooled probit model[1)] (1)		Dynamic random effects probit[2)3)] (2)	
	Marginal effect	(SE)	Marginal effect	(SE)
Informal employment at t-1	0.552	(0.010) ***	0.283	(0.021) ***
Female	0.021	(0.014)	0.006	(0.024)
15-29	-0.055	(0.022) **	0.048	(0.051)
50-59	0.015	(0.019)	-0.072	(0.052)
60 or more	0.291	(0.031) ***	0.212	(0.102) **
Middle school or lower	0.098	(0.018) ***	0.153	(0.222)
Technical college graduate	-0.135	(0.019) ***	-0.145	(0.108)
University or higher	-0.113	(0.017) ***	-0.121	(0.135)
Unmarried	0.021	(0.019)	0.023	(0.067)
Divorced / widowed	0.095	(0.026) ***	-0.034	(0.089)
1-4 persons	0.346	(0.018) ***	0.325	(0.035) ***
5-9 persons	0.177	(0.019) ***	0.153	(0.033) ***
10-29 persons	0.042	(0.016) **	-0.011	(0.028)
Non-regular work	0.199	(0.015) ***	0.104	(0.024) ***
Agriculture, forestry & fishing	0.159	(0.077) **	0.201	(0.192)
Construction	0.243	(0.026) ***	0.200	(0.086) *
Producer services	0.052	(0.020) **	0.169	(0.069) **
Distributive services	0.063	(0.018) ***	0.023	(0.059)
Social services	0.077	(0.023) ***	0.223	(0.086) **
Personal services	0.243	(0.026) ***	0.336	(0.071) ***
Unionized workplaces	-0.224	(0.017) ***	-0.192	(0.033) ***
Informal work at the first year			0.373	(0.026) ***
Log likelihood	-3907.7		-3679.5	
N	8,720			

Note. 1) The year dummy in the pooled probit model were additionally controlled.
2) The year dummy and the mean of time-varying variables in the dynamic random effects probit model were additionally controlled.
3) Likelihood ratio test result for ρ=0: chibar2(01) = 187.02 Prob >= chibar2 = 0.000
4) Reference group was married male high school graduate regular workers age 30 to 49 in nonunionized workplaces with 30 or more workers in the manufacturing and the electricity, gas and water supply industries.
5) * significant at 10% level; ** significant at 5% level; *** significant at 1% level.

From *Korean Labor & Income Panel Study*, by Korea Labor Institute, 2002-2008.

value. Column (2) presents estimation results in a dynamic random effects model using the same sample. Explanatory variables, though not shown separately, include the average of time-varying variables and year dummies. The null hypothesis that ρ is 0 is rejected, demonstrating that it is more desirable to engage in estimation with individual heterogeneity controlled. Even after heterogeneity and initial conditions are controlled, γ still has statistically significant, positive value. The experience of informal work in the previous year increases the probability of the current informal work by 28.3%p compared to the probability of a formal work experience. This finding implies that informal employment persistence can be attributed to the segmented labor market structure and low level of labor policy enforcement.

Summary and Policy Implications

After the 1997 financial crisis, Korea sought to introduce greater flexibility in the labor market while also implementing reforms to expand social protection. While the dark side of such reforms was the sharp increase in non-regular work and increased inequality within the labor market, the bright side was the institution of a universal system within which all workers were integrated into a single system.

This paper is focused on the reasons behind the widespread occurrence of informal work despite the presence of a wide variety of protective policies. The fact that 80% of informal employment occurs not due to non-regulation, but because of non-compliance to law and policies, demonstrates that this issue stems from a low level of policy enforcement. Even with stronger universal social protection, if policies are not effectively enforced, informal employment will continue to exist broadly. The issue of informal employment also reveals that *ex post facto* social protection cannot sufficiently offset the negative effects of increased flexibility. It can only be resolved when market failure is regu-

lated together with the implementation of measures to complement policy failure.

The following policy implications can be derived from the results of this analysis.

First, the finding that 80% of socially-unprotected informal employment can be attributed not to non-regulation but to non-compliance indicates that, more than just making legislative efforts to expand the scope of coverage for social protection, the strengthening of the level of policy enforcement. It is necessary through such means as the labor administration and inspection to deter the occurrence of informal employment while also providing policy incentives for employers to comply with rules and policies and to formalize employment.

Second, policy responses may differ according to the cause of informal employment persistence. If informal employment persists mainly because of individual heterogeneity, policies should target vulnerable groups with characteristics that increase the probability of informal employment persistence, and efforts should focus on increasing productivity in these groups. However, the results of this analysis point to genuine state dependence as the main reason for informal employment persistence, indicating the need for encompassing policies to curb informal work and promote formal work.

Third, the analysis that an overlap is present in the blind spots of minimum wage, labor standards and social insurance coverage implies that measures to heighten the effectiveness of any protective policies may contribute to improving compliance level of other policies as well. To promote formal employment, mixing various policies including labor laws, labor policies, social insurance programs, and taxation policies must be explored.

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4 Determinants of Corporate Employment Performance*

Yoon-Gyu Yoon**

Introduction

Prior to the 1997 foreign exchange crisis, employment security was not of great concern to Korean society. At the time, relatively positive economic conditions and strong union activity worked in favor of employment stability. The 1997 crisis, however, led many firms to implement large-scale downsizing to address various managerial challenges. Corporate strategies for increased labor flexibility were implemented with greater intensity after the crisis than previously with the introduction of a variety of employment adjustment methods, including lay-offs, voluntary early retirement, and the expansion of non-regular workers. This trend of employment adjustment has gained further momentum through the strengthening of neoliberalism within the global economic environment (Yoon, 2010).

While firms utilize employment adjustment with the goal of enhancing productivity by cutting labor costs, such adjustments can also lead to truncating skills development, weakening worker morale, and requiring additional costs for the establishment of a social safety net. In some cases, the costs incurred will exceed the costs saved from employment

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adjustment, which defeats the original purpose of improving corporate performance through such strategies.

Corporate decisions on the level at which employment is to be maintained in the organization are determined by various factors. Job creation is impacted by external factors (such as the legal and institutional environment, market demand, industrial structure, etc.), corporate characteristics (industry, region, size, etc.), and internal factors (working hours, management systems, personnel management systems, etc.). This study examines data from the KLI Workplace Panel Survey (2005-2009) to empirically analyze the relationship between job creation and a broad scope of variables and to identify the key factors that affect job creation performance.

The KLI Workplace Panel Survey (2005-2009) is utilized for this study's empirical analysis of corporate employment performance and its determinants. Workplaces are first categorized into four groups based on their job creation performance. Next, a basic statistical analysis is conducted on the differences caused among the four groups in terms of major variables related to external factors, workplace characteristics, and internal factors. The study then analyzes the net effect of each factor on corporate employment performance through a regression analysis that simultaneously controls multiple factors. This empirical analysis on the various determinants of employment performance is expected to provide useful input to encourage greater job creation in mid- to long-term corporate human resource planning and in changes to government labor market policies and institutions.

Data for Analysis and Basic Statistics

Data from the 2005-2009 Workplace Panel Survey (WPS) are analyzed in this study to identify the characteristics of workplaces with relatively robust employment growth and those with weaker growth. Em-

ployment growth is determined on the basis of the employment growth rates reported by workplaces for each wave of the survey (with 2 years in between each wave), in which workplaces are categorized into four groups according to their employment growth rate ("lower than -10%", "-10% to lower than 0%", "0% to lower than 10%", "10% or higher").

In each wave of the WPS, 1,700 to 1,900 workplaces were surveyed, including general workplaces and those in electricity, gas and water supply, finance and insurance, telecommunications, and the public sector (refer to Table 4-1). The population for the survey is comprised of all workplaces with 30 or more permanent employees, and responses to the WPS questionnaires were provided by human resource and labor managers and worker representatives of the workplaces, allowing for the collection of a very wide scope of information on workplaces that included data on industry, region, employees, finances, workplace characteristics, employment status and employment management, remuneration and evaluation, human resource management and work organizations, human resource development, corporate welfare, and industrial accidents and industrial relations (in both unionized and nonunionized workplaces).

Information on employees is provided through data on gender, rank, occupation, regular/non-regular positions, and worker turnover. In terms of workplace finances, the WPS provides data on revenue, operating income, current net income, tangible assets, intangible assets, and labor costs. Workplace characteristic variables include management

Table 4-1. *Composition of the WPS Population*

(Unit: workplaces)

	WPS2005	WPS2007	WPS2009
Total	1,905	1,735	1,737
General	1,504	1,500	1,519
Electricity, gas and water supply	20	20	20
Finance and insurance	58	58	53
Telecommunications	33	32	29
Public sector	290	125	116

systems, mid- to long-term vision and planning, degree of market competition, market demand conditions, workplace innovation, and overall industrial relations. For remuneration and evaluation, data are provided on performance appraisal systems, remuneration systems, performance-based pay, employee stock ownership plans, and wage peak systems. Information on human resource management and work organizations was collected in the survey through data on human resource planning, job task analysis, human resource management, and small-group activities; while corporate activities for human resource development are examined through data on the various education and training programs provided in the workplaces. Additionally, a variety of information related to industrial relations in both unionized and nonunionized workplaces was collected through the WPS.

From the broad range of information collected through the WPS, this study analyzes data on major variables that may impact the level of employment collected from the 1,229 workplaces observed continuously throughout the period of analysis (2005-2009). This analysis focuses on examining how the characteristics of the four groups of workplaces as categorized according to their employment growth rates differ and change over time.

The basic characteristics of samples included in this analysis of the WPS are set forth in Table 4-2. The average number of workers in the sample workplaces was 387.9 in 2005 and grew 47.5 to 435.4 two years later in 2007. In 2009, however, this number decreased 9.3% to 426.1, most likely a reflection of the decline in the domestic economy following the 2008 global financial crisis. In terms of finances, it can be seen that there was hardly any change to real revenue from 2005 to 2007, whereas from 2007 to 2009, including the period surrounding the 2008 economic crisis, there was a sharp increase in real revenue, which contrasts starkly with the decrease in employment during this same period. The fact that this considerable increase in revenue from 2007 to 2009 occurred without any accompanying growth in employment points to

the likelihood that the economic crisis was used by firms as a reason to attempt rather excessive employment adjustment.

Table 4-2. *Trends in WPS Sample Workplace Characteristics and Major Variables (2005~2009)*

		Level			Rate of change		
		2005	2007	2009	2005~07	2007~09	2005~09
Number of workers		387.9	435.4	426.1	47.5(12.2%)	-9.3(-2.1%)	38.2(9.8%)
Finances	Revenue (1 million KRW)	721,737	733,389	970,518	11,652(1.6%)	237,129(32.3%)	248,781(34.5%)
	Labor costs (1 million KRW)	41.9	43.9	40.0	2(4.8%)	-3.9(-8.9%)	-1.9(-4.5%)
	Tangible assets (1 million KRW)	359,035	342,364	384,280	-16,671(-4.6%)	41,916(12.2%)	25,245(7.0%)
	Intangible assets (1 million KRW)	14,245	14,278	19,093	33(0.2%)	4,814(33.7%)	4,847(34.0%)
	Total hours worked	-	56.4	51.1	-	-5.3(-9.4%)	-
Employ-ment type	Regular	-	61.56	61.58	-	0.02	-
	Non-regular	-	38.44	38.42	-	-0.02	-
Occupation	Managerial	33.6	35.0	35.7	1.4	0.7	2.1
	Non-managerial	66.4	65.0	64.3	-1.4	-0.7	-2.1
Gender	Male	71.3	71.7	72.0	0.4	0.3	0.7
	Female	28.7	28.3	28.0	-0.4	-0.3	-0.7
Unioniza-tion	Yes	41.3	41.7	42.5	0.5	0.7	1.2
	No	58.7	58.3	57.5	-0.5	-0.7	-1.2
Manage-ment system	Professional	15.7	11.0	7.5	-4.7	-3.5	-8.2
	Non-professional	84.3	89.0	92.5	4.7	3.5	8.2
Workplace innovation	Yes	52.3	53.5	51.0	1.1	-2.4	-1.3
	No	47.7	46.5	49.0	-1.1	2.4	1.3

(table continues)

		Level			Rate of change		
		2005	2007	2009	2005~07	2007~09	2005~09
Number of workers		387.9	435.4	426.1	47.5(12.2%)	-9.3(-2.1%)	38.2(9.8%)
Industrial relations	Good	73.6	74.6	73.9	1.0	-0.7	0.3
	Not good	26.4	25.4	26.1	-1.0	0.7	-0.3
Managerial lay-offs	Yes	24.7	17.6	13.7	-7.1	-3.9	-11.0
	No	75.4	82.4	86.3	7.1	3.9	11.0
Regular personnel planning	Yes	58.0	60.0	49.9	2.0	-10.1	-8.1
	No	42	40.03	50.12	-2.0	10.1	8.1
Education and training implementation and support	Yes	92.8	92.3	87.3	-0.5	-5.0	-5.5
	No	7.2	7.7	12.7	0.5	5.0	5.5
Selective working hours	Yes	10.6	8.9	6.7	-1.7	-2.3	-3.9
	No	89.4	91.1	93.3	1.6	2.3	3.9
Flexible working hours	Yes	13.8	12.5	7.7	-1.3	-4.8	-6.1
	No	86.2	87.5	92.3	1.3	4.8	6.1
Industry	Manufacturing	61.7	61.7	61.5	0.0	-0.2	-0.2
	Non-manufacturing	38.3	38.3	38.5	0.0	0.2	0.2
5-day work-week	Yes	67.8	82.1	83.3	14.3	1.2	15.5
	No	32.2	17.9	16.7	-14.3	-1.2	-15.5
Number of workplaces		1,229	1,229	1,229			

The proportion of regular and non-regular workers in the sample workplaces remained almost unchanged from 2007 to 2009. Regarding occupations, even though a very slight upward trend can be seen for managerial occupations from 2005 to 2009, the overall composition did not have much change. The composition of workers by gender also remained largely unchanged from 2005 to 2009. Meanwhile, although

there was a slight increase in unionized workplaces from 2005 to 2009, this change was not very significant; the proportion of workplaces in the manufacturing industry remained stable from 2005 to 2009.

In terms of management systems, workplaces with professional management decreased continuously from 15.7% in 2005 to 11.0% in 2007 and further to 7.5% in 2009, revealing that owner-centric management systems gained strength during this period. The figures for workplace innovation and industrial relations remained almost unchanged from 2005 to 2009, while the proportion of workplaces that experienced managerial lay-offs decreased from 24.7% in 2005 to 17.6% in 2007 and to 13.7% in 2009.

Slight increases were seen from 2005 to 2007 in human resource planning and multi-functional job training, but the trend turned downward in 2009. The proportion of workplaces implementing the 5-day workweek increased steadily in line with the yearly expansion of the application of laws mandating the 5-day workweek that had already been implemented in July 2004 in the finance and insurance industry, the public sector, and workplaces with 1,000 or more workers. In regards to selective and flexible working hours, there was a slight decrease in the proportion of workplaces implementing the two from 2005 to 2007, and a more pronounced decrease in 2009.

Major Characteristics and Changes for Each Group

This study takes the sample workplaces used in the analysis and divides them into 4 groups ("lower than -10%", "-10% to lower than 0%", "0% to lower than 10%", "10% or higher") according to the workplaces' employment growth rates during the most recent 2 years (from 2007 to 2009), and then looks at how the groups differ and change over time in terms of a variety of workplace characteristics including worker composition, finances, management, education and

training, and industrial relations. The following findings outline the differences among the four groups in terms of numerous variables that comprise these workplace characteristics. The results of a regression analysis that simultaneously controls multiple variables are presented later.

Characteristics of and Changes to the Employment Structure

An examination of the change in the average number of workers for each group of workplaces as categorized according to their employment growth rate from 2007 to 2009 (refer to Table 4-3) reveals that workplaces that attained employment growth of 10% or more were relatively smaller in size as of 2007 than workplaces in the other groups, but the former grew an outstanding 93% during the 2 years up to 2009. The group of workplaces with the lowest employment growth rates of lower than -10% were largest in size in 2007, but then had a very sharp drop in employment of -64%. The data reveal that, compared to workplaces in the "-10% to 0%" and "0% to 10%" groups, the "10% or higher" and "lower than -10%" groups have a considerably higher number of workplaces that experienced rather drastic changes in employment numbers. Further, a very wide gap exists in employment performance between the highest and lowest performers.

In terms of worker gender (refer to Table 4-3), the decrease rate for female workers is higher in workplaces with the lowest employment growth rates (lower than -10%), indicating that women are more vulnerable than men when employment is reduced. Meanwhile, in workplaces with the highest employment growth (10% or higher), the increase rate is just slightly higher for women than for men.

Differences exist between regular and non-regular workers in terms of employment increase/decrease rates. While the situation does differ slightly by group, in general, the employment decrease rate is higher for non-regular workers in workplaces where employment shrinks, and the

Table 4-3. *Changes in Total Employment and Employment by Gender*

(Unit: person, %)

		All				Male				Female			
		〈 -10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈- 10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈- 10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
	N	169	417	509	134	169	417	509	134	169	417	509	134
2007	Average	485.7	444.1	436.4	340.8	294.2	339.3	303.6	236.1	191.5	104.8	132.7	104.8
2009	Average	172.4	418.3	456.0	657.1	113.8	321.3	315.0	453.7	58.6	96.9	141.0	203.3
	Increase rate(%)	-64.5	-5.8	4.5	92.8	-61.3	-5.3	3.7	92.2	-69.4	-7.5	6.2	94.1

employment increase rate is higher for non-regular workers in workplaces where employment grows. For instance, in workplaces with the largest employment decrease rates, the employment growth rate for non-regular workers from 2007 to 2009 is -70.8%, compared to only -59.6% for regular workers. At the same time, in workplaces with the highest employment growth rates, regular workers increased 59.8%, whereas the rate of increase for non-regular workers was about two times higher at 133.6%. These numbers reveal that non-regular workers act as a buffer in times of employment adjustment when they are eliminated first in times of employment reduction and are hired first in times of employment expansion. Therefore, non-regular workers may be exposed to greater insecurity and vulnerability in employment than have their counterparts.

Table 4-4. *Changes in the Employment of Regular / Non-regular Workers*

(Unit: persons, %)

		Regular workers				Non-regular workers			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Average	273.2	291.1	276.1	188.4	212.6	153.0	160.3	152.4
2009	Average	110.3	280.4	278.4	301.1	62.2	137.9	177.6	356.0
	Increase rate (%)	-59.6	-3.7	0.8	59.8	-70.8	-9.9	10.8	133.6

The employment growth rates for union members and non-members also differ by group. Nonetheless, from 2007 to 2009, in workplaces where employment decreased, the employment decrease rate is clearly lower for union members than for non-members. Still, in workplaces where employment increased, the employment growth rate is higher for union members than non-members. This difference implies that unions do indeed play a certain role in guaranteeing the employment stability of their members, particularly in times of employment reduction. The higher employment growth rate of union members in times of employment expansion can be attributed somewhat to a greater number of new hires or non-members joining the unions, perhaps in reflection of the role that unions play in employment stability.

In workplaces that attained the highest rate of employment growth of 10% or higher from 2007 to 2009, there is almost no change in terms of contractual working hours, whereas the number of overtime hours drops sharply. This same trend is seen for workplaces with 0% to 10% employment growth, which points to the possibility that jobs were added to offset the reduction in working hours, particularly overtime hours, in workplaces where employment grew. Contractual and overtime hours also decreased considerably in workplaces where employment decreased. Without this decrease in working hours, these workplaces may possibly have been forced to reduce employment to a much greater extent than have other workplaces.

Table 4-5. *Changes in the Employment of Union Members / Non-members*

(Unit: persons, %)

		Union members				Non-members			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Average	134.5	183.9	175.7	57.5	351.2	260.2	260.7	283.3
2009	Average	53.5	202.2	188.7	147.7	118.9	216.1	267.2	509.3
	Increase rate (%)	-60.2	9.9	7.4	157.0	-66.1	-17.0	2.5	79.8

Table 4-6. *Changes in Hours of Work*

(Unit: hours, %)

	Contractual working hours				Overtime hours				Total hours worked			
	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈
2007 Average	51.8	45.0	42.2	40.3	12.2	13.7	10.3	13.8	64.0	58.7	52.5	54.0
2009 Average	40.6	45.0	42.2	40.1	5.7	10.8	8.0	6.0	46.3	55.8	50.2	46.1
Increase rate (%)	-21.6	0	0	-0.5	-53.3	-21.2	-22.3	-56.5	-27.7	-4.9	-4.4	-14.6

Characteristics of and Changes to Financial Indicators

An analysis of the relationship between changes in revenue and employment growth reveals that, in general and as expected, workplaces with high employment growth rates experienced greater increases in revenue than have those with low growth. However, workplaces with negative employment growth also saw their revenue increase considerably. This lack of growth indicates that the reduction of employment in these workplaces may not specifically be linked to any weakening of production activities or decrease in revenue, and may perhaps be due to a combination of other factors. The regression analysis discussed later is critical in taking into account various factors, including revenue, to identify the relationship between revenue and changes in employment.

As for operating income, workplaces with poor employment performance (i.e., with employment growth rates lower than -10%), have the highest operating income increase rate. These data point to the lack of any clear relationship between the size of employment adjustment and operating income, and they contradict the general perspective and claims by employers that employment reduction is implemented for managerial reasons such as poor business performance. While a large-scale reduction of employment may have contributed to this increase in operating income, the significant increase in operating income invalidates any claims that jobs had to be eliminated due to managerial difficulties.

Table 4-7. *Changes in Revenue and Operating Income*

(Unit: 1 million KRW, %)

		Revenue				Operating income			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Average	684,661	831,313	701,430	566,361	53,383	69,794	58,816	57,612
2009	Average	837,162	1,104,972	921,391	880,098	182,049	82,087	116,294	67,775
	Increase rate (%)	22.3	32.9	31.4	55.4	24.1	17.6	97.7	17.6

Characteristics of and Changes to Management Systems and Industrial Relations

Theorists differ in their views on whether employment performance is impacted by corporate management systems, making this issue one that needs to be verified empirically. Table 4-7 reveals how the proportion of workplaces with professional management changed from 2007 to 2009, a period during which a financial crisis hit the global economy. While some differences are observed among the four different groups, the overall proportion of workplaces with professional management decreased from 2007 to 2009. By group, it is indicated that in all workplaces except for those with employment growth lower than -10%, the proportion of professional management is relatively high in 2007, whereas in post-crisis 2009, the proportion drops significantly. Because large-scale employment downsizing may be related to poor management performance in the workplace, this phenomenon could be interpreted as an outcome of increased demand for stronger management leadership in response to the global crisis.

While it is difficult to claim from this analysis alone that a clear causal relationship exists between the management system and employment performance, in light of the fact that professional management systems were maintained in a more stable manner in workplaces with better employment performance, it is plausible that a positive relationship exists between professional management systems and employment performance. This analysis contrasts, however, with the findings of Cho

Table 4-8. *Proportion of Workplaces with Professional Management Systems and Mid- to Long-Term Visions and Planning*

(Unit: %)

		Professional management system				Mid- to long-term vision and planning			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Proportion	13.6	9.2	9.2	10.5	60.7	61	61.8	61.1
2009	Proportion	6.5	7.1	7.1	9.7	63	70.5	55.6	51.8
	Increase / decrease (%p)	-7.1	-2.1	-2.1	-0.8	2.3	9.5	-6.2	-9.3

and Park (2007) based on WPS and National Information and Credit Evaluation financial data. These data indicate that the degree of employment adjustment is greater in workplaces with professional management systems than in those with owner management systems.

Meanwhile, in all four groups, the proportion of workplaces with mid- to long-term visions and planning in 2007 is similar at about 60%, whereas this proportion differs for each group in post-crisis 2009. The data reveal that the proportion of workplaces with mid- to long-term visions and planning increases among workplaces with poor employment performance from 2007 to 2009, whereas the proportion drops for workplaces with better employment performance levels. This phenomenon can possibly be attributed to the realization of workplaces with poor employment performance levels of the need to establish mid- to long-term visions and plans to overcome the economic crisis.

Sound industrial relations based upon healthy cooperation between labor and management can have a positive influence on maintaining and creating jobs through greater productivity and through compromises on maintaining jobs. Table 4-9 reveals, however, that there is no clear relationship between cooperative industrial relations and corporate employment performance. To elaborate, the existence of a higher proportion of workplaces with cooperative industrial relations is not particularly helpful for employment performance, and neither is high employment performance an indicator of more cooperative industrial

Table 4-9. *Proportion of Workplaces with Cooperative Industrial Relations and Those Implementing Innovation*

(Unit: %)

		Cooperative industrial relations				Innovative workplaces			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Proportion	71.0	74.1	76.4	73.9	54.4	55.2	50.9	56.7
2009	Proportion	74.6	72.7	75.5	71.7	55	51.1	49.7	50.8
	Increase / decrease (%p)	3.6	-1.4	-0.9	-2.2	0.6	-4.1	-1.2	-5.9

Note. Figures for innovative workplaces represent the proportion of "workplaces in which R&D is conducted to develop products and services and to innovate processes and imitate innovation from other firms."

relations. Further, from 2007 to 2009, there is no consistent trend that is observable in the proportion of workplaces with cooperative industrial relations in any of the four groups. This topic will be analyzed in more detail in the following regression analysis, which includes considerations on variables such as unionization and industrial relations.

No clear relationship is observed, either, between employment performance and workplace innovation in which R&D is conducted to develop products and services and to innovate processes and imitate innovation from other firms. It is difficult to identify any unique trend in the proportion of workplaces that carried out innovative efforts from 2007 to 2009. Most likely, this difficulty somewhat reflects that the effect that R&D innovation has on employment performance differs significantly according to the nature of innovation (e.g., product innovation vs. process innovation), and that it takes a relatively long time for R&D efforts to appear in the form of employment performance. Thus, there may be a gap between the short-term and the mid- to long-term employment effect of R&D. The absence of a clear relationship between innovation and employment performance may also be attributed in part to the fact that maintaining and creating jobs are secondary goals in corporate strategies for workplace innovation, for innovation mainly focuses on attaining primary goals.

Table 4-10. *Proportion of Workplaces that Implement Regular Personnel Planning and Implement / Support Education and Training*

(Unit: %)

		No regular personnel planning				Implements/supports education and training			
		〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈	〈-10%	-10=〈 〈0%	0=〈 〈10%	10% =〈
2007	Proportion	46.8	40.3	39.9	31.3	92.3	88.7	94.1	96.3
2009	Proportion	58.0	50.4	49.1	43.3	83.4	88.5	87.6	87.3
	Increase / decrease (%p)	11.2	10.1	9.2	12.0	-8.9	-0.2	-6.5	-9.0

While differences do exist by year, in general, firms with low employment growth rates tend to be firms that "do not implement regular human resource planning." An examination of changes to the proportion of workplaces that do not implement regular human resource planning from 2007 to 2009 reveals that, in all four groups, the proportion increases quite significantly. This increase implies that it is quite likely that firms that "do implement regular human resource planning" will not drastically cut jobs when faced with external shocks because their plans regarding human resources are established on the basis of a comprehensive outlook on the future of the economy.

Next, the proportion of workplaces in each group that conduct and support education and training is discussed. While slight differences appear by year, it can be found that workplaces with higher employment growth generally tend to implement and support education and training more than those with lower growth. It could be that workplaces that invest heavily in education and training have a higher quantitative and qualitative level of accumulated human capital that is managed efficiently, and therefore there is a weaker incentive for these workplaces to cut jobs in the face of any negative impacts.

Differences are now examined that are found in the four groups in terms of working hours (i.e., implementation of the 5-day workweek and selective/flexible working hours). First, for the 5-day workweek, it

Table 4-11. *Proportion of Workplaces Implementing the 5-Day Workweek and Selective/Flexible Working Hours*

(Unit: %)

	5-day workweek				Selective working hours				Flexible working hours			
	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈	〈-10%	-10=〈〈0%	0=〈〈10%	10%=〈
2007 Proportion	89.4	91.4	89.2	91.8	8.3	7.4	10.6	8.2	11.8	12.7	12.4	13.4
2009 Proportion	91.1	92.3	92.3	94.8	5.3	6.5	7.1	7.5	8.3	7.0	8.3	7.5
Increase / decrease (% p)	1.7	0.9	3.1	3.0	-3.0	-0.9	-3.5	-0.7	-3.5	-5.7	-4.1	-5.9

can be found that a greater proportion of workplaces with higher employment growth have implemented the 5-day workweek and that the overall proportion of workplaces implementing the 5-day workweek has increased slightly from 2007 to 2009. It is difficult, however, to observe any significant difference among the four groups. The same is also true for selective/flexible working hours, for which there is no significant difference among the groups and for which the increase/decrease of implementation between 2007 and 2009 is not found to have any clear relationship with the level of employment growth.

Results of Regression Analysis

Regression Model and Variables

The previous analysis on characteristics of workplaces grouped by their level of employment growth was based on simple relationships between employment growth and variables representing characteristics deemed likely to be related to corporate employment performance. The simple relationships identified as a result of the earlier analysis do not, however, take into consideration the impact of a wide range of other variables. Thus, they may differ from the results of a regression analysis

that simultaneously controls the multiple factors that affect employment performance. In this section, therefore, a regression model is developed that takes all the previously discussed variables into consideration. Next, a quantitative analysis is conducted that utilizes panel analysis techniques.

The analysis on determinants of employment performance requires the estimation of a dynamic employment equation that includes lagged dependent variables representing employment in the previous period. The rationale is to account for the possibility, when employment levels change due to external impacts, that the current level of employment might be affected by employment in the previous period and may not completely return to a state of equilibrium within the given timeframe. The dynamic level equation that includes fixed effects and lagged dependent variables is expressed as follows. A more convenient and simpler model that does not include the vector of the explanatory variable (x) is utilized in this analysis.

$$y_{it} = \alpha + \delta y_{i,t-1} + u_i + \epsilon_{it},\ 0 < \delta < 1$$

The dependent variable y_{it} represents the level of employment, while $y_{i,t-1}$ is the lagged dependent variable (i.e., the employment level in the previous period). The disturbance term u_i represents firm-specific fixed effects, and the disturbance term ϵ_{it} is assumed to have an I.I.D$(0,\ \sigma_\epsilon^2)$ distribution that is serially uncorrelated: $E(\epsilon\epsilon_{is}) = 0$ for $t \neq s$, $E(\epsilon\epsilon_{kt}) = 0$ for $i \neq k$.

The lagged dependent variable $y_{i,t-1}$ is a predetermined variable that is affected by the past $y_{i,s}$. While it is uncorrelated to ϵ_{it} in the error term $(u_i + \epsilon_{it})$, there does exist a correlation with unobserved firm characteristics u_i, giving rise to the issue of endogeneity. An instrument variable is thus needed to control this endogeneity caused by the lagged dependent variable within the structure of this regression model. The regression model for this study is estimated with the 2SLS

(2 Stage Least Stages) method that utilizes a differenced lagged variable as the instrument variable to control the endogeneity of the lagged dependent variable. More specifically, ($\Delta y_{i2}, \Delta y_{i3}, \cdots, \Delta y_{i,t-1}$) is used as a valid instrument variable that controls the endogeneity of the lagged dependent variable $y_{i,t-1}$ in the level equation just presented.

The major explanatory variables used in this regression analysis are now described. The dependent variable in the dynamic employment equation presented previously is the current level of employment, and other important explanatory variables include the lagged dependent variable, which is the past value for the level of employment. Level of employment is the dependent variable, along with revenue, capital intensity, average labor costs by industry, operating income, worker composition (the proportion of women, non-regular workers etc.), and a dummy variable for industry. Unionization, professional management systems, workplace innovation, industrial relations, personnel planning, selective/flexible working hours, 5-day workweek implementation, support for education and training, and numerous other variables related to corporate management, human resource management, and industrial relations are also included in the regression model as dummy variables.

The lagged dependent variable is included because the employment level of the previous period can affect the current level of employment, mostly in consideration of the fact that the current level of employment may not completely return to equilibrium after experiencing external shocks within the period covered by the panel data (2 years). 1 minus δ, the coefficient for the lagged dependent variable (1- δ), can be interpreted as the speed at which the level of employment moves back towards equilibrium after experiencing external shock in the partial adjustment model. The natural log values for the dependent variable (i.e., the current level of employment), and for the lagged dependent variable are used for this purpose.

The revenue variable reflects firm-specific exogenous impacts related

to product demand and is measured as the natural log of real revenue as adjusted for the Producer Price Index (where the 2005 index = 100). External impacts related to product demand lead to adjustments to output, which in turn lead to adjustments in labor, capital, and other factors of production. Most studies have confirmed that revenue is a key factor affecting the level of employment (Hamermesh, 1982; Merrilees, 1982; Rice, 1986; Yoon, 2001). Operating income is also an indicator that reflects corporate management performance, and is included as an explanatory variable that can impact employment performance or employment adjustment behavior. Like the revenue variable, the operating income variable is measured as the natural log value of real operating income adjusted for Producer Price Index (where the 2005 index = 100).

Capital intensity as measured by per worker tangible fixed assets (i.e., the labor equipment ratio), is included as a variable that reflects firm-specific skills. Firms with higher capital intensity are likely to have production processes that depend more on specialization, division of labor, and group work, making it more likely for these firms to utilize production technology that requires greater firm-specific skills (Koike, 1989; Muramatsu, 1983). This view is basically in agreement with the implications of Griliches' (1969) capital-skill complementarity hypothesis.

The wage variable represents the price of labor and has a negative correlation with the level of employment, but at the same time it is determined together with the level of employment. The issue of endogeneity may arise, therefore, when wages are used as an explanatory variable in the estimation of the employment equation. The characteristics of the estimation model used in this study make it difficult to control the endogeneity of the workplace wage variable. For this reason, this study introduces the concept of alternative wage, which is regarded by workplaces as an exogenous factor (Abowd & Lemieux, 1993; Currie & Harrison, 1997). The average per capita labor cost for each workplace at the 2-digit industrial classification level is calculated and used

here as the proxy variable for alternative wage in each workplace. This alternative wage is measured as the natural log of real wage as adjusted for the Consumer Price Index.

Labor unions, regardless of the bargaining structure, can exert a degree of influence and play a certain role in issues such as the level of employment and employment stability. Even when no official bargaining structure exists between labor and management for discussions on the level of employment and employment stability, the unions can take collective action and demonstrate their influence, particularly when employment is expected to be downsized (Yoon, 2008). The labor union variable is measured as a dummy variable that is determined by the existence or non-existence of a union. Because worker composition can also affect employment performance, such composition variables as the proportion of women and the proportion of non-regular workers are also introduced as explanatory variables, while a dummy variable for the manufacturing industry is also brought in to control differences caused by industry characteristics.

Lastly, because variables related to management systems and strategies, human resource management, working hours, and industrial relations also can all impact corporate employment adjustment behavior and employment performance, some of these, including professional management systems, workplace innovation, industrial relations, personnel planning, selective/flexible working hours, 5-day workweek implementation, and support for education and training, have been introduced as explanatory variables in the form of dummy variables.

Regression Analysis Results

Table 4-12 sets forth the results of the regression analysis on the dynamic employment equation that includes a lagged dependent variable for when the endogeneity of the lagged dependent variable is controlled (2SLS) and for when it is left uncontrolled (Pooled OLS, fixed

effects). As explained earlier, the dependent variable in this regression analysis is the level of employment as measured by its natural log value, where the explanatory variables including the lagged dependent variable, revenue, capital intensity, labor costs, and operating income are also measured as natural log values. A comparison of the estimated coefficients for the lagged dependent variable demonstrates that in the fixed effects model in which the endogeneity of the lagged dependent variable is not controlled, the value of the coefficient is, contrary to expectations, negative (-), while the coefficient is positive and close to 1 at 0.878 in the OLS model. In the 2SLS model that controls endogeneity, however, the coefficient of the lagged dependent variable is significantly lower at 0.675. The following is a discussion on the estimation results for variables of particular interest as derived through the instrument variable estimation model that controls the endogeneity of the lagged dependent variable.

The 2SLS estimation results shown in Table 4-12 indicate that the coefficient for the lagged dependent variable is 0.675, which is positive (+) at a significance level of 1%, and which is aligned with the theoretical prediction that the value would be between 0 and 1, which demonstrates that the level of employment in the preceding period has a relatively strong impact on the current level of employment. In turn, it is implied that the speed at which employment levels return to a state of equilibrium after an external shock is much slower than generally perceived.

The coefficient for revenue (i.e., the employment elasticity of revenue), is also found to have a positive (+) value at a significance level of 1%. The numbers indicate that a 10% change in revenue would lead to a 1.45% change in employment. This finding is consistent with the general expectation that employment will increase with higher revenue, for demand would be higher for labor and other input factors. Meanwhile, the coefficient for capital intensity has a negative value (-) at a significance level of 10%, indicating that firms with higher capital in-

tensity rely more heavily on firm-specific skills and are therefore relatively more likely to hoard or steadily maintain their workforce even during times of external shock.

As for the operating income variable, the coefficient has a negative (-) value at a significance level of 10%, which contradicts the general expectation that higher operating income will lead to better employment performance. It may be that the increase in operating income does not follow though to job creation, or that operating income has increased as a result of employment reduction, a topic that requires additional research.

The coefficient for average labor cost by industry, the proxy variable for alternative wage is, as expected, negative (-) in value but is not statistically significant. The same is true for coefficients for the proportion of non-regular workers and women. The values of the coefficients for the manufacturing industry, professional management systems, and workplace innovation dummy variables are also not statistically significant.

The regression analysis tells us that the dummy variable for the existence of labor unions in the workplace is positive (+) at a significance level of 1%, indicating that the presence of a labor union impacts employment performance to a certain degree. If, however, it happens to be that unions are formed more often in workplaces with higher employment performance, then the union variable is also affected by the issue of endogeneity, and in this case, further research is once again required. Meanwhile, the industrial relations variable is found to be negative (-) at a significant level of 10%, which contradicts the general expectation that employment performance will be better under cooperative industrial relations.

With regard to this analysis on the impact of industrial relations on employment performance, it is possible to provide the following hypothetical explanation. When responding to the WPS questionnaire on the status of industrial relations in the workplace, respondents may

have provided responses from the perspective of whether there is a high or low degree of collective action or intervention on the part of the union or workers at times when labor-management relations are tense or interests collide. If, when faced with employment reduction, the union or the workers engaged in a struggle to maintain the level of employment (and therefore the response to the WPS survey was that industrial relations were not cooperative), then there may have been certain gains in terms of employment as a result of this confrontation. On the other hand, if the union or the workers responded to the threat of employment reduction in a passive manner and continued to seek compromise (in which case the response to the WPS survey would likely have been that industrial relations were cooperative), the end result may have been a more severe reduction in employment than in workplaces where the union or workers fought against employment reduction. It is therefore necessary to explore ways to better measure this variable so that it more appropriately represents the degree of cooperativeness in industrial relations.

Regarding the "no regular personnel planning" dummy variable, the coefficient is negative (-) at a level of significance of 5%, which demonstrates that firms that systematically establish human resource plans according to a comprehensive understanding of economic projections are likely to address external shocks well and thus have high performance in terms of job creation. Meanwhile, the education and training support dummy variable is found to be positive (+) at a 10% significance level, implying that firms that systematically implement education and training are able to efficiently manage the quality of human capital, which in turn enables them to achieve high employment performance on the basis of this accumulated human capital and provides less incentive for firms to reduce employment in the face of negative (-) external shocks.

Lastly, the 5-day workweek and the selective/flexible working hour variables are all found to be statistically insignificant in this analysis.

Table 4-12. *Estimation Results for a Dynamic Employment Equation that Includes a Lagged Dependent Variable*

Explanatory variable	Lagged dependent variable endogeneity uncontrolled				Lagged dependent variable endogeneity controlled (2SLS)	
	Pooled OLS		Fixed effects			
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Lagged dependent variable	0.878	0.000	-0.218	0.000	0.675	0.000
Revenue	0.062	0.000	0.036	0.272	0.140	0.000
Capital intensity	-0.014	0.116	-0.030	0.248	-0.024	0.076
Average labor cost by industry	-0.014	0.814	-0.006	0.953	-0.123	0.194
Operating income	-0.010	0.362	-0.027	0.114	-0.034	0.055
Proportion of women	-0.026	0.040	0.047	0.454	-0.010	0.633
Proportion of non-regular workers	0.009	0.654	0.074	0.037	-0.020	0.528
Manufacturing industry dummy	-0.049	0.064	-1.071	0.001	-0.003	0.942
Labor union dummy	0.037	0.222	0.133	0.324	0.196	0.001
Professional Management dummy	0.036	0.378	-0.003	0.952	0.050	0.468
Workplace innovation dummy	0.015	0.578	0.023	0.509	0.006	0.875
Industrial relations dummy	-0.056	0.059	0.003	0.951	-0.084	0.068
No personnel planning dummy	-0.112	0.000	0.012	0.709	-0.087	0.037
Selective working hours dummy	-0.050	0.325	0.006	0.925	-0.041	0.618
Flexible working hours dummy	-0.009	0.844	0.048	0.400	0.027	0.732
Support for education and training dummy	0.080	0.091	-0.064	0.313	0.129	0.057
5-day workweek dummy	0.045	0.428	0.077	0.396	0.110	0.266
Constant term	0.165	0.478	7.239	0.000	0.824	0.029
N	1,363		1,363		672	
R^2	0.860		0.096		0.833	

Note. 5-day workweek implementation includes partial implementation.

The estimation results for the 5-day workweek variable, in particular, contradict the general expectation that implementation of the 5-day workweek would require the employment of more workers to meet preset output levels. This idea can be attributed, in part, to the fact that about 90% of the sample firms had already implemented the 5-day workweek (at least partially) prior to 2007, the beginning of the analysis period, and therefore it may have been difficult for this particular analysis to capture the positive effect of 5-day workweek implementation on increasing employment (though a more detailed analysis is required for this topic).

Summary and Implications

This study utilized WPS data to examine the effect of major variables on employment performance. Workplaces were categorized into four groups according to their level of employment growth, after which major variables were observed to examine differences among groups and changes in levels or proportions to analyze the relationship between these variables and employment performance. Next, this study utilized a dynamic regression model that includes a lagged dependent variable to estimate the impact of these major variables on employment performance. A summary of the main findings of this analysis on factors affecting workplace employment performance is set forth next.

First, a summary is provided of the effect that major corporate finance-related indicators were found to have on employment performance. As expected, the revenue variable was found to have a positive (+) effect, where an increase in revenue stimulates demand for input factors and increases employment. Meanwhile, capital intensity has a negative (-) effect on employment performance, most likely because firms with higher capital intensity rely heavily on firm-specific skills; thus, they tend to hoard or steadily maintain their workforce in re-

sponse to external shocks. The coefficient for the operating income variable was estimated to have a negative (-) value, which contradicts the general expectation that an increase in operating income will lead to more employment, pointing to the need for further research on this topic.

The following is a summary of the results of the analysis on the effect that major variables related to industrial relations have on employment performance. First, the labor union dummy variable was shown to have a positive (+) coefficient, indicating that the presence of a labor union does have a certain impact on the level of employment. If, however, labor unions are more likely to be organized in workplaces that perform better than others in terms of employment, the labor union variable itself is affected by the issue of endogeneity, also requiring additional detailed research. Second, the variable for the status of industrial relations was found to have a negative (-) value, which also contradicts the general view that employment performance will be better in workplaces with cooperative industrial relations. Because responses to WPS questions on the status of industrial relations may possibly have been provided according to an individual's subjective perception of the degree of collective action or intervention taken on the part of the union or workers at times when interests between labor and management collide, such as when employment is adjusted, it is necessary to explore ways to best measure this variable so that it more appropriately represents the degree of cooperativeness in industrial relations.

Lastly, the results of analysis on the effect that major variables related to human resource management and education and training have on employment performance are summarized. First, the dummy variable representing the absence of regular personnel planning was found to have a negative (-) value, implying that firms that engage in systematic human resource planning are able to better respond to external shocks and can therefore attain higher employment performance. Regarding the dummy variable for education and training, the estimated coeffi-

cient had a positive (+) value, indicating that firms that support education and training perform better than others in terms of employment growth on the basis of their accumulated human capital.

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5 Baby Boomers' Employment*

Joyup Ahn and Bogsoon Kim**

Introduction

Since members of the baby boom generation began reaching retirement age in 2010, serious concerns have been expressed about a possible labor shortage as they retire in large numbers. There are also concerns about their impact on the self-employment industry. If those who retire before reaching the National Pension benefit age move on to self-employment in order to sustain their livelihood, it is likely to pull down the profitability of self-employment in general given that demand tends to be consistent for the mostly non-tradable goods or services offered by self-employed businesses. This could jeopardize the self-employment industry across the board, creating a cycle of baby boomer retirement, business start-up, and bankruptcy. Consolidation in the self-employment industry, ongoing since 2003, began an upward trend in August 2011, showing a year-to-year increase of 123,000 as of August 2012. Many are concerned that this trend is a manifestation of these fears.

The "baby boom generation" (those born during the period 1955–1963)[1] accounted for 17.8% of the productive population as of 2011.

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[1] A "baby boom generation" is a demographic cohort born during a period when the cumulative birthrate remains above 3.0. One such period is the years 1946 through 1964 in the

Their level of economic activity, together with Korea's low birthrate and aging population, is expected to have a considerable impact on the overall labor supply. This paper compares the employment status of the baby boom generation with that of the generations immediately before (those born during the period 1950–1954) and after (those born during the period 1964–1968), based on a number of labor market indicators, to review the intergenerational changes in patterns of economic activity. This paper also reviews the jobs occupied and lost by the baby boomers, as well as those reacquired.

Baby Boomers' Lifetime Work

Baby Boomers' Position in the Labor Market

Table 5-1 and Table 5-2 show the recent economic activity of the baby boomers. As of 2011, they accounted for 17.8% of Korea's total productive population, and their economic participation rate and employment rate were relatively high, at 76.8% and 75.3% respectively. At

Table 5-1. *Baby Boomers' Main Labor Market Indicators*

(Unit: In thousands)

	2009	2010	2011	August 2012
Productive population	7,245 (-34)	7,326 (80)	7,292 (-34)	7,268 (26)
Economically active population	5,628 (-100)	5,660 (32)	5,603 (-57)	5,534 (64)
(Economic participation rate)	77.7 (-1.0)	77.3 (-0.4)	76.8 (-0.4)	76.1 (-0.6)
Employed	5,491 (-122)	5,531 (40)	5,488 (-43)	5,420 (67)
(Employment rate)	75.8 (-0.1)	75.5 (-0.3)	75.3 (-0.2)	74.6 (-0.1)
Unemployed	137 (22)	129 (-7)	116 (-14)	114 (-3)
Economically inactive	1,617 (66)	1,666 (48)	1,688 (23)	1,734 (-38)
Non-employed (= Displaced + Inactive)	1,754 (88)	1,795 (41)	1,804 (9)	1,848 (-41)
Displaced (within previous year)	556 (52)	578 (22)	581 (3)	609 (-30)

Note. Numbers in parentheses ( ) indicate year-to-year change. From *Economically Active Population Survey*, by National Statistical Office of Korea.

United States and the years 1947 through 1949 in Japan, where they are called the Dankai generation. In this paper, the period is limited to the years 1955 through 1963.

Table 5-2. *Employment Growth and Share Among Baby Boomers, by Employment Type*

(Unit: In thousands, %)

	2009		2010		2011		August 2012	
Employed	5,491	(-122)	5,531	(40)	5,488	(-43)	5,420	(-67)
Wage workers	3,364	(-35)	3,443	(78)	3,423	(-20)	3,379	(-31)
Permanent	1,827	(53)	1,930	(103)	1,935	(5)	1,969	(48)
Temporary	989	(-38)	1,011	(22)	1,012	(1)	956	(-64)
Daily	549	(-50)	502	(-47)	476	(-25)	454	(-15)
Non-wage workers	2,127	(-87)	2,088	(-39)	2,065	(-23)	2,041	(-36)
Self-employed w/employees	566	(1)	543	(-24)	504	(-39)	490	(-13)
Self-employed, no employees	1,181	(-74)	1,173	(-8)	1,192	(18)	1,203	(-3)
Unpaid family workers	380	(-13)	373	(-7)	370	(-3)	348	(-20)
Share of employed								
Wage workers	61.3	(0.7)	62.2	(1.0)	62.4	(0.1)	62.3	(0.2)
Permanent	33.3	(1.7)	34.9	(1.6)	35.3	(0.4)	36.3	(1.3)
Temporary	18.0	(-0.3)	18.3	(0.3)	18.4	(0.2)	17.6	(-1.0)
Daily	10.0	(-0.7)	9.1	(-0.9)	8.7	(-0.4)	8.4	(-0.2)
Non-wage workers	38.7	(-0.7)	37.8	(-1.0)	37.6	(-0.1)	37.7	(-0.2)
Self-employed w/employees	10.3	(0.2)	9.8	(-0.5)	9.2	(-0.6)	9.0	(-0.1)
Self-employed, no employees	21.5	(-0.9)	21.2	(-0.3)	21.7	(0.5)	22.2	(0.2)
Unpaid family workers	6.9	(-0.1)	6.7	(-0.2)	6.7	(0.0)	6.4	(-0.3)
Share of wage workers								
Permanent	54.3	(2.1)	56.1	(1.8)	56.5	(0.5)	58.3	(1.9)
Temporary	29.4	(-0.8)	29.4	(0.0)	29.6	(0.2)	28.3	(-1.6)
Daily	16.3	(-1.3)	14.6	(-1.7)	13.9	(-0.7)	13.4	(-0.3)
Share of non-wage workers								
Self-employed w/employees	26.6	(1.1)	26.0	(-0.6)	24.4	(-1.6)	24.0	(-0.2)
Self-employed, no employees	55.5	(-1.2)	56.2	(0.6)	57.7	(1.5)	59.0	(0.9)
Unpaid family workers	17.9	(0.1)	17.8	(0.0)	17.9	(0.1)	17.1	(-0.7)

Note. Numbers in parentheses ( ) indicate year-to-year change in employment and share of employment. From *Economically Active Population Survey*, by National Statistical Office of Korea.

the same time, non-employed baby boomers, at 1,804,000 increased by 9,000 from the previous year, but their growth appears to be slowing. Of non-employed baby boomers, 581,000, or 32.2%, had experienced job displacement within the previous year.

By employment-contract type, the number of wage-earning baby

boomers decreased by 20,000 in 2011 from the previous year, but their share actually increased, mostly among permanent workers. In comparison, the number of daily workers among baby boomers stood at 476,000 as of 2011, showing an ongoing trend of decline.

Meanwhile, in 2011 the number of non-wage workers among baby boomers was 2,065,000, or 37.6% of the employed (Table 5-2). There was a decline of 23,000 from the previous year mainly in the number of self-employed with employees (employer) and unpaid family workers. But the trend in self-employment without employees reversed, increasing by 18,000 from the previous year. This change appears to reflect the trend in Korea overall; restructuring in the self-employment sector turned around in August 2011, when those over 50 actively began starting their own businesses. The growth in self-employment that began in the second half of 2011 continued into 2012, but the trend among baby boomers fluctuated during the same period, remaining stagnant from year to year in 2012 (January –August average).

Table 5-3 shows the employment rate, self-employment, and perma-

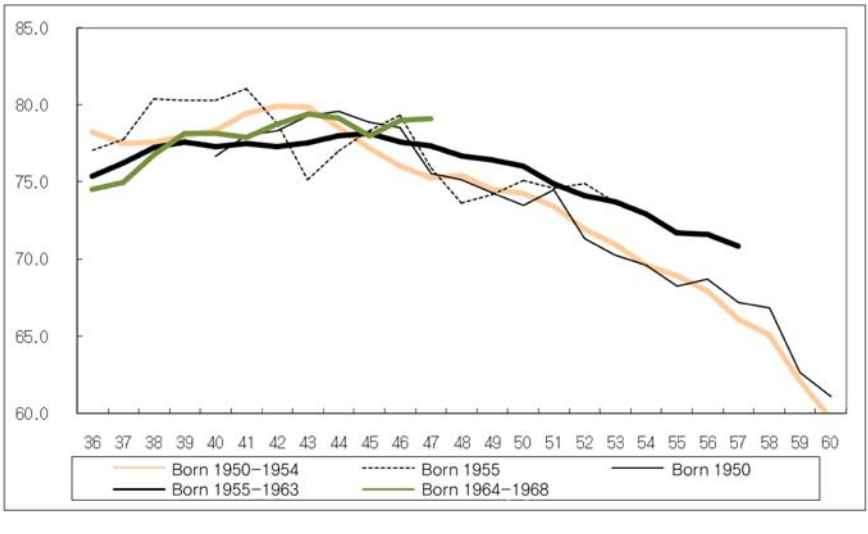

Figure 5-1. Employment-rate patterns by birth cohort and age (%). From *Economically Active Population Survey*, by National Statistical Office of Korea.

Table 5-3. *Lifetime Work, by Birth Cohort*

(Unit: %)

	Birth cohort and age						Birth year and age					
	1950~1954			1955~1963			1950			1955		
	45	50	55	45	50	55	45	50	55	45	50	55
Employment rate	77.2	74.3	68.9	78.1	76.0	71.7	78.9	73.5	68.3	78.3	75.1	71.8
Self-employment among the employed	37.8	38.3	36.1	32.2	32.7	32.9	38.4	41.3	38.4	35.6	35.9	34.3
Permanent workers among wage workers	53.9	45.9	49.7	50.9	53.5	56.4	55.4	44.6	46.5	49.0	47.3	54.8

Note. Self-employment is the sum of those with employees and those without. From *Economically Active Population Survey*, by National Statistical Office of Korea.

nent-worker shares for baby boomers and the previous generation by birth cohort and age. These employment numbers are comparatively favorable for the baby boomers. Those born in 1955, who have just started to retire, have a higher employment rate than the previous generation at the same age. In particular, the employment rate for those 55 years old (the age at which they start retiring) is 2.9 percentage points higher than that for the previous generation. Of the employed, both the share of wage workers and the share of permanent workers out of wage workers are higher than in the previous generation, whereas the share of self-employment is slightly lower.

The difference in employment rates between the baby boomers and the previous generation derives in large part from women's employment, as can be seen in Figure 5-2.

The employment rate for women born in 1955 is 58.5% at age 55, 6.3 percentage points higher than the rate for women at age 55 who were born in 1950 (52.2%), a much bigger gap than the 2.2 percentage points between the male generations (Table 5-4). For permanent workers, the employment rate is considerably higher, especially for women.

Figure 5-3 shows the share of self-employment out of the employed and the share of wage workers out of permanent workers for the period January 2010 (when they began turning 55) through August 2012 for those born in 1955, in comparison with the period January 2005

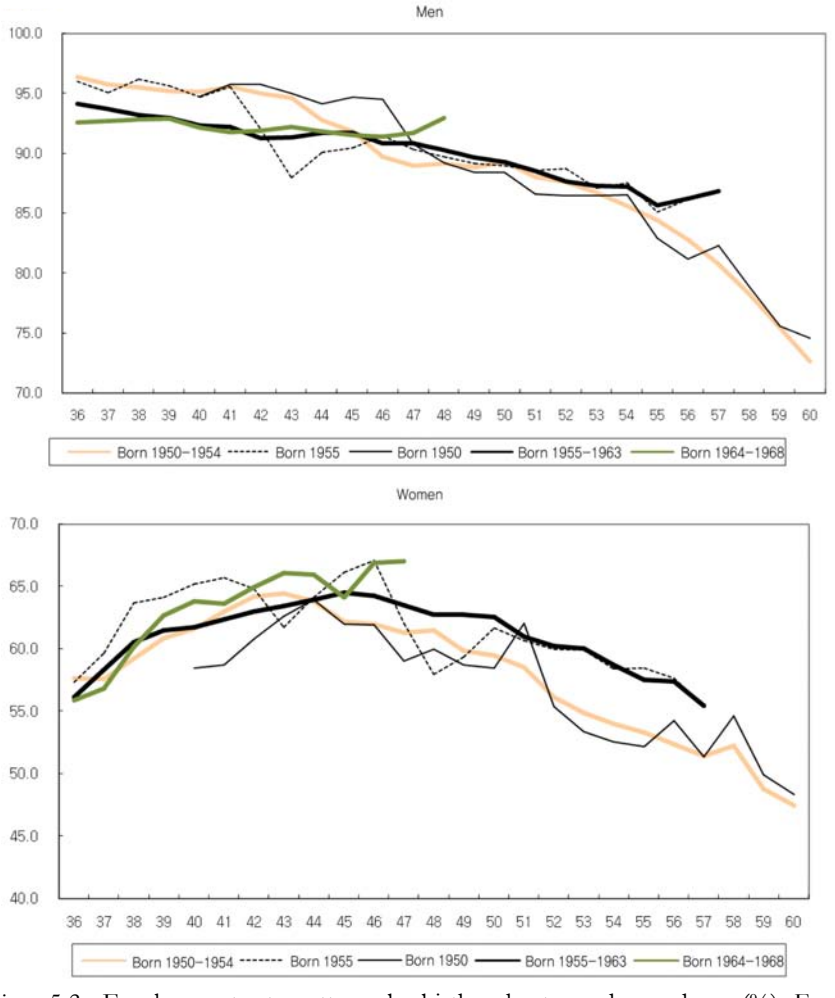

Figure 5-2. Employment-rate patterns by birth cohort, gender, and age (%). From *Economically Active Population Survey*, by National Statistical Office of Korea.

through August 2007 (when they began turning 55) for those born in 1950. As the figure shows, the self-employment rate for those age 55 and 56 does not shoot up from the 35% level, as their employment rate remains relatively stable despite the global financial crisis. In fact, it is quite low compared with that for the previous generation at age 55 and

Figure 5-3. Share of self-employment and permanent workers by birth cohort and age (%). Data for those born in 1950 reflect the period January 2005–August 2007, and for those born in 1955, the period January 2010–August 2012. Self-employment is the sum of all self-employed, with and without employees. From *Economically Active Population Survey*, by National Statistical Office of Korea.

Table 5-4. *Lifetime Work, by Birth Cohort and Gender*

(Unit: %)

	Birth cohort and age						Birth year and age					
	1950~1954			1955~1963			1950			1955		
	45	50	55	45	50	55	45	50	55	45	50	55
Men												
Employment rate	91.8	89.3	84.4	91.7	89.3	85.7	94.7	88.4	82.9	90.5	89.0	85.1
Self-employment among the employed	46.2	46.8	43.5	39.7	40.6	40.8	45.8	49.1	43.3	44.2	45.5	43.1
Permanent workers among wage workers	69.7	61.6	64.5	66.8	68.7	70.3	69.3	63.3	59.3	67.1	66.8	68.9
Women												
Employment rate	62.2	59.5	53.3	64.5	62.6	57.5	62.0	58.5	52.2	66.2	61.7	58.5
Self-employment among the employed	25.2	25.8	24.4	21.3	21.4	21.0	26.3	29.4	29.8	23.8	22.5	21.3
Permanent workers among wage workers	27.7	22.9	26.8	28.2	32.2	37.4	29.6	16.7	21.9	21.9	21.4	36.5

Note. Self-employment is the sum of all self-employed, with and without employees. From *Economically Active Population Survey*, by National Statistical Office of Korea.

56. The rate appears to increase in 2011 as the baby boomers turn 57, but its pattern is still different from that for the previous generation, when it shot up to over 40%. The share of permanent workers out of wage workers, at around 55%, does not drop sharply after age 55 (although there are some seasonal fluctuations), maintaining a relatively high level compared with the previous generation.

What Are the Baby Boomers Experiencing?

The cohort analysis in the preceding section indicates that baby boomers are much better off than the previous generation in terms of their level of economic activity. In particular, the share of permanent workers at age 55, when they start retiring, is considerably higher than for the previous generation, and their employment rate is also significantly higher, led mostly by women. In the industrial distribution in 2010, when the baby boomers born in 1955 started retiring, the share of manufacturing, health and social services increased more than in 2005, when those born in 1950 turned 55.

Then what is the number of non-employed among baby boomers who have not secured a job in the labor market? And what is the number of those who recently became unemployed during the past one month?[2]

The number of non-employed among the baby boomers, at 217,000 as of August 2012, is larger than the 165,000 for the previous generation; however, the non-employment rate for baby boomers is still lower. Figure 5-4 illustrates this point. Cohort analysis also reveals that the share of the economically inactive population among the middle-aged/older baby boomers over 50 is lower than that for the previous generation at the same age.

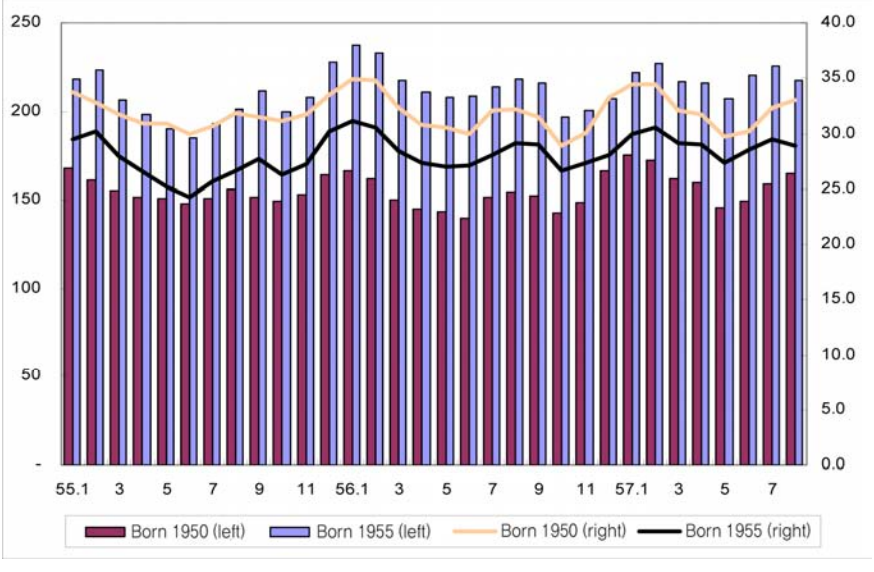

Figure 5-4. Number and trends of non-employment in the 1950 and 1955 cohorts by age (In thousands, %). From *Economically Active Population Survey*, by National Statistical Office of Korea.

[2] Data from December 2009 to August 2012 were used for those born in 1955 for non-employment and 1-month unemployment among baby boomers; data from December 2004 to August 2007 were used for those born in 1950.

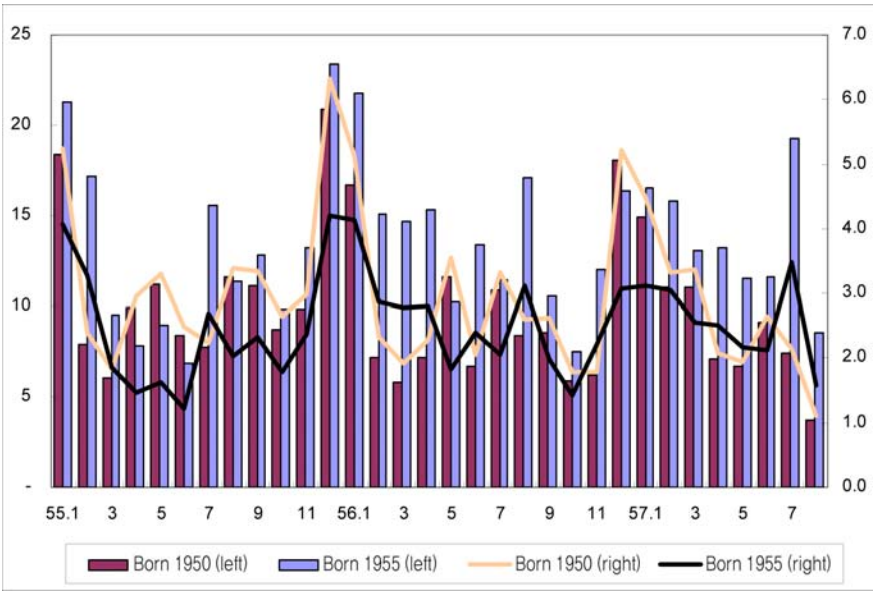

Figure 5-5. Numbers for and trends in 1-month unemployment in the 1950 and 1955 cohorts by age (In thousands, %). "1-month unemployment" indicates the state of going from being employed in the month prior to the survey month to being unemployed or economically inactive at the month of the survey. From *Economically Active Population Survey*, by National Statistical Office of Korea.

Of baby boomers born in 1955, the 1-month unemployment number was 9,000, or 1.6% of those employed in the month prior to the survey. This figure is slightly higher than that for 55-year-olds born in 1950, but the trend is largely the same. Causes of 1-month unemployment are also similar to those for the previous generation. Figure 5-6 shows a similar intergenerational trend in the percentage of 1-month unemployment for involuntary reasons.

Cohort analysis reveals that the patterns of non-employment and 1-month unemployment and the causes of unemployment are similar to those for the previous generation at the same age, indicating that there are no big differences in employment patterns for the baby boomers.

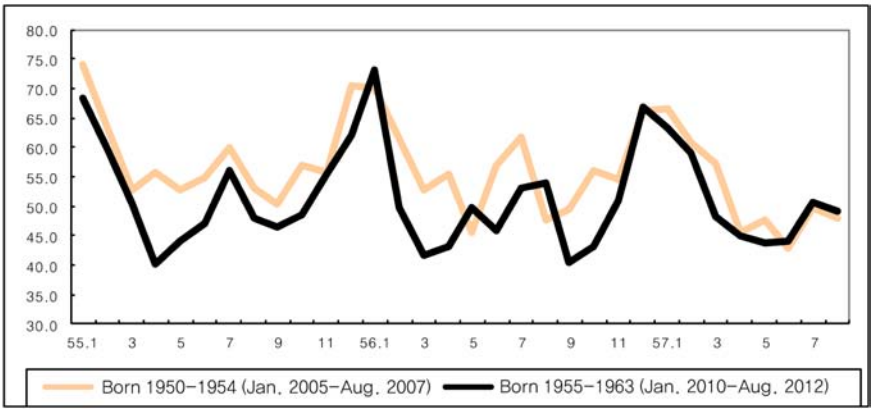

Figure 5-6. Share of involuntary displacement in baby boomers and previous generation (for 1-month unemployment) (%). Involuntary causes of displacement include mandatory retirement due to age, workplace shutdown, honorary/early retirement, downsizing, temporary/seasonal completion of work, no jobs, and business downturn. From *Economically Active Population Survey*, by National Statistical Office of Korea.

Table 5-5. *Figures for 1-Month Unemployment and Involuntary Displacement*

	Age							
	55		56		55 (Jan. Aug. avg.)		56 (Jan. Aug. avg.)	
Year of birth	N	%	N	%	N	%	N	%
1950								
1-month unemployment	11	(3.3)	9	(2.9)	9	(2.9)	10	(2.8)
Involuntary displacement	6	(56.6)	6	(61.3)	6	(60.1)	6	(65.1)
Employed this year	334		327		320		339	
1955								
1-month unemployment	13	(2.4)	14	(2.5)	15	(2.7)	14	(2.6)
Involuntary displacement	8	(57.9)	8	(55.0)	8	(52.0)	8	(56.5)
Employed this year	548		542		546		533	

Note. "1-month unemployment" indicates those who are unemployed or economically inactive in the survey month but who were employed in the previous month. From *Economically Active Population Survey*, by National Statistical Office of Korea.

What Is the Quality of Jobs Held by the Baby Boomers?

The baby boomers' economically active status is relatively better than for that of the previous generation, and the two groups' rates of non-

employment and 1-month unemployment are more or less similar. Then, what is the income level for the jobs currently held by baby boomers?

Of those born in 1955, low-income workers accounted for 29.5% of wage workers as of March 2012, a decrease from 2011, and an indication that this generation is not yet retiring in large numbers and continues to occupy decent jobs, mostly as permanent workers. In contrast, the ultra-low-income group, earning less than a third of the median hourly wage, grew to 3.7% of wage workers. In addition, the share of the ultra-low-income group among reemployed baby boomers in the month of reemployment jumped to 15.8%. This percentage is much higher than that for 2009, when the job market was suffering from the repercussions of the global financial crisis.

Meanwhile, 13.7% of the wage workers born in 1955, the baby boomers, were not even receiving the statutory minimum wage (as of March 2013). Among them, almost 3 out of 10 (27.8%) who became employed in the month when the survey was taken ("the newly employed")

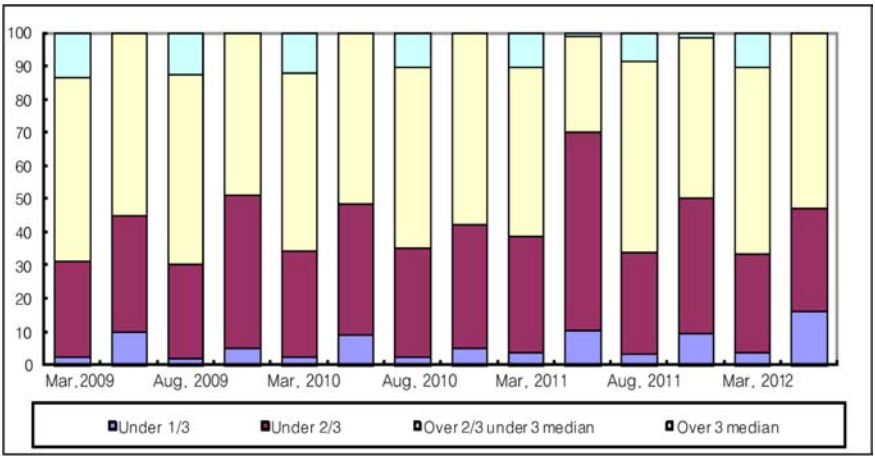

Figure 5-7. Wage levels among wage workers born in 1955 and in the month of reemployment. Wage level is median hourly wage. From *Supplementary Survey to the Economically Active Population Survey*, by National Statistical Office of Korea.

were found to be entering the labor market at less than the minimum wage. Post-retirement boomers were found to re-enter the labor market as wage workers in even worse conditions, not only of the wage level but also of employment type. Figure 5-9 shows that 41.9% of wage workers born in 1955 were non-regular workers (as of March 2013), while almost 9 out of 10 (86.9%) of the newly employed were in non-regular positions. Even among non-regular types, unconventional employment types such as dispatch (temporary agency work), contract service, special types of employment, in-house work or daily/short-term work were found to be more prevalent than temporary or part-time work.

Table 5-6 is an overview of employee benefits of jobs that retired boomers found when they re-entered the labor market. One indicator of employment benefits is coverage of the four insurance plans (including National Pension, National Health Insurance and Employment Insurance), which for them was found to be quite low. Rarer still were jobs with retirement pay or paid vacation, which hints at the highly in-

(Unit: %)

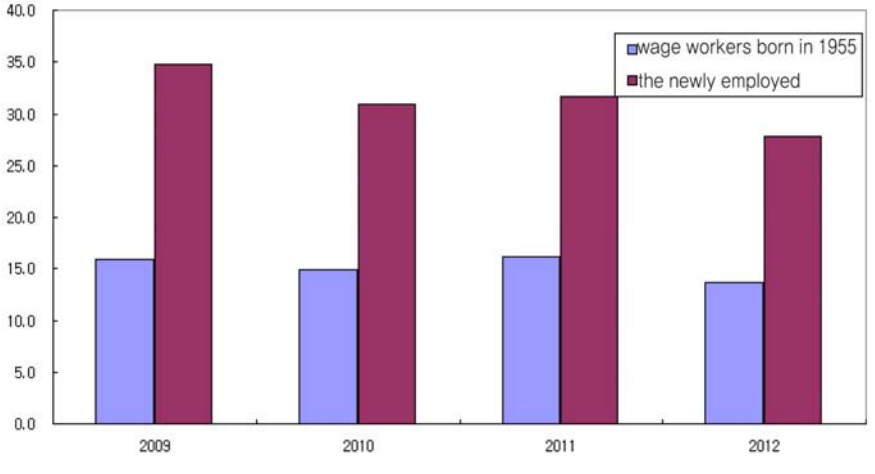

Figure 5-8. Minimum wage among wage workers born in 1955 and the newly employed. From *Supplementary Survey to the Economically Active Population Survey*, by National Statistical Office of Korea.

(Unit: %)

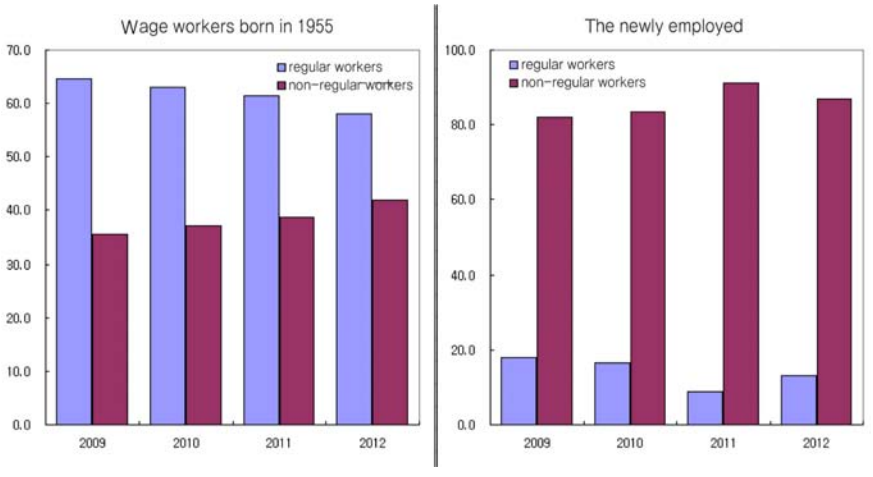

Figure 5-9. Non-regular workers among wage workers born in 1955 and the newly employed. From *Supplementary Survey to the Economically Active Population Survey*, by National Statistical Office of Korea.

adequate employee benefits level of the mid/old-aged workers post retirement. Overall, the indicators show that for this generation, those who hurriedly sought wage work after being displaced from the labor market entered insecure and unfavorable jobs.

Of the wage workers born in 1955, the leading cohort of the boomers, 77.2% are in the service industry, 14.4% in manufacturing, and 11.4% in construction. Still, the industry distribution among the newly employed was found to be considerably different. They are likelier to enter the construction sector than service or manufacturing. Further, among the non-trading sectors, the restaurant/hotel industry was found to be the most favored. In terms of job category, there is a considerably high share of low-skilled jobs such as routine labor among the boomers born in 1955 who found employment in the survey month.

Of the non-wage-earning baby boomers (as of August 2011), those who started their own business after January 2010 accounted for 13.7%, much lower than the 28.8% of those born in 1950 (when they began to retire in January 2005). Moreover, baby boomers' business start-ups

Table 5-6. *Employee Benefits of Wage Workers Born in 1955 and the Newly Employed*

(Unit: %)

Coverage Rate		March 2009	March 2010	March 2011	March 2012
National Pension	Wage workers born in 1955	59.1	62.0	60.2	65.1
	Newly employed	10.0	14.5	6.1	10.4
National Health Insurance	Wage workers born in 1955	61.0	61.7	62.1	65.5
	Newly employed	11.1	11.9	6.1	10.4
Employment Insurance	Wage workers born in 1955	47.6	48.4	48.9	55.5
	Newly employed	15.4	16.9	11.8	15.7
Retirement pay availability	Wage workers born in 1955	55.5	58.1	59.1	61.4
	Newly employed	3.3	9.6	4.7	4.8
Paid vacation availability	Wage workers born in 1955	47.9	54.2	49.4	48.5
	Newly employed	3.5	7.1	4.8	3.1

Note. From *Supplementary Survey to the Economically Active Population Survey*, by National Statistical Office of Korea.

after 2010 are mostly concentrated in the service sector. In particular, "other personal services" and "finance and insurance" have increased sharply, indicating a much brisker business start-up rate in the service sector than for the previous generation.

The majority of baby boomers starting a business after January 2010 reported either that they funded their start-ups with "money that I or my family saved up" (time deposit, retirement pay, honorary retirement pay, etc.) (59.6%) or that "no capital [was] needed" (business inheritance, start-up with no capital) (26.6%). In other words, most baby boomers started their own business with their retirement pay or honorary retirement pay, or did so with no capital requirements. For them, start-up funding from the financial sector was found to be tight, for loans from banks, insurance companies, and mutual credit finance have significantly declined for this generation. Most of the self-employed who started businesses after 2010 have done so with small capital

Table 5-7. *Industry Distribution of Wage Workers Born in 1955 and the Newly Employed*

(Unit: %)

		Wage workers born 1955				Newly employed			
		2009	2010	2011	2012	2009	2010	2011	2012
Industry	Manufacturing	21.2	18.4	16.5	14.4	7.4	4.4	0.0	4.7
	Service	62.8	66.9	66.2	72.2	39.0	38.0	41.3	34.6
	Wholesale/retail	4.9	6.4	5.3	8.5	6.1	3.2	1.3	5.8
	Restaurant/hotel	10.7	9.9	9.6	7.7	11.7	7.7	15.5	12.0
	Public administration	9.0	8.2	6.6	4.8	1.9	2.7	3.4	1.0
	Education service	6.9	5.8	7.4	8.1	0.0	0.0	1.9	0.0
	Social welfare service	5.7	7.7	6.0	7.2	4.1	4.5	2.7	3.3
	Construction	14.5	12.6	15.6	11.4	51.8	48.3	50.7	56.8
Job category	Managerial/professional	16.7	15.6	16.5	18.9	1.5	0.0	0.8	0.0
	Secretarial	9.2	8.5	10.8	8.2	1.2	0.0	0.0	1.0
	Sales service	21.3	20.1	19.9	19.6	16.2	9.9	19.0	8.3
	Technical/related work	15.1	13.0	12.7	10.8	39.0	35.8	37.0	38.7
	Routine labor	24.3	27.2	25.3	27.3	40.7	50.7	40.5	49.0
	Others	13.4	15.7	14.8	15.3	1.4	3.6	2.6	3.1

Note. From *Supplementary Survey to the Economically Active Population Survey,* by National Statistical Office of Korea

amounts of less than 20 million Korean won, mostly in the areas of wholesale/retail, finance/insurance, and other personal services.

Of the non-wage baby boomers, 7.2% of those who started their businesses after January 2010 were planning to "close down," with most of them planning to do so within the next year. The most often cited reasons were "no prospects" (declining industry), and "poor business performance." Other reasons were "to find wage-earning employment" at 30.3%, which is considerably different from those who started businesses after January 2005, the timing of retirement by those born in 1950. This trend indicates a strong desire to switch to wage-earning work even after entering the labor market through non-wage work.

Table 5-8. *Distribution of Non-wage Workers (Self-Employed With Employees + With No Employees) by Start-Up Period and Industry*

(In thousands, %)

Industry	Year of birth and start-up period							
	1955				1950			
	Before Jan. 2010		After Oct. 2010		Before Jan. 2005		After Jan. 2005	
All	158	(100.0)	25	(100.0)	79	(100.0)	32	(100.0)
Agriculture, forestry, fishery	20	(12.9)	1	(3.6)	21	(26.9)	5	(16.3)
Construction	11	(6.9)	0	(0.0)	4	(5.4)	3	(8.3)
Manufacturing	16	(9.8)	3	(11.6)	7	(8.3)	1	(3.9)
Service	111	(70.3)	21	(84.8)	47	(59.4)	23	(71.5)
Wholesale/retail	37	(23.1)	4	(15.7)	14	(17.1)	5	(16.5)
Transport	34	(21.5)	4	(14.0)	14	(17.9)	6	(18.3)
Restaurant/hotel	18	(11.6)	2	(8.1)	9	(11.9)	2	(7.5)
Finance/insurance	1	(0.4)	3	(10.1)	0	(0.0)	1	(1.6)
Other personal services	10	(6.6)	8	(32.2)	6	(7.0)	7	(21.4)

Note. Numbers in parentheses ( ) are percentages. From *Supplementary Survey to the Economically Active Population Survey,* by National Statistical Office of Korea.

Table 5-9. *Plan for Business by Start-up Timing by Non-wage Workers (Self-Employed with Employees + Without Employees)*

(Unit: 1,000 persons, %)

		Born in 1955				Born in 1950			
		Start-up before Jan. 2010		Start-up after Jan. 2010		Start-up before Jan. 2005		Start-up after Jan. 2005	
Total		158	(100.0)	25	(100.0)	79	(100.0)	32	(100.0)
Plan for current business	Will maintain	147	(92.8)	23	(91.1)	75	(94.9)	26	(80.0)
	Will close down	5	(3.1)	2	(7.2)	1	(1.7)	2	(5.4)
	Don't know	6	(4.1)	0	(1.6)	3	(3.4)	5	(14.6)
Timing of closing	Sub-total	5	(100.0)	2	(100.0)	1	(100.0)	2	(100.0)
	Within 6 months	2	(32.2)	1	(30.3)	-	(0.0)	1	(52.8)
	Within 6 12 months	1	(22.9)	1	(54.6)	0	(29.7)	0	(23.6)
	After 1 year	2	(44.9)	0	(15.1)	1	(70.3)	0	(23.6)
Reason for wishing to close down current business	Sub-total	5	(100.0)	2	(100.0)	1	(100.0)	2	(100.0)
	To switch to a better industry	-	(0.0)	0	(15.1)	-	(0.0)	1	(29.2)
	To find wage-earning employment	-	(0.0)	1	(30.3)	1	(81.0)	-	(0.0)
	No prospects	5	(93.5)	1	(54.6)	-	(0.0)	1	(70.8)
	Personal reason (health, etc.)	0	(6.5)	-	(0.0)	0	(19.0)	-	(0.0)

Note. From *Supplementary Survey to the Economically Active Population Survey,* by National Statistical Office of Korea.

Conclusion

Employment indicators confirm that Korean baby boomers' (born 1955–1963) level of economic activity is better than that of the previous generation. Because they have yet to retire in large numbers, the share of permanent workers is relatively higher for baby boomers than for 55-year-olds born in 1950, and baby boomers' non-employment rate is lower. In particular, the employment rate reviewed through cohort analysis was found to be higher than the previous generation's, thanks largely to women's contribution. But as was ascertained by the intergenerational employment-rate patterns, their employment rate is likely to fall dramatically (just as with previous generations) as they begin to retire in droves, potentially causing a labor shortage. Another concern is the possible draining of the skills and functions they have accumulated over a long time, for which the mechanism of transfer should be improved so that the succeeding generation can inherit them.

To prevent the serious labor shortage that might result from the baby boomers' retirement, it will be necessary to discuss realistic and effective means such as extension of the mandatory retirement age. And efforts should be made to help create jobs for older adults by promoting industries that are friendly to them.

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6 Collective Disputes and Dispute Resolution Systems in South Korea: From Controlling Interventions to Evolutionary Institutionalized Regulation*

Kiu-Sik Bae**

Collective Disputes in Developing Countries

Collective labor disputes happen in all capitalist countries to varying degrees. As countries are industrialized and as increasingly more workers are on modern employment contracts, collective labor disputes are more likely to arise, as a result of the differing interests of employees and employers. How do the state and employers respond to this trend of growing labor unrests? All countries with capitalist systems have faced such a significant challenge during and after industrialization. How to establish collective regulation of industrial actions in industrialized countries may vary among countries, depending on political, industrial, social and cultural contexts. The paper looks at how South Korea has developed and institutionalize dispute resolution systems during the period of industrialization under authoritarian regimes, massive Industrial disputes in the middle of democratization, and after. It identifies

* This paper is a revised version of the paper presented at the conference, Conflict and Cooperation: The International Symposium of Collective Labor Dispute Resolution and Regulation, organized by Renmin University, Beijing in China on 17 -18th December 2011. For the publication of *Labor Issues in Korea 2012*, some contents have been newly added.

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Table 6-1. *Different Approaches to Industrial Actions*

	Political control of collective disputes	Collective regulation of labor disputes
Political systems	Political authoritarianism	Political pluralism/democracy
Frame of reference	Unitarism, not recognizing conflicting interests between employees and their employer	Pluralism, recognizing conflicting interest between the two parties
Mode of regulation	Controlling interventionism, ad hoc interventions, and no voluntary rules emerged	Collective bargaining between unions and employer(s) and webs of rules agreed on by both parties
Role of the state	Guardian of industrial stability or social order	Setting fair rules and facilitating both parties to solve their disputes
View of strikes	Threats to political stability	Inevitable arising from diverging interests between capital and labor
How to deal with strikes	Arrest of strike leaders, crackdown on strikes, or forcing employers to make concessions to striking workers	Let them happen but trying to resolve disputes via conciliation, mediation, or arbitration

two different approaches to industrial actions and how to regulate them in South Korea over the years.

Political Control of Collective Disputes Before 1987

Until 1986, political authorities in Korea regarded industrial actions such as strikes, collective refusals of overtime, or collective refusals to eat lunch or supper as an important element of political instability and even issues of national security. Industrial actions organized by rank-and-file workers were often portrayed as being agitated by, and linked to, socialists or communists by relevant employers and authorities, without evidence.

Although legislation such as the Trade Union Act and the Labor Dispute Mediation Act and organizations such as the Labor Relations Commission already existed in the 1960s and 1970s, the relevant legislation and the commission were not properly operationalized in the conciliation, mediation and arbitration of industrial disputes. In many cases

of industrial action, the due processes of conciliation, mediation, and mediation through the Labor Relations Commission remained ritualistic. Local offices of the labor authorities, part of the central government directly intervened in industrial actions when they occurred. They, together with information police and KCIA agents, usually threatened to jail, or ask employers to sack, the leaders of workers taking industrial actions unless they ceased their actions but rarely pressured employers to make concessions to the workers. The increasingly authoritarian government under the long-standing dictator Park Jung Hee, to a significant extent, not only lessened the freedom of association and the right to collective bargaining but also eliminated the right to strike by successively introducing new legislation or revising the existing labor laws in the 1970s (NCCK. 1984, Lee, 1986, Koo 2001).

Following another law established in 1971, called the Special Law Concerning Safeguarding the State, the right to industrial actions was limited or prohibited in state enterprises, local governments, and firms related to public interests or having significant influence on national economies. When each party wanted to negotiate on wages or working conditions, the party was required to first request local authorities' mediation to later secure the right to collective bargaining (National Labor Relations Commission, 2008). According to the Renovation Constitution in 1972, arbitrarily legislated by the dictator Park Jung Hee, three fundamental rights of workers such as freedom of association, the right to collective bargaining, and the right to industrial actions were to be restricted or reserved by relevant laws. The government transferred conciliation of collective labor disputes away from the Labor Relations Commission to the local offices of labor authorities of the government through revision of the Labor Dispute Mediation Act in December 1974 and thereby secured a legal way of directly intervening in industrial actions (Chun Taeil Memorial, 1991).

Apart from the direct intervention in industrial actions by local offices of the labor authorities, intelligence police and powerful intelli-

gence agents of KCIA also openly, effectively intervened in collective labor disputes. Intelligence police and KCIA agents gathered information on union leaders, or leaders of industrial actions in the workplace. They often colluded with employers to oppress or dismiss a few resistant union leaders who organized industrial actions or leaders of independent union leaders. A few moderate, intelligent union leaders sometimes took advantage of interventions in labor disputes by local offices of the labor authorities or intelligence police in order to achieve wage increases. Legitimate claims for their proposals for wage increases were put forward to local offices of the labor authorities and intelligence police at the time.

In these ways the authoritarian government was able to control almost all industrial actions. However, there were quite a many industrial actions some of which fell short of strikes but effective in embarrassing employers and disrupting production.[1] Especially one major industrial action at the YH Trading Firm arising from redundancies developed into a political incident, and together with other political developments at the time, precipitated the collapse of the authoritarian government in 1979. After the assassination of the dictator Park in October 1979 and during a short spell of political freedom, many strikes happened in March – May, 1980. Another dictator, General Chun, usurped the political power through a Coup d'etat in May 1980 and the same political control of industrial actions was repeated in 1980 up to 1986, while his government sidelined Labor Relations Commission in conciliation, mediation and arbitration of collective disputes.

[1] Workers in a few independent or new unions developed various kinds of legitimate industrial action in order to get around tightly controlled procedures of strikes or industrial actions. Those legitimate actions included putting ribbons on the chest, collective petition to labour authorities, work-to-rules, rejecting overtime, overtime working without eating supper, hunger strikes, members' rally at canteens in the lunch time or sit-ins in factory canteen or union office within the firm during lunch time or after work (NCCK 1984).

Gradually Reconfigured Collective Dispute Resolution Systems Since 1987

There was a fundamental transformation in labor movements and industrial relations in 1987 that followed political democratization. A great number of strikes happened, at nearly all factories and many offices across the country, initiated by the-rank-and-file, who had long wanted to increase wages and improve terms and conditions significantly. The rank-and-file workers nationwide were on 'The Great Offensive'. They organized new unions or made effort to reform and democratize the existing powerless unions in order to galvanize union movement (Koo 2001, 153 -162).

Nearly all strikes and industrial actions took place without notice, conciliation, or mediation by the Labor Relations Commission. With the advent of political democracy, the authorities' longstanding political control of industrial actions was weakened. The existing procedures of conducting conciliation, mediation, and arbitration through the Labor Relations Commission were ignored by workers. Almost all strikes were prohibited on the legal terms at the time but workers did not care about the legality of the strikes. Suddenly the state could not cope with the wave of illegal strikes across the country. There was widespread recognition among workers that the legal procedures and requirements for organizing unions and taking industrial actions were unfairly biased toward employers and that they were made convenient means for the authorities to control workers. Very few workers were willing to observe the legal procedures and requirements (Kim 1995, 107 – 108).

In the face of mounting pressures and a large number of strikes, the government had to reform the existing labor laws in order to accommodate workers' rapidly increasing expectation of the right to union organization, union members' participation in trade union activities and internal union democracy, and curtailment of interventions in union affairs by the labor authorities in October 1987. The government also

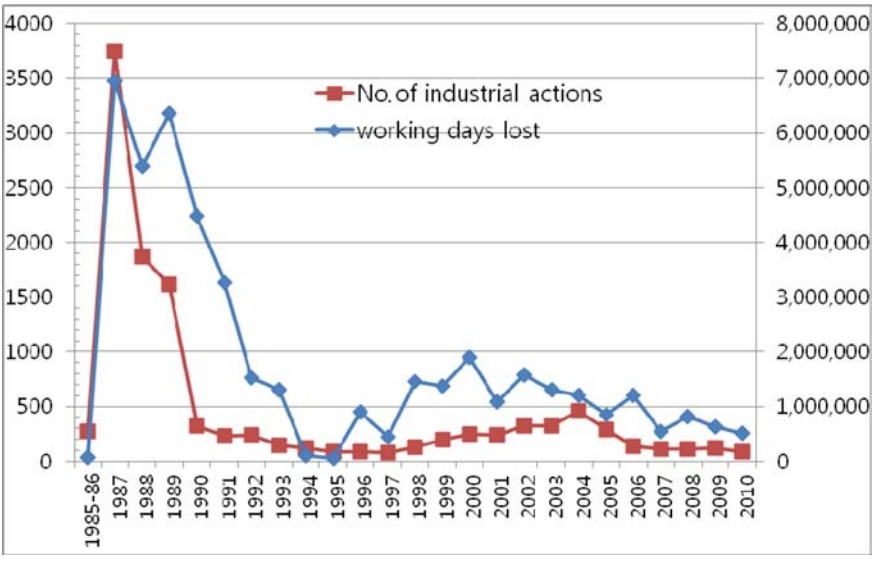

Figure 6-1. Number of industrial actions and working days lost. From Ministry of Employment and Labor.

had to revise the Labor Dispute Mediation Law in order to allow more workers to engage in legitimate industrial actions and to reconfigure the collective dispute resolution system to integrate newly proliferating strikes or industrial actions into the institutional framework in the same year.[2] The old institutions, practices, and thinking embedded in the existing Labor Dispute Mediation Act did not disappear overnight but lingered for years.

Even the revised Labor Dispute Resolution System in the late 1980s and early 1990s was ineffective in dealing with much of the industrial actions occurring in firms. A high proportion of strikes and other industrial actions (sits-in and occupying factories) still happened illegally. Striking workers placed no trust in the existing procedures of conciliation, mediation, or arbitration stipulated in the Labor Dispute Media-

[2] The reformed Labor Dispute Mediation Act narrowed the scope of businesses related to public interests and the scope of the businesses in which strikes were banned and shortened the cooling-off period before strikes, but retained a provision that banned industrial actions in the defense industry.

tion Act at the time. Some labor-law provisions were still regarded as a straightjacket on trade union activities by many workers who unsuccessfully campaigned for revision of the old, authoritarian provisions of the labor laws (Kim 1995, 138 – 143).

The revised legal system was still based on old institutional framework, and was too limited to accommodate the rising hopes and expectations of the newly awakened workers armed with powerful enterprise unions. Since the ruling elites and employers were too cautious and old-fashioned to make concessions to the workers, confrontations and open conflicts between the new union movement and employers and the government continued in the late 1980s, early 1990s, and early 2000s. During the conflicts, the police intervened in and broke up a number of high-profile illegal strikes by large unions, and arrested many union leaders (Koo 2001, 189-193).

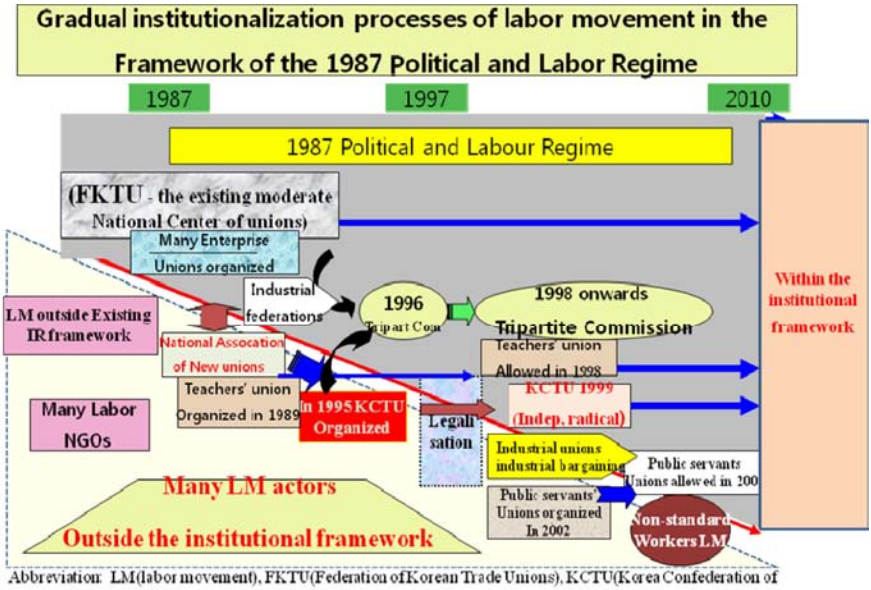

Figure 6-2. Gradual institutionalization of the labor movement in Korea (revised figure of Cho's).

In 1997, 1999, and 2006, further revisions to the labor laws were made in order to allow teachers unions (1999), multiple unions at firms, and public servants unions (2006), and to abolish compulsory arbitration in essential services. As indicated in Figure 6-2, a gradual institutionalization of new trade unions and union activities began in 1987 and proceeded through the late 2000s. Formerly illegal trade unions outside the existing legal framework were gradually legalized and integrated into a more comprehensive institutional framework. Together with this gradual institutionalization and legalization of trade unions and their activities outside the existing framework of industrial relations, collective labor dispute resolution systems also expanded the scope of their role and the degree of integration of the hitherto illegal strikes or industrial actions into the legal framework and procedures. The trend of a gradually declining proportion of illegal industrial actions out of the total number of industrial actions, as shown in Figure 6-3, reveals the 20-year institutionalization processes of industrial dispute resolutions.

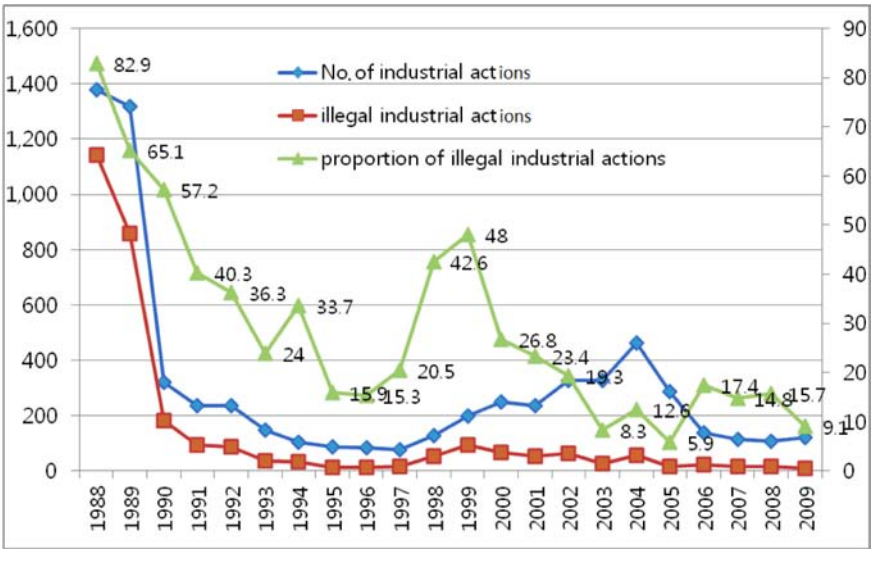

Figure 6-3. Proportion of illegal industrial actions. From *Industrial Action Database*, by Ministry of Employment and Labor.

The Dispute Resolution System in Korea

Collective labor disputes are always associated with trade unions (labor movement) and collective bargaining. Without organized labor, such as trade unions or labor movements, labor issues such as wages, working hours, health and safety, terms and conditions, and discrimination would not be likely to be raised. Moreover, collective labor disputes most often arise as a result of the breakdown of collective bargaining. Conversely, where collective bargaining is still not institutionalized or is only weakly institutionalized, collective labor disputes happen often. Therefore, developments in collective bargaining reflect the extent to which collective labor disputes are solved in institutionalized ways.

Trade Unions and Collective Bargaining in Recent Years

Union density in Korea remained around 10% in the latter half of the 2000s. Traditionally, trade unions have been enterprise-based, but

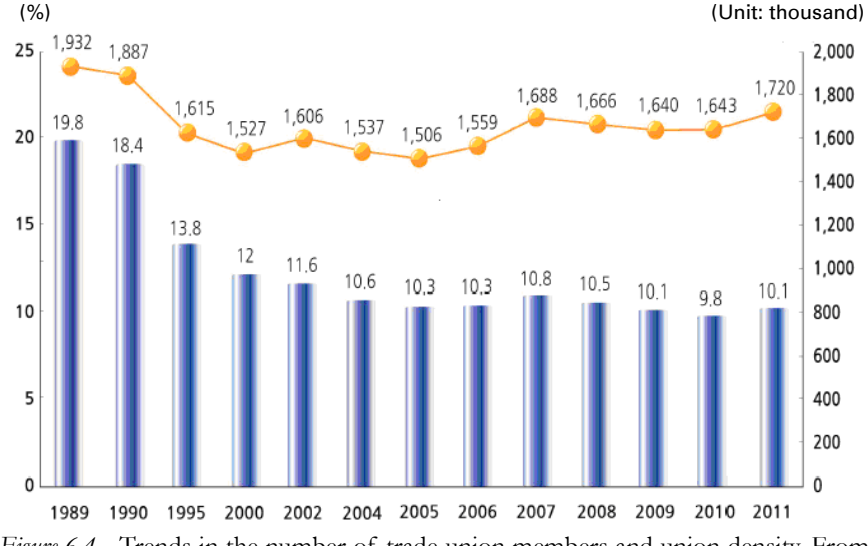

Figure 6-4. Trends in the number of trade union members and union density. From Ministry of Employment and Labor, 2012.

Table 6-2. *Union Types and Their Affiliation*

	Total	Enterprise unions	Other unions	FKTU	KCTU	Non-affiliation
No. of unions	4,420	4,074	346	2,292	432	1,696
Membership	1,643,113	754,676	888,437	728,649	580,064	334,400

Note. From *The Current Trade Union Nationwide*, by Ministry of Employment and Labor, 2011.

under KCTU, trade unions reshaped their enterprise-based unions into industrial, subsectoral, regional ones in the 2000s. Now more than half of union members belong not to enterprise unions but to other types of unions such as industrial, regional, or general unions. Although the union types have changed, union activities and practices remain within enterprise boundaries.

As of the end of 2009, 26.4% of collective bargaining by establishment units took place at the industrial, sub-sectoral, or regional levels, while wages were bargained at the firm level in 77.8% of bargaining units. Collective bargaining above the enterprise level is usually followed by subsequent bargaining at the enterprise level which is more

Table 6-3. *The Proportion of Collective Bargaining (Including Wage Bargaining) Beyond Enterprise Boundaries Out of the Total Number of Bargaining Units*

		2009		2011	
		No. of establishments	Proportion	No. of establishments	Proportion
Total		8,494	26.8	8,903	29.9
Industry	manufacturing	2,450	29.9	2,410	29.4
	Non-manufacturing	6,045	25.5	6,493	30.1
SIZE	30-99	4,164	30.2	4,617	35.3
	100-299	3,048	21.9	2,844	22.2
	at least 300	1,282	27.2	1,442	27.9
Affiliation	FKTU	4,572	30.3	5,136	27.4
	KCTU	2,649	30.1	2,212	44.3
	Non-affiliation	1,225	7.4	1,555	17.6
Union type	Enterprize unions	4,894	20.8	4,381	16.8
	Unions beyond enterprises	3,600	34.9	4,521	42.6

Note. From *Workplace Panel Survey 2009*, by Korea Labor Institute, 2010.

important than industrial or sub-sectoral one in deciding wages or terms and conditions of employment. The attempts at sectoral or sub-sectoral bargaining in hospitals, metals, banks, and other small subsectors at first seemed to be rather successful but have faltered since the current government took power. Whether the attempts at sectoral or sub-sectoral bargaining will ultimately succeed remains to be seen.

Not every firm with a trade union bargains over wages each year. According to the Workplace Panel Survey 2009, 17.8 percent of all unionized establishments are not engaged in wage bargaining or bargaining on other issues. Some unions have given up and entrusted bargaining rights to their employers, for a variety of reasons. Other, small unions do not have the capabilities to listen to their members' demands and to put forth wage proposals to their employers because they are too small or lack volunteer union officers to carry out union activities.

Evolution of the Collective Labor Dispute Resolution System

The annual number of industrial actions has decreased since the early 1990s but resurged in the early 2000s, arising from massive redundancies after the financial crisis in 1998 and the attempted privatization of public utilities in the early 2000s. The Dispute Resolution System has significantly improved since the end of the 1990s. The number of industrial actions fell again in the latter half of the 2000s. The decreasing number of industrial actions and the improving dispute resolution system of the Labor Relations Commission mutually reinforced each other.

When both parties bargain over wages and working conditions, most negotiations end in agreement. However, at times the parties fail to reach an agreement or have disagreements that are not easily reconciled. These situations become collective labor disputes. Either one or both of the parties can request a mediation of their disputes. In 2009, about 3.9% of all establishments that were engaged in collective bargaining

Table 6-4. *Proportion of Establishments Requesting Mediation at the End of Bargaining*

		2009			2011		
		No. of establishments	No. of establishments requesting mediation	(proportion)	No. of establishments	No. of establishments requesting mediation	(proportion)
Total		5,036	181	3.6	5,590	349	6.3
Industry	Manufacturing	1,172	102	8.7	1,416	36	2.5
	Non-manufacturing	3,864	80	2.1	4,174	313	7.5
Size	30-99	2,531	57	2.3	2,916	182	6.3
	100-299	1,780	95	5.3	1,751	121	6.9
	at least 300	725	29	4	923	46	5
Affiliation	FKTU	2,959	79	2.7	3,470	184	5.3
	KCTU	1,253	103	8.2	1,123	76	6.7
	Non-affiliation	824	0	0	997	90	9
Union Type	Enterprize unions	3,134	59	1.9	2,985	177	5.9
	Other unions	1,903	123	6.4	2,605	173	6.6

Note. From *Workplace Panel Survey 2009,* by Korea Labor Institute, 2010.

requested the Labor Relations Commission to mediate their labor disputes. When trade unions seek to go on a strike to resolve a deadlock with employers, they must request the Labor Relations Commission to mediate their disputes. Then the commission comes in to listen to both parties' arguments, and offers a mediation proposal. Even if both parties are not fully satisfied with the mediation proposal, they are much more likely to accept the mediation proposal in most cases.

That is why the mediation success rate for the Labor Relations Commission, shown in Table 6-5, is high (around 65%). Even if one or both parties refuses to accept the mediation proposal, they will often compromise based on the mediation proposal, or at last reach almost the same agreement as the mediation proposal outlines. Therefore, the dispute resolution rates are ultimately even higher (about 95%).

The resolution of collective disputes through the Labor Relations Commission's mediation efforts have significantly increased since 2001 in comparison with the high percentage of illegal industrial actions out

Table 6-5. *Number of Requests for Mediation through Labor Relations Commission and Success Rate of Mediations*

Year	Number of requests for mediation	Success rates	Rate of dispute resolutions
2001	1,096	43.2	96.3
2002	1,042	44.1	95.4
2003	896	50.4	95.1
2004	868	48.2	95.1
2005	891	57.7	94.4
2006	758	52.9	93.7
2007	885	64.8	93.3
2008	851	65.6	95.5
2009	726	58.5	96.5
2010	708	64.5	97.2
2011	695	70.2	95.6

Note. From *Statistics on Mediation and Adjudication Cases*, by Ministry of Employment and Labor, 2012.

of the total number of collective disputes without resorting to the Labor Relations Commission in the late 1980s and early 1990s. The increased success at resolving collective labor disputes via mediations means that the dispute resolution system works effectively in dealing with collective labor disputes.

The collective labor dispute resolution system through the Labor Relations Commission in Korea has accumulated a great deal of experience with and expertise in mediating collective disputes and now proactively addresses recurring industrial actions at the same firms. The commission has also benchmarked FMCS (Federal Mediation and Conciliation Services) in the USA as well as ACAS (Advisory Conciliation and Arbitration Services) in the UK to upgrade its services.

Once industrial actions start, they often become protracted, lasting up to 30 or 40 days. The reason why industrial actions lengthen lies in the complex nature of labor disputes such as restructuring, redundancies, the transfer of undertakings, outsourcing, reinstatement of dismissed union leaders, and emotional issues. Solutions to these issues are not easily found.

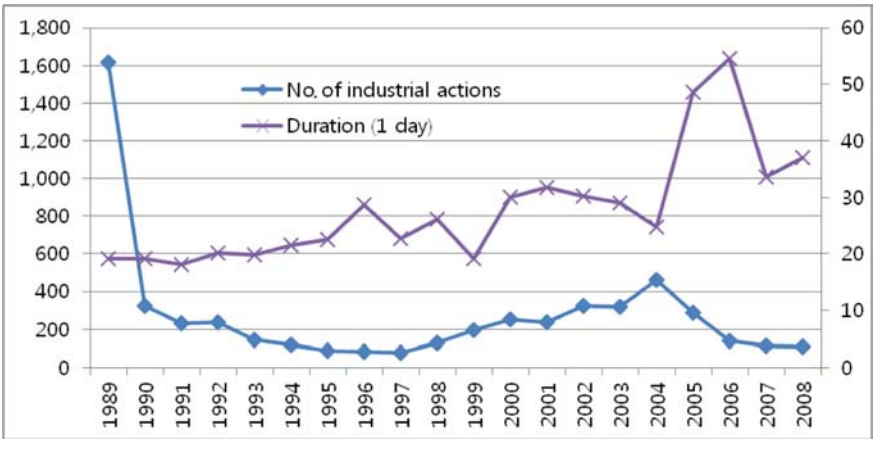

Figure 6-5. Duration of industrial actions. From Ministry of Employment and Labor.

On these occasions, mediation requires specific skills and experience to deal with those tricky issues in a way both parties reach a compromise. A small number of industrial actions that were protracted, or one or two industrial actions at large firms, contributed to most of the working days lost due to strikes.

How the Collective Dispute Resolution System Works

As mentioned earlier, when both parties fail to reach an agreement despite lengthy and numerous negotiations, either party or both parties can make a request to the Labor Relations Commission for mediation of the dispute.

Request for mediation. The mediation process starts immediately when either of the two parties files a request. The mediation period is 10 days for general industries and 15 days for public utilities. The period may be extended upon the agreement of both parties. Mediation is legally required before trade unions may go on a strike.

Prior review. Once a request for mediation is received, a Labor Relations Commission examiner reviews the background of the labor dispute, such as the company's business situation, collective bargaining

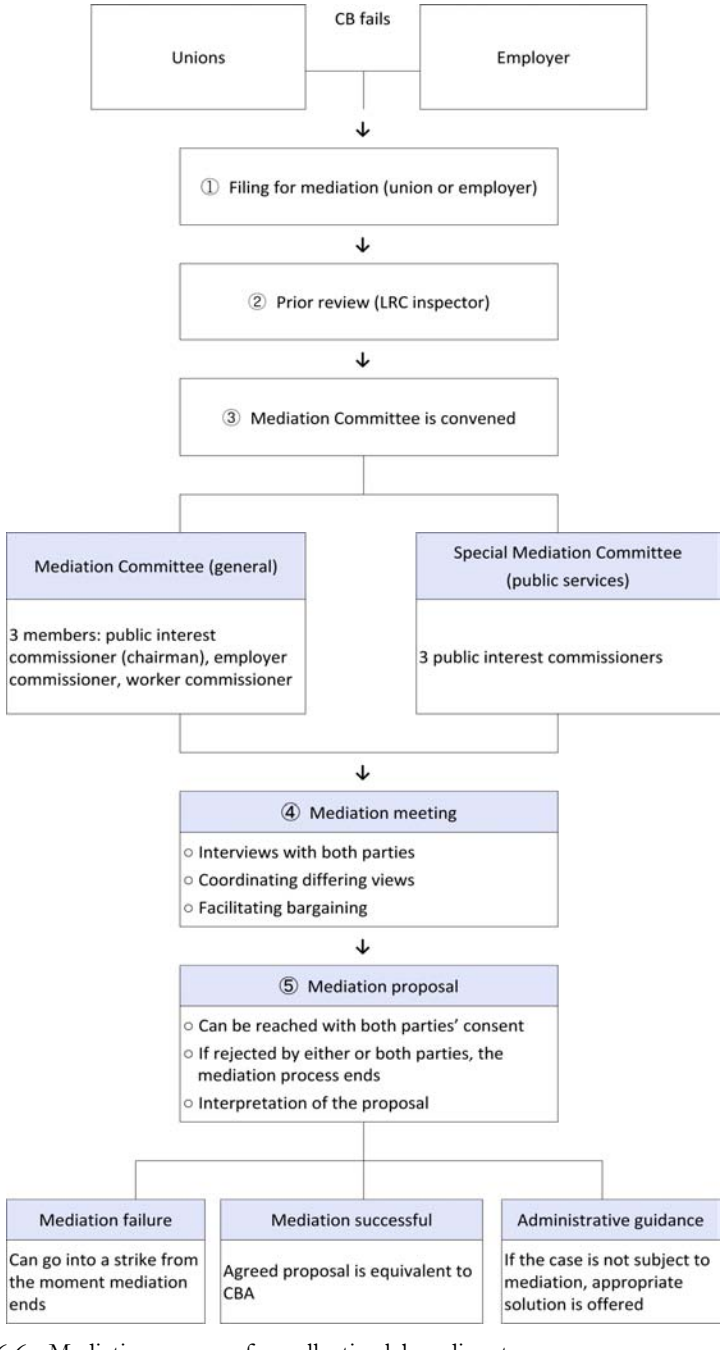

Figure 6-6. Mediation process for collective labor disputes.

processes, and issues of contention. The result is reported to the Mediation Committee.

Mediation Committee. The Mediation Committee is composed of three members for general industries: one member representing the public interest in charge of mediation, one member recommended by the trade unions, and one member by the employers. The committee mediates collective labor disputes based on the examiner's report.

Mediation meetings. The meetings are held two or three times during the mediation processes (sometimes as many as five times). The purpose is to listen to the views of the two parties, then mediate between the two parties to bridge their differences and thereby facilitate bargaining.

Mediation proposal. When the differences between the two parties are bridged through mediation, or when the mediation period is about to expire, the Mediation Committee offers a proposal. If both parties agree to the proposal, it becomes equivalent to a collective bargaining agreement. If either party or both parties reject the proposal, mediation fails and the mediation process ends. If the process ends with no agreement, the union can go on a strike. The employer can counter this with a lockout.

The Composition of the Labor Relations Commission

The Labor Relations Commission in Korea deals with collective labor disputes as well as individual disputes. The commission is a consensus-based administrative body composed of tripartite representatives of employees, employers, and public members. The commission is a quasi-judiciary institution that adjudicates or arbitrates individual labor disputes and mediates collective disputes. There is no labor court, but there are labor divisions of the general court.

Regional Labor Relations Commissions and National Labor Relations Commission. There are 12 Regional Labor Relations

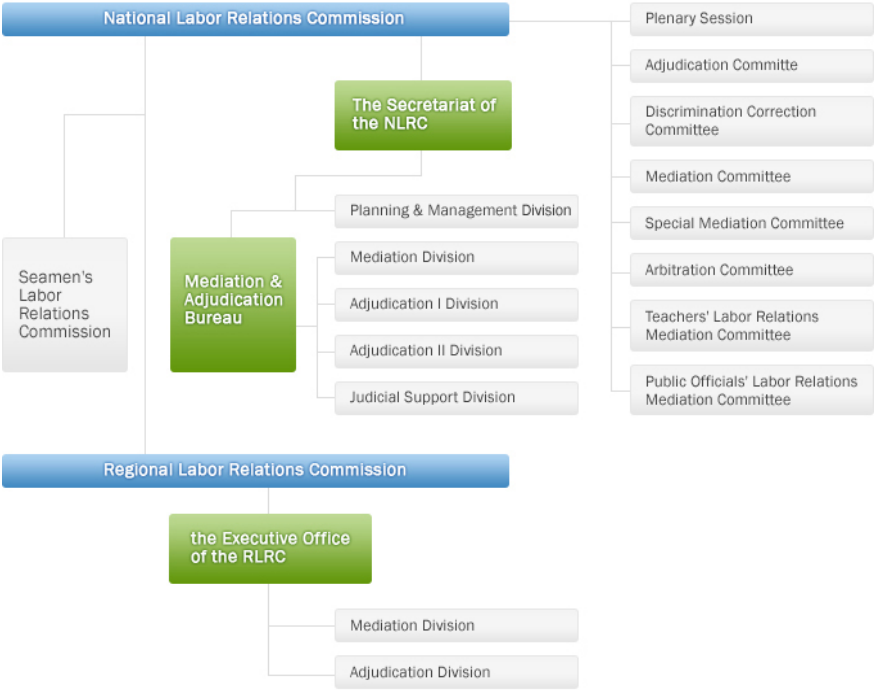

Figure 6-7. Organization chart of the commission. Reproduced from "Characteristics and Organizations," *Overview*, by National Labor Relations Commission, 2009. Retrieved from http://www.nlrc.go.kr/en/en_index.html.

Commissions, one special Seamen Labor Relations Commission, and one National Labor Relations Commission. The Regional Labor Relations Commission is composed of two divisions, both of which address collective labor disputes and individual labor disputes. With respect to collective labor disputes, there are a number of committees: the Mediation Committee, the Special Mediation Committee, the Arbitration Committee, and special mediation committees for teachers and public servants. The Adjudication Committee and the Discrimination Correction Committee address individual labor disputes such as unfair dismissals, discrimination, and unfair labor practices.

Table 6-6. *The Number of Commission Staff (March 2013)*

Position / Class	Total	Chairperson	Standing members	Senior civil service	3rd-4th Grade	4th Grade	5th-9th Grade	Technical
Total	372	12	11	1	1	13	291	30
NLRC	94	1	2	1	-	7	79	4
RLRC	278	11	6	-	1	6	228	26

Note. Adapted from "The Number of Commission Staff," *Overview*, by National Labor Relations Commission, 2013. Retrieved from http://www.nlrc.go.kr/en/en_index.html.

Staffing and number of panel members on the Labor Relations Commission. There were 372 people working for the Labor Relations Commission as of February 2009. The National Labor Relations Commission employs 103 people, and the 12 Regional Labor Relations Commissions together employ 269 people. Each regional commission employs an average of 22.4 people.

Apart from the staff above are panels, each of which is composed of the same number of employers' representatives, trade union repre-

Table 6-7. *The Number of Panel Members in the Commissions*

Title	Employees' members	Employers' members	Public members		
			Adjudication	Mediation	Discrimination correction
NLRC	50	50	33	20	17
Seoul RLRC	50	50	33	20	17
Busan RL	50	50	33	20	17
Gyeonggi RLRC	50	50	33	20	17
Chungnam RLRC	40	40	26	15	14
Jeonnam RLRC	40	40	26	15	14
Gyeongbuk RLRC	40	40	26	15	14
Gyeongnam RLRC	40	40	26	15	14
Incheon RLRC	40	40	26	15	14
Gangwon RLRC	30	30	19	12	9
Chungbuk RLRC	30	30	19	12	9
Jeonbuk RLRC	30	30	19	12	9
Jeju RLRC	25	25	16	11	8

Note. NLRC = National Labor Relations Commission. RLRC = Regional Labor Relations Commission. Adapted from "The Number of Commissions," *Overview*, by National Labor Relations Commission, 2013. Retrieved from http://www.nlrc.go.kr/en/composition.html.

sentatives, and public members. Employers' representatives are recommended by employers' organizations but can be rejected by the trade union sides, and vice versa.

Public members of all committees are professionals such as labor lawyers, labor-law scholars, industrial relations scholars, labor market scholars, sociologists, and economists. The total number of panels in all committees at the national commission, 12 regional commissions, and other special committees is 1,723. The National Labor Relations Commission has 189 members, and each regional commission has 100 to 169 panel members. Those members are divided into mediation members, adjudication members, and discrimination correction members.

Table 6-8. *Special Committee and Their Responsibilities*

Committee	Composition of panels	Responsibilities
Plenary Session	All members	Determination of general matters in the administration of the LRC
Adjudication Committee	3 Public interest adjudication commissioners	Judgments and remedies on unfair labor practices and unfair dismissals
Discrimination Correction Committee	3 Public interest commissioners in charge of discrimination correction	Ordering discrimination correction for non-regular employee
Mediation Committee	1 mediation commissioner representing labor, management, and public interest, respectively	Mediation of industrial disputes in general businesses
Special Mediation Committee	3 Public interest mediation commissioners	Mediation of industrial disputes and determination of essential minimum services in public interest industries
Arbitration Committee	3 Public interest mediation commissioners	Arbitrating upon a request from both parties concerned or a party of collective bargaining agreement
Teachers' Labor Relations Mediation Committee	3 Public interest mediation commissioners	Mediation and arbitration of the labor relations of teachers
Public Officials' Labor Relations Mediation Committee	Maximum 7 public interest commissioners dedicated to mediating public officials' labor relations	Mediation and arbitration of the labor relations of public officials

Note. Adapted from "Sectional Committees and Their Undertakings," *Overview*, by National Labor Relations Commission, 2009. Retrieved from http://www.nlrc.go.kr/en/sectional.html.

Further Points on Collective Labor Dispute Resolution System in Korea

Important problems remain to be solved in the collective dispute resolution system in Korea. First, although the Labor Relations Commission is a quasi-judiciary institution that is supposed to be independent of the government, employers, and trade unions, it is still substantially influenced or sometimes pressured by the Ministry of Employment and Labor. The budget and staffing of the Labor Relations Commission is designed and planned by the ministry. This may compromise the commission's fairness and independence in the mediation and arbitration of collective labor disputes and the adjudication of unfair labor practices and unfair dismissals. The Labor Relations Commission should be independent of the ministry in terms of its finances and staffing policies.

Second, the staff of the Labor Relations Commission must improve and accumulate experience and expertise on conciliation, mediation, and arbitration in collective dispute resolution and on adjudication of unfair labor practices and unfair dismissals in individual labor dispute cases. Thus, all Labor Relations Commission staff persons should not belong to the Ministry of Employment and Labor but to the commission itself. All commission staff are basically public servants belonging to the ministry, and their identity currently lies in the ministry rather than the commission. The staff think they are temporarily transferred to the commission, and eventually return to the ministry. This circulation or transfer of staff should stop. Otherwise, the experience and expertise of the commission staff cannot be upgraded, and the commission will not improve the quality of the services they provide.

Third, the staff's expertise and experience should be used in dispute resolution processes regardless of whether they are collective or individual disputes. The current dispute resolution system has relied heavily on the panel members of the committees, leaving a relatively small role

for commission staff. To make better use of the staff's knowledge and expertise, the conciliation services should be expanded and strengthened before mediations and adjudications.

Lessons from Developments in the Korean Collective Dispute Resolution System

As industrialization progresses, collective and individual labor disputes tend to increase in most developing countries. Authoritarian governments are tempted to intervene in or suppress collective labor disputes by political means. Those political means often seem to be quick and effective in dealing with collective labor disputes, despite their inherent adhocracy. Possible political instability and trouble that industrial actions may cause were too much worried by the political authorities under political authoritarianism in Korea. The authoritarian governments in the 1970s and 1980s suppressed trade union movements and strikes out of fear of political instability. As long as markets are open and capitalism has been introduced, political authorities cannot completely control economic changes or moves, or people's social lives. Some should be left to markets and people.

Political authorities may realize that even when they intervene in collective labor disputes, they need some criteria on which to base decisions either to force employers to make concessions to striking workers or to force workers to end strikes. Otherwise, political authorities may face piled-up petitions of collective or individual labor disputes because many workers expect authorities to sort out their grievances, individual disputes, or collective disputes. Employers under political authoritarianism tend to rely on political authorities to resolve their disputes rather than trying to address the causes of collective disputes themselves. As long as political authorities control and resolve collective labor disputes via political means, employers may become stagnant when it comes to

developing labor relations management or expertise.

Even if a country implements a collective labor dispute resolution system and tries to run it properly, the system may not work unless collective bargaining develops. Without the organized power of workers, often through independent trade unions, collective bargaining may remain collective begging rather than real bargaining and may not solve labor issues raised by rank-and-file workers. Even without collective bargaining, individual labor dispute resolution systems may develop and work. However, a collective labor dispute resolution system cannot be thought of without developments in collective bargaining.

Most potential or hidden forms of collective labor conflict can be bridged and institutionally settled through collective bargaining. Unresolved, open forms of collective labor disputes are conciliated, mediated, or arbitrated through collective labor dispute resolution systems and then are resolved. In a sense, collective bargaining as an industrial relations institution is a well-developed, institutionalized form of voluntary collective dispute resolution system conducted by the parties themselves on the basis of their own, balanced negotiating power.

The transition from an authoritarian type of collective labor control to voluntary regulation of collective labor conflict through collective bargaining supported by a collective dispute resolution system may often be tumultuous, as evidenced by the wave of nationwide strikes from 1987 to 1989 in Korea. During the transition period, confrontations, turmoil, and confusion caused by workers' strikes and demonstrations may seem to threaten the economic and political stability in a society in the short run. However, after a period of turmoil in industries, confusion in the workplace, and employers' outcries, a new order of industrial relations may gradually emerge through the joint efforts of employers and trade unions, not of the authoritarian government. Those joint efforts are emerging forms of collective bargaining. In this context, the government should provide the services of conciliation, mediation, and arbitration through a collective dispute resolution sys-

tem in order to facilitate negotiations between the parties, reduce trials and errors, and temper emotions of both parties. The new system of collective bargaining or collective dispute resolution may guarantee political and economic order in the long run.

Now the question is, "will the country risk such a period of turmoil to allow a new order to develop", or "will it continue to rely on old-fashioned political interventionism to control collective labor disputes?". The Korean case of developments in collective resolution systems gives us an example of how the former controlling interventions in collective labour disputes by the state can shift to institutionalized system of collective dispute resolution system during the fundamental political transformation, social changes and economic developments.

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7 Changing Trends in the Youth Unemployment Crisis: 2004–2011*

Jae-ho Keum**

Introduction

Youths are the biggest victims of a sluggish job market. Youth unemployment can undermine the formation of human resources in youths in the early years of their social lives and result in a life-long loss of income. The percentage of youths age 18 to 29 who were unemployed as of 2011 stood at 7.6%, twice the overall unemployment rate of 3.4% for the same period. As seen in Figure 7-1, changing population structures, a lack of jobs, and the rising rate of students advancing to college has caused the unemployment rate of youths age 18 to 29 to continuously fall since 2000. Youth employment, on the other hand, has fallen from 55.7% in 2004 to 51.9% in 2011 to levels seen in 1998, when the Asian financial crisis was in full swing.

Two questions can be raised regarding the youth unemployment crisis. The first is "Are all youths struggling against unemployment?" To answer these questions and to assess the reality of the unemployment problem, this paper will refer to the raw material used to compile the *Economically Active Population Survey* between 2004 and 2011 by National Statistical Office of Korea. To more closely observe the social economic activity of youths by age, this paper observed the changes after

* This thesis was based on the rearranged and supplemented version of Keum Jae-ho (2012a, 2012b).

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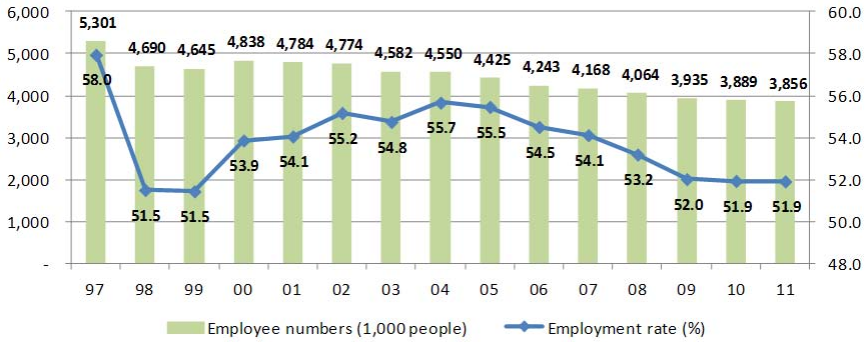

Figure 7-1. Trend of the number of all employed youths age 18 to 29 (Unit: 1,000) and the rate of their employment (%). From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

grouping the youths into different age brackets, with each group composed of youths within a closer 3-year, rather than the typical 5-year, range.

The second question is "Has the quality of youth employment deteriorated" because of the decline in the employment rate? In most cases, job quality decreases in tandem with the employment rate. But a time-series analysis conducted for this paper showed that the quality of jobs improved despite worsening job market conditions. Further, even when compared with those in the 30-to-54 age bracket, with the exception of the aftermath of the global financial crisis, there was no proof that the relative quality of jobs deteriorated. This finding begs a question about the fundamentals of youth unemployment. That is, it appears that a lack of decent jobs is at the core of youth unemployment, but the analysis results reveal that even when a sufficient number of decent jobs is created, it will not be easy to completely resolve the youth unemployment problem unless the gap between different jobs is narrowed.

There are a number of reasons why the quality of jobs has improved despite worsening youth unemployment during the period 2004–2011, but this paper focuses on explaining this phenomenon in terms of the size of business establishments. If the wage premium corresponding to

business size has been increasing, it can be seen as one reason why youth unemployment has worsened despite an overall improvement in employment quality. The job that youths want is not an absolutely decent job but a relatively decent job, which is why even if the quality of jobs improves, youths will be more motivated to find employment at a larger, better company. Consequently, this will lead to delays in graduation and a deepening unemployment problem.

Victims of Youth Unemployment

Central Victims of Youth Unemployment: Younger Youths, Males, and the Undereducated

To determine whether the unemployment problem applies to all youths, this paper will use data from the Economically Active Population Survey conducted by National Statistical Office of Korea during the period 2003–2011 to observe the growth of unemployment rates by gender and age. Youths age 18 to 29 were divided into 3-year brackets for the purpose of studying the unemployment rate of each bracket. Because most youths age 15 to 17 are either attending or on leave from school and are prone to little change as time goes by, this age group was excluded from the study.[1]

Figure 7-2 shows employment of youths in different age brackets. In Figure 7-2, the employment rate fell for most age brackets beginning in 2004; for the 27-to-29 age bracket, however, it increased. Also, although the employment rate declined for youths in the 18-to-20, 21-to-23, and 24-to-26 age brackets, the decline was steepest among youths in the 21-to-23 age bracket.

Students either attending or on leave from school were found to be

[1] A total of 96.6% of youths age 15 to 17 in 2011 were either in school or on leave from school, and this percentage ranged from 96.6% to 97.6% from 2003 to 2011.

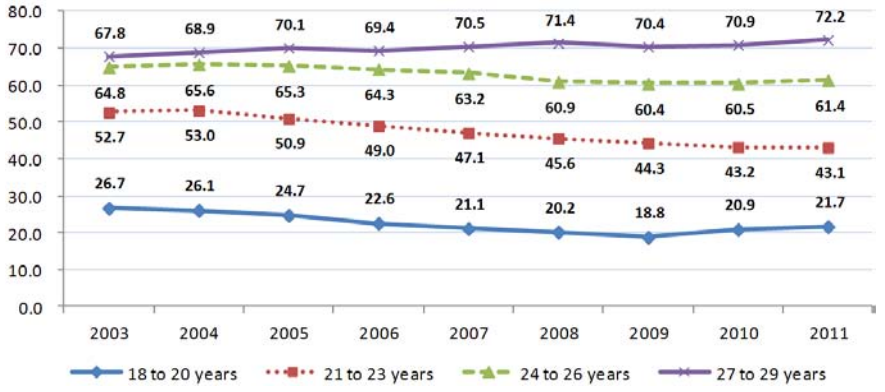

Figure 7-2. Employment rate growth trends of all youths age 18 to 29: 2003–2011 (year). From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

highly likely to be temporarily employed in non-regular work such as part-time side jobs, instead of in permanent jobs.[2] Including these temporary jobs as employment would risk distorting the unemployment problem; for instance, if youth employment was found to have improved due to a significantly larger number of students taking on part-time jobs to cope with rising tuition fees, the reality of youth unemployment would be downplayed. Therefore, to more accurately evaluate the situation, employment rates were studied after limiting the subject of this analysis to youths who had either graduated or dropped out of school. The results are as shown in Table 7-1. In this case, subjects whose major weekly activity involved attending a preparatory academy were excluded, as they were considered to possess an almost identical attitude toward jobs as students who were attending school.

As seen in Table 7-1, when subjects were limited to those who had either graduated or dropped out of school to exclude those attending preparatory academies, the employment rate fell by a bigger rate for the

[2] The employment rate of youths age 18 to 29 who were in either school, on leave from school, or attending academies for college entrance studies rose from 24.9% in 2003 to 27.2% in 2005. Afterward, the rate started to decline to a record 24.7% in 2009, which was amid a global financial recession. The employment rate in 2011 was 25.5%.

younger youths. That is, the younger they were, the bigger the decline in rate of employment. A closer look showed that the employment rate for youths age 18 to 20 fell 17.3 percentage points during the period 2003–2011, while the rate for those age 21 to 23 declined by a smaller clip of 8.0 percentage points. The rate was further reduced to 1.9 percentage points for youths age 24 to 26. On the other hand, the employment rate for youths in the 27-to-29 age bracket rose from 68.9% in 2003 to 73.9% in 2011.

Next, in terms of how employment rates change according to gender or age, there are certain characteristics, which can be seen in Table 7-2. First, the employment rate for all youths in the 18-to-29 age bracket, both male and female, declined during the period 2003–2011. But the rate of decline was steeper for males (56.7% → 51.2%) than for females (53.0% → 52.6%), showing that men were bigger victims of the employment problem than women.[3] Second, the employment rate for males in all age brackets has fallen since 2004, and the rate of decrease was bigger for those who were younger. Third, the employment-rate pattern changes for females were different from those for men.[4] The employment rate for women ages 18 to 20, 21 to 23, and 24 to 26 all declined beginning in 2004, as with males, but the declination rate for women was smaller than that for men. Further, the employment rate of women age 27 to 29 rose from 55.6% in 2004 to 66.1% in 2011. Therefore, as can be seen in Figure 7-2, the rise in youth employment of those in the 27-to-29 age bracket was actually owing to a rise in female employment.

[3] Even in the case the subjects are limited to youths who have graduated from school or dropped and are not attending academies to prepare for college entrance exams, Annex Figure 1 shows that males suffer more from unemployment than the females. Another fact revealed from Annex Figure 1 is that in the case of female youths who are not attending academies but either graduated from school or have dropped out, the employment rate rose, which was contrary the results in Table 7-2. The employment rate for these females rose from 64.0% in 2003 to 69.8% in 2011.

[4] The change in the employment rate per age bracket of all youths who are not attending academies but have either graduated from school or dropped out can be seen in Annex Figure 1 and Annex Figure 2.

Table 7-1. *Employment Rate of Youths per Age Bracket Who Graduated or Dropped Out and Are Not Attending Academies*

(Unit: %)

Age range	2003	2004	2005	2006	2007	2008	2009	2010	2011
18-20	56.3	52.6	49.8	48.2	45.9	45.3	39.8	38.8	39.0
21-23	72.3	71.4	70.2	70.6	70.1	68.0	65.8	66.2	64.3
24-26	74.4	73.8	73.6	73.3	73.2	70.8	71.2	71.6	72.5
27-29	68.9	70.0	71.1	70.8	72.1	73.4	72.1	73.0	73.9
18-29	70.3	70.2	70.5	70.6	71.0	70.4	69.3	69.6	69.8

Note. From *Economically Active Population Survey,* by National Statistical Office of Korea, each year.

In analyzing the raw data from National Statistical Office of Korea, it becomes evident that it is not only youths who are being victimized by the unemployment problem. Within this group, the younger youths are inflicted with greater damage, whereas in terms of gender, men are the bigger victims. There are a number of reasons why males are hit harder, such as the higher education levels of women, their increased desire for social activity, and changing matrimonial cultures.[5] There is also a possibility of female competitiveness exceeding that of their male counterparts in the job market.

The drop in the employment rate of younger youths up until their early 20s can be attributed to two reasons. First is that the number of youths in school—including those attending school, on leave from school, or attending preparatory academies—has increased. Generally speaking, not only are youths who are attending or on leave from school young in age, but their resolve for employment is comparatively weaker than that of youths who have already graduated or dropped out. If the percentage of students in school or on leave has increased, this would trigger a decline in the employment of younger youths.

Second is the discrimination that younger youths face in the job market. Youths in their early 20s who have graduated from school are mostly women or have at most a high school or 2-year-college diploma.

[5] Increased emphasis on women's economic capacities as a condition for marriage is one factor of change in matrimonial culture.

Table 7-2. *Employment Rate for All Youths by Gender and Age*

(Unit: %)

Gender and age range	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males									
18-20	22.2	21.6	20.5	18.3	16.9	15.9	14.6	15.8	17.0
21-23	45.6	46.2	42.4	41.5	40.9	37.9	38.2	36.6	37.5
24-26	61.4	60.9	60.7	58.9	57.5	54.9	53.6	53.5	54.0
27-29	83.0	81.6	81.2	79.5	78.5	77.3	76.5	77.7	78.2
18-29	56.7	56.8	55.8	54.6	53.8	52.6	51.7	51.2	51.2
Females									
18-20	30.3	29.8	28.2	26.0	24.7	23.5	22.0	24.8	25.3
21-23	57.7	57.8	56.8	54.1	51.5	51.2	48.8	48.6	47.6
24-26	68.5	70.2	69.9	69.9	69.0	66.8	67.4	67.6	69.1
27-29	52.8	55.6	58.7	59.1	62.2	64.9	63.9	64.1	66.1
18-29	53.0	54.7	55.2	54.5	54.4	53.8	52.4	52.6	52.6

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

If the job market in turn is more hostile to females or to those with less education, then this could also result in lower employment rates for younger youths.

Growing Number of Youths on Leave From School

Rising percentage of students on leave. The percentage of youths in school—either attending, on leave, or attending preparatory academies—has increased. To determine whether this increase was due to more students taking leave as a result of employment problems, this paper observed the percentage of youths on leave, as seen in Figure 7-3 and Table 7-3. First, there was a partial increase and also some volatility in the declining rate, but in general, more youths were on leave from school. Consequently, the percentage of students on leave rose from 6.5% in 2003 to 8.2% in 2011, as seen in Table 7-3.

Second, as seen in Figure 7-3, the percentage of students on leave rose in all age brackets with the exception of those age 18 to 20. In particular, the percentage of those age 21 to 23 rose from 13.5% in 2003 to 18.3% in 2011, contributing significantly to the overall increase

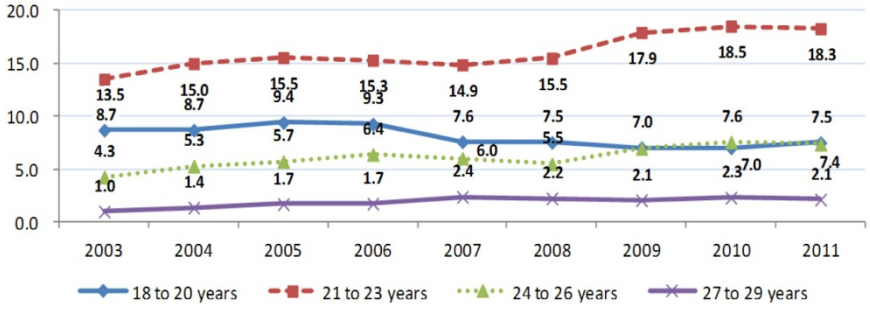

Figure 7-3. Percentage of youths on leave by age: 2003~2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Table 7-3. *Percentage of Youths on Leave From School*

(Unit: %)

Gender and age range	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males									
18-20	14.2	13.6	14.7	14.2	11.3	11.1	10.3	10.4	10.7
21-23	26.0	27.6	28.5	28.8	26.6	25.6	29.2	28.4	27.7
24-26	6.8	8.6	9.4	10.6	9.4	9.0	11.6	12.4	12.0
27-29	1.5	2.0	2.2	2.3	3.4	3.2	2.9	3.3	3.1
18-29	10.8	11.6	12.0	12.1	11.0	10.4	11.6	12.1	12.0
Females									
18-20	4.2	4.6	5.1	5.2	4.5	4.7	4.5	4.4	5.0
21-23	4.6	6.1	6.7	6.1	6.4	8.0	9.7	10.6	10.8
24-26	1.6	2.0	2.0	2.0	2.6	2.1	2.3	2.6	2.5
27-29	0.4	0.6	1.2	1.2	1.3	1.1	1.2	1.3	1.1
18-29	2.6	3.3	3.6	3.4	3.5	3.7	4.1	4.4	4.7
All									
18-20	8.7	8.7	9.4	9.3	7.6	7.5	7.0	7.0	7.5
21-23	13.5	15.0	15.5	15.3	14.9	15.5	17.9	18.5	18.3
24-26	4.3	5.3	5.7	6.4	6.0	5.5	7.0	7.6	7.4
27-29	1.0	1.4	1.7	1.7	2.4	2.2	2.1	2.3	2.1
18-29	6.5	7.2	7.6	7.5	7.1	6.9	7.7	8.1	8.2

Note. From *Economically Active Population Survey,* by National Statistical Office of Korea, each year.

in the number of students on leave.[6] Third, in terms of gender, the increase in the percentage of youths on leave was the most conspicu-

[6] In 2011, 99.9% of youths age 21 to 23 who were attending school or on leave were in 2-year colleges or above. In more detail, 74.6% were attending 4-year universities, while 23.6% attended 2-year colleges and 1.7% attended graduate school.

Table 7-4. *Cause for Taking Leave From School: Multiple Responses Permitted*

(Unit: %)

Cause of leave	Year and month				
	May 2007	May 2008	May 2009	May 2010	May 2011
Percentage of students taking leave	23.0	25.3	26.8	27.0	29.8
For job preparations	2.1	2.9	3.9	3.1	3.2
For certification exam preparations	1.3	1.4	1.7	2.1	2.1
Language courses	1.6	2.4	3.0	3.2	3.6
Internships and other job experience	0.7	0.5	0.5	0.8	1.0
Family issues	1.0	1.0	0.9	0.7	0.6
To earn tuitions/living	2.9	3.2	3.3	3.5	3.7
Military duty	17.0	17.7	18.7	18.2	20.1
Others	1.8	1.7	1.5	1.9	2.7
Have not taken leave	77.0	74.7	73.2	73.0	70.2

Note. From *Supplementary Results of Economically Active Population Survey on Youths,* by National Statistical Office of Korea, May of each year.

ous among females age 21 to 23, and males age 24 to 26 showed the greatest propensity to take a leave from school. Upon closer look, the percentage of women age 21 to 23 on leave rose from 4.6% in 2003 to 10.8% in 2011, whereas the percentage for men in the 24-to-26 age bracket rose from 6.8% to 12.0% during the same period. The average age of youths who either graduate from a 4-year university or drop out of one was 25.6 years for men as of May 2011, and 23.4 years for women. These results show that a growing number of students are choosing to take leave shortly ahead of graduation.

Employment crisis and growing number of youths on leave. To determine the cause for taking leave, a study conducted by National Statistical Office of Korea in May every year, the *Supplementary Results of Economically Active Population Survey on Youths*, began in 2007 to ask graduates whether they have experience taking leave from school, and if yes, why. Students were allowed to give multiple answers for why, and the results of why and whether they did take leave are shown in Table 7-4. As Table 7-4 shows, the percentage of graduates who have experience taking leave rose from 23.0% in 2007 to 29.8% in 2011. In particular, the percentage of students who took time off for employment-related

reasons, such as to prepare for job-related exams, certification exams, and language courses, increased from 5.6% in 2007 to 9.8% in 2011, an indirect indication that more students are taking leave from school as a result of job market problems.[7]

Delayed Graduation

Extending semesters. Not all students who were nervous about their future as a result of uncertain job market conditions were choosing to take leave from school. It was easy to find many others choosing instead to extend the number of semesters they attend. For instance, instead of graduating in the required eight semesters for a 4-year college, they would continue to attend classes for a ninth or tenth semester. One indirect way to determine whether students were extending semesters in order to cope with employment problems was to observe the change in the percentage of students who are attending school. As seen in previous analyses, there is no proof that education levels have been increasing since 2003. Therefore, if more youths are in school, this could be seen as indirect evidence that more students are extending semesters to cope with the employment crisis.

Figure 7-4 shows the percentage of youths in school age 18 to 29, and in this illustration, the percentage can be seen increasing beginning in 2004. The percentage of students in school rose from 20.5% in 2004 to 27.1% in 2011. This phenomenon can be seen in both males and females, thereby showing that due to job market problems, an increasing percentage of youths are delaying graduation by extending semesters. In terms of age, the increase was as expected; the most dramatic seen in the 21-to-23 age bracket. The percentage of students age 21 to 23 who were in school rose from 31.0% in 2004 to 41.3% in 2011, a significant increase, of 33.2%.[8]

[7] The percentage of students who took leave for employment-related reasons stood at 7.1% in 2008, 8.2% in 2009, and 9.2% in 2010.

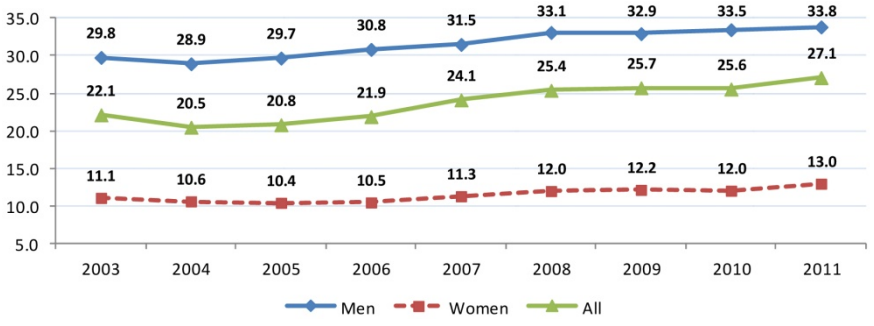

Figure 7-4. Percentage of youths age 18 to 29 attending school (%). From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Increase in number of years until graduation and in graduation age. In the *Supplementary Results of Economically Active Population Survey on Youths*, questions are asked about respondents' time of admission, transfer, graduation, taking leave, or dropping out. The answers provide an opportunity to calculate the time taken from admissions until graduation, as well as the age when students graduate from or drop out of school. Further, based on observing the patterns in how long it takes to graduate and the age of youths when they graduate or drop out, one can indirectly calculate whether students are delaying graduation, and any related changes.

Figure 7-5 shows the length of time taken to graduate from a 4-year university.[9] This figure has been increasing since 2007 for both men and women. Overall, compared with the 58.8 months it took to graduate in 2007, the time increased by 2.2 months, to 61.0 months, in 2011. In particular, the time to graduation increased more rapidly for women than for men.

[8] During the same period, the percentage of students age 18 to 20 who were in school rose from 67.1% to 75.2%, while the same percentage of such students who were age 24 to 26 rose from 16.7% to 19.2%. For the 27-to-29 age bracket, the percentage rose from 4.6% to 5.3%.

[9] Cases where it took less than a year to graduate were excluded from the analysis.

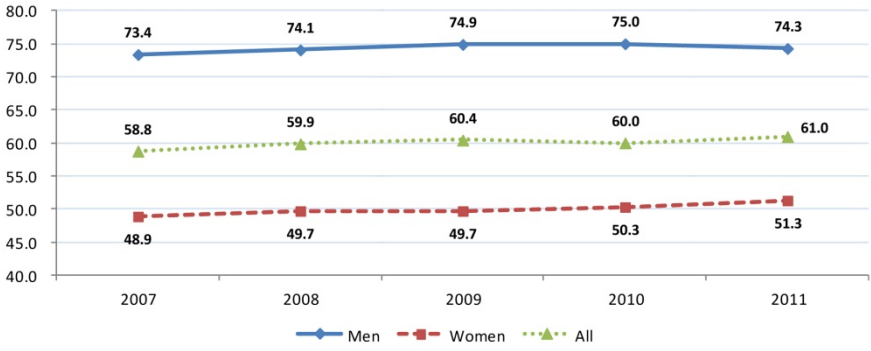

Figure 7-5. Time taken until graduation from a 4-year university (months): Ages 18 to 29. From *Supplementary Results of Economically Active Population Survey on Youths*, by National Statistical Office of Korea, May of each year.

Another barometer for detecting graduation delays, including taking leave from school, is the age when youths graduate or drop out. This average age is shown in Table 7-5, and the figure has been on the rise for both men and women since 2005. As with the previously explained amount of time needed to graduate, in the case of 2-year colleges, there is no change in the age when youths graduated or dropped out of school, but for 4-year colleges, the age rises notably. The age of graduation or dropping out was 24.02 years in 2005, but it rose by approximately 3.1 months over a period of 6 years, to 24.28 years in 2011. In terms of gender, the growth rate of age of graduation or dropout was bigger for females than for males.

To cope with the employment crisis, many youths took leave from school or extended semesters to delay graduation. This in turn led to a decline in the employment rate for younger youths. Further, the percentage of youths in school or on leave was higher for men than for women, but in terms of the growth pace, females grew at a faster pace than men to gradually close the gap with men. A similar reduction in the gap between females and males can also be observed in the time needed to graduate and the graduation age.

Table 7-5. *Age at Graduation or Dropping Out: Ages 18 to 29*

Education level and sex	Year and month						
	May 2005	May 2006	May 2007	May 2008	May 2009	May 2010	May 2011
All education levels							
Males	21.38	21.50	21.76	21.82	22.00	21.94	22.21
Females	20.50	20.73	20.90	20.94	21.02	21.16	21.10
All	20.88	21.06	21.28	21.33	21.45	21.50	21.58
Two-year college							
Males	23.21	23.07	23.31	23.22	23.13	23.16	23.19
Females	21.18	21.15	21.28	21.25	21.31	21.16	21.16
All	21.89	21.82	22.05	21.98	21.99	21.89	21.91
University							
Males	25.38	25.35	25.46	25.34	25.48	25.52	25.55
Females	23.05	23.03	23.22	23.26	23.32	23.41	23.35
All	24.02	23.94	24.12	24.13	24.23	24.23	24.28

Note. From *Supplementary Results of Economically Active Population Survey on Youths*, by National Statistical Office of Korea, May of each year.

Declining Employment Rate of Graduates and Dropouts

Declining employment rate of undereducated youths who have graduated or dropped out. In Table 7-1, Annex Figure 1, and Annex Figure 2, the pattern of changes in the employment rate for youths who graduate or drop out but do not attend college preparatory academies shows that the younger the youths, the bigger the decrease clip of the employment rate. That is to say, youth unemployment, which has worsened since the 2000s, was being materialized not only in the form of delayed graduations but also as a decline in the employment rate of youngsters who have either graduated or dropped out of school.

One reason for this decline is that the employment crisis has made it increasingly difficult for less-educated youths to find jobs, and, consequently, the employment rate for younger youths has fallen at a faster pace. The educational attainment of younger youths who graduated or dropped out from their final stage of school is most likely lower than that of older youths. As of 2011, the distribution of the educational

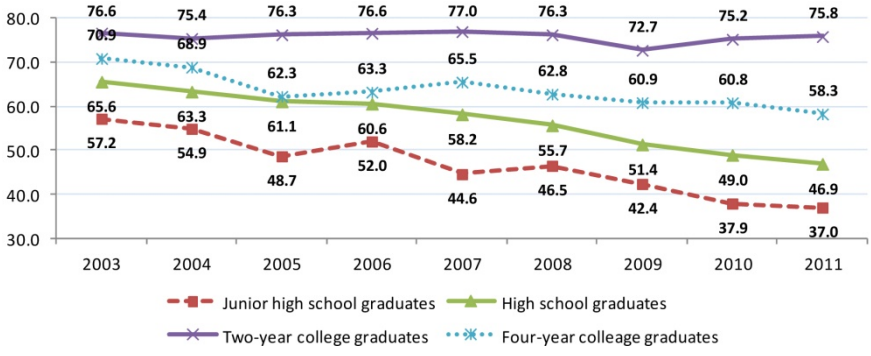

Figure 7-6. Employment rate of college graduates and dropouts (excluding youths attending preparatory academies) by education level (%): 2003~2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

status of youths age 18 to 23 who graduated or dropped out shows that 57.2% held diplomas from a high school or higher educational institution, whereas only 11.2% had a university education or higher. In the 24-to-29 age bracket, the percentage of youths with a high school education or less was almost halved, to 30.3%, whereas the share of those with a university or higher education rose to 40.2%.[10]

If the decline in the employment rate of youths with a high school education or less is more significant than that for youths with a university education or higher, this may indicate that youths of lower educational status are bigger victims of the difficult job market. Furthermore, the steeper decline can also offer an explanation for the question "Why is the employment rate decline steeper for the younger youths who have graduated or dropped out?"

Figure 7-6 shows the changes in the employment rate of youth graduates or dropouts who are not attending preparatory schools, according to their respective educational status since 2003. The decline in the employment rates of youths with a high school education or less

[10] The percentage of 2-year college graduates was 31.6% for those age 18 to 23, and 29.4% for those age 24 to 29.

was steeper than the decline for youths with a 4-year university education. Broken down, the employment rate of youths with a high school education shed 28.5%, from 65.6% in 2003 to 46.9% in 2011. During the same period, the employment rate of youths who graduated from 4-year universities fell 17.8%. The employment rate of youths with diplomas from 2-year colleges showed no significant change. This was because while 4-year university graduates encroached upon the jobs of 2-year college graduates, the 2-year college graduates in turn encroached upon the jobs of high school graduates.

As a result, it can be derived that there were no conspicuous shifts in the employment rates.[11] Worsening job market conditions, therefore, are seen to be inflicting bigger damage on youths with less education, which, as shown in Table 7-1, has led to a bigger decrease in the employment rate of younger youths, among whom the percentage of those with less education is higher.

Increase in number of graduates and dropouts with no work experience. In the *Supplementary Results of Economically Active Population on Youths* conducted by National Statistical Office of Korea, youths who graduated or dropped out of schools of their final level of education were asked how many times they have been employed since their graduation or dropout, including their current jobs. Figure 7-7 shows the percentage of youths devoid of work experience, a figure that has grown since 2005. The percentage of youths with no work experience rose from 8.1% in 2005 to 10.9% in 2011, whereas in terms of gender, the growth in the percentage rate was more significant in men than in women. Due to worsening job market conditions, more youths were unable to find jobs following graduation or after dropping out, and this has become yet another reason for the drop in youth employment.

[11] To evaluate the propriety of this statement, changes in job quality such as wages and working conditions should also be assessed.

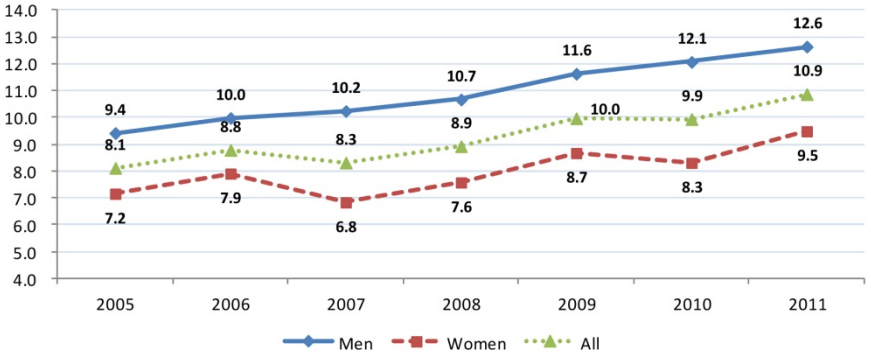

Figure 7-7. Percentage of youth graduates or dropouts with no work experience (%): Ages 18 to 29. From *Supplementary Results of Economically Active Population Survey on Youths*, by National Statistical Office of Korea, May of each year.

Decline in employment frequency and length of service in first jobs. Regarding frequency of employment, "once" was the most widely given answer, with 36.2% answering thus in 2011. Next was "twice" (23.0%), followed by "three times" (15.6%). Based on the time-series analysis, it was difficult to find a certain pattern, as in the case of Table 7-6. As such, the number of employment opportunities also fails to show any conspicuous changes. The only notable point is that the average number of employments fell by a significant rate during the periods 2005–2006 and 2010–2011.

The service period of a youth's first job also has been falling steadily since 2006. The possibility is that more youths prematurely quit their jobs upon experiencing growing dissatisfaction after taking on unsatisfying jobs amid labor market uncertainties. Only 40.7% of youths who graduated or dropped out in May 2011 and found their first jobs since then are currently still at the same jobs. The remaining youths have already quit such jobs. In terms of gender, males and those with more education were more likely to keep their first jobs. One reason for the high unemployment rate and low employment rate of undereducated youths is that their employment is unstable. College graduates, on the

Table 7-6. *Number of Jobs and Length of Service at First Job After Graduating or Dropping Out of the School of Respondents' Final Level of Education: Ages 18~29*

	Year and month						
	May 2005	May 2006	May 2007	May 2008	May 2009	May 2010	May 2011
Frequency of employment							
None	8.1	8.8	8.3	8.9	10.0	9.9	10.9
Once	35.4	38.5	36.5	36.5	35.1	33.7	36.2
Twice	23.0	22.6	23.3	22.6	22.0	23.2	23.0
Three times	17.4	15.9	17.7	17.5	18.2	17.7	15.6
Four times or more	16.1	14.3	14.2	14.5	14.8	15.5	14.4
Average no. of jobs (including those with no experience)	1.98	1.88	1.93	1.92	1.93	1.95	1.86
No. of months at first job	20.6	21.4	20.9	20.4	20.3	19.4	19.6

Note. "More than four jobs" was treated as four jobs in the average number of jobs. From *Supplementary Results of Economically Active Population Survey on Youths*, by National Statistical Office of Korea, May of each year.

other hand, were able to land jobs in comparatively less time after completing their education and were more likely to stay at one job; this reveals a significant employment gap based on education levels.

As of May 2011, youths who quit their jobs had worked an average of 20 months at their first jobs. They mostly cited "unsatisfactory working conditions" as the reason for quitting, followed by other personal or family-related reasons such as "child-rearing," "home-making," "health problems," "marriage," and "studies." Up to 9.9% said they quit because their work or job had no prospects. More women than men changed jobs because of unsatisfactory working conditions and lack of prospects.

Quality of Youth Employment

Changes in the Form of Employment and Business Size

Working status: Increase in permanent workers. Changes in the working status of youths age 15 to 29 who have graduated or dropped

but who do not attend preparatory academies are as shown in Table 7-7: the percentage of permanent workers has risen at a drastic pace, while the percentages of those with temporary or day jobs or who are self-employed has declined.[12] The rise in permanent workers since 2003 is prevalent not only among youths, but in people of all ages. This is mostly due to a decline in temporary job opportunities and economic difficulties that have reduced the number of self-employed.

In terms of gender, as seen in Table 7-7, the percentage of permanent workers rose among both males and females. One notable point is that with the exception of 2008, the percentage of permanent workers among female employees was higher than that of men. For instance, in 2011, the percentage of permanent workers among women age 15 to 29 was 65.8%, 4.0 percentage points higher than that of males. Further, the higher the education level, the higher the percentage of regular workers and the lower the percentage of temporary or daily workers. Specifically, 75.2% of employees with a college education or higher held permanent jobs, 17.7% were temporary workers, and 1.1% held daily jobs (see Annex Table 1). Only 6.0% were self-employed. In contrast, only 45.6% of employees with a high school education or less were permanent workers.

To determine whether the rise of permanent workers is more prominent among youths age 15 to 29 compared with other age brackets, the youths were compared with employees age 30 to 54 who graduated or dropped out of the school of their final education level. The results, as provided in Annex Table 2, show that it is difficult to say that the rate of increase in the percentage of permanent workers among youths age 15 to 29, both males and females, was higher than that of workers age 30 to 54. That is to say, the rates of increase in the percentages of permanent workers were similar for those age 15 to 29 and those age

[12] As the subjects of analysis in this study usually indicate youths who graduated or dropped out but do not attend preparatory academies, the term "graduates or dropouts who do not attend preparatory academies" will be dispensed with.

Table 7-7. *Changes in the Working Status of Youths Age 15 to 29*

(Unit: %)

Year	Wage workers				Self-employed			
	Permanent	Temporary	Daily	Total	Employer	Self-employed	Unpaid workers	Total
2003	49.9	35.4	5.5	90.7	1.8	4.4	3.1	9.3
2004	51.2	35.2	5.6	92.0	1.1	4.1	2.8	8.0
2005	53.2	33.6	5.7	92.5	1.0	4.0	2.6	7.5
2006	55.0	32.8	4.9	92.7	0.9	3.9	2.5	7.3
2007	58.1	30.6	4.8	93.4	1.0	3.6	2.1	6.6
2008	59.4	29.4	4.2	92.9	1.2	4.0	1.9	7.1
2009	59.9	29.4	4.1	93.3	1.2	3.5	2.0	6.7
2010	61.7	28.3	3.8	93.8	1.1	3.3	1.8	6.2
2011	64.0	26.5	3.2	93.6	1.3	3.2	1.9	6.4

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

30 to 54. Furthermore, the percentage of permanent workers among both male and females age 15 to 29 who graduated or dropped out of school but who do not attend preparatory academies was significantly higher than for all other age brackets (Annex Table 2). This indicates that youths preferred salaried work over self-employment, and among wage workers, preferred stable jobs.

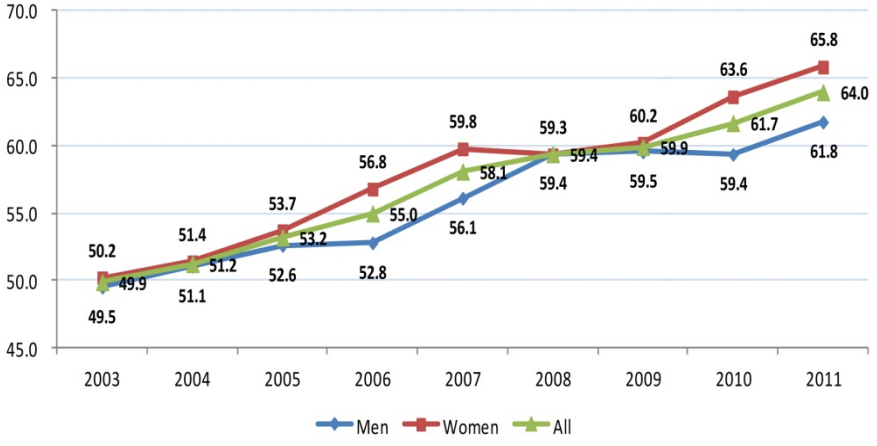

Figure 7-8. Percentage of permanent workers among employees age 15 to 29. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Regular worker status: Increase of regular jobs. Of the entire group of wage workers, youths age 15 to 29 who graduated or dropped out of school but who do not attend preparatory academies are the most likely to have a job as a regular employee whose retirement age is guaranteed. In August 2011, 74.1% of youths were regular employees. This rate was 8.3 percentage points higher than the 65.8% for all wage workers.

Further, the composition of non-regular workers in Table 7-8 shows that among youths, contingent employment accounted for 20.4%, whereas part-time work accounted for 3.8% and atypical employment accounted for 5.0%.[13]

On the other hand, the percentage of contingent employment out of all wage workers stood at 19.7%; part-time employment accounted for 9.7%; and atypical employment, 13.9%. Among youths, the percentage of contingent employment was mostly on a par with levels for the entire wage-worker group, but the percentage of part-time employment and atypical employment fell significantly. Youths are thus seen to be reluctant to be employed in part-time or atypical jobs. This reluctance is seen to be an important factor in increasing the percentage of regular workers among youth employees. This gap in the composition of non-regular employees is shown to have stabilized in time-series terms after August 2003.[14]

The percentage of non-regular workers measured in terms of time-series measurements, as in Table 7-8, shows the percentage of regular workers increasing since August 2004, while the percentage of non-regular workers has decreased. The percentage of non-regular employees among youth employees age 15 to 29 who graduated or dropped out of school but who do not attend preparatory academies fell from 30.0% in September 2004 to 25.9% in August 2011. In particular, con-

[13] Atypical employment includes services, dispatch work, daily labor, domestic labor, and special employment.

[14] Refer to KOSIS or Keum Jae-ho (2012a) for the change in non-regular jobs among the entire wage workers group.

tingent and atypical employment experienced a dramatic decline. Contingent employment was reduced to 23.0% from 20.4% during the same period, and atypical employment fell from 7.9% to 5.0%. This decline in the percentage of non-regular workers is not limited to youths; it's a phenomenon found in all age brackets.

Figure 7-9 shows that in terms of gender, the percentage of non-regular workers was higher among female wage workers than male workers, with the exception of August 2007. In August 2011, the percentage of non-regular workers among female wage workers age 15 to 29 was 27.4%, 3.3 percentage points higher than the 24.1% for male wage workers. This shows that female workers age 15 to 29 have a higher propensity to become non-regular workers than men, but when compared with the entire group of wage workers, there is little gender gap. Of all wage workers, the percentage of female non-regular workers continued to be at least 10 percentage points higher than the percentage of male non-regular workers since after August 2003.[15] Therefore, the high rate of non-regular workers among female wage workers appears to be a bigger problem for females in their 30s or older or who are in school or taking leave, rather than females age 15 to 29 who graduated or dropped out of school but who do not attend preparatory academies.

As seen in Annex Table 3, the gaps between the percentages of non-regular workers by education level are not big. Time-series analysis shows that due to an overall decline in non-regular workers, the percentage of non-regular workers decreased for youths with a high school education or less and for youths who graduated from 2-year colleges. The percentage of non-regular workers among youths who graduated from 4-year universities, on the contrary, began to increase after August 2009. This increase of non-regular workers was more

[15] Of all wage workers, the percentage of non-regular workers stood at 27.8% for men in August 2011, whereas the percentage for women was 42.9%, 15.1 percentage points higher than the percentage for men. This gender gap has been a steady feature in the survey since August 2003.

Table 7-8. *Percentage of Non-Regular Workers Among Youth Wage Workers Age 15 to 29*

(Unit: In 1,000 people, %)

Year and month	Type of wage worker					
	Regular	Non-regular				All
		Contingent	Part-time	Atypical	Non-regular total	
Aug. 2003	2,546 (74.7)	640 (18.8)	113 (3.3)	222 (6.5)	862 (25.3)	3,407 (100.0)
Aug. 2004	2,391 (70.0)	785 (23.0)	114 (3.3)	268 (7.9)	1,025 (30.0)	3,416 (100.0)
Aug. 2005	2,355 (71.3)	741 (22.4)	120 (3.6)	211 (6.4)	948 (28.7)	3,303 (100.0)
Aug. 2006	2,338 (73.1)	708 (22.1)	106 (3.3)	154 (4.8)	862 (26.9)	3,199 (100.0)
Aug. 2007	2,305 (72.0)	706 (22.0)	123 (3.8)	196 (6.1)	899 (28.1)	3,203 (100.0)
Aug. 2008	2,236 (73.4)	641 (21.1)	89 (2.9)	172 (5.6)	810 (26.6)	3,045 (100.0)
Aug. 2009	2,134 (72.6)	631 (21.5)	113 (3.8)	179 (6.1)	807 (27.5)	2,941 (100.0)
Aug. 2010	2,151 (73.5)	591 (20.2)	137 (4.7)	163 (5.6)	776 (26.5)	2,927 (100.0)
Aug. 2011	2,126 (74.1)	585 (20.4)	110 (3.8)	144 (5.0)	745 (25.9)	2,871 (100.0)

Note. Figures inside ( ) indicate percentages (%). From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of every year.

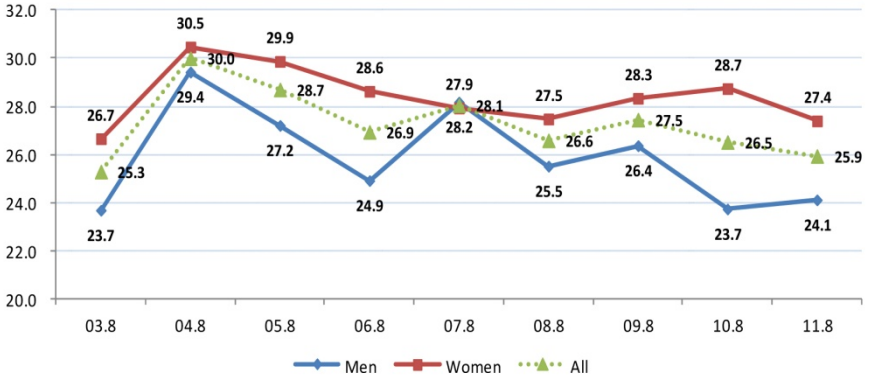

Figure 7-9. Percentage of non-regular workers among employees age 15 to 29, by gender. From *Supplementary Results of Economically Active Population Survey on Job Type*, by National Statistical Office of Korea, August of each year.

prominent among women than men.

The percentage of non-regular workers among male youths from August 2003 to August 2011 was highest for those with a high school education or less, followed by youths who graduated from 2-year col-

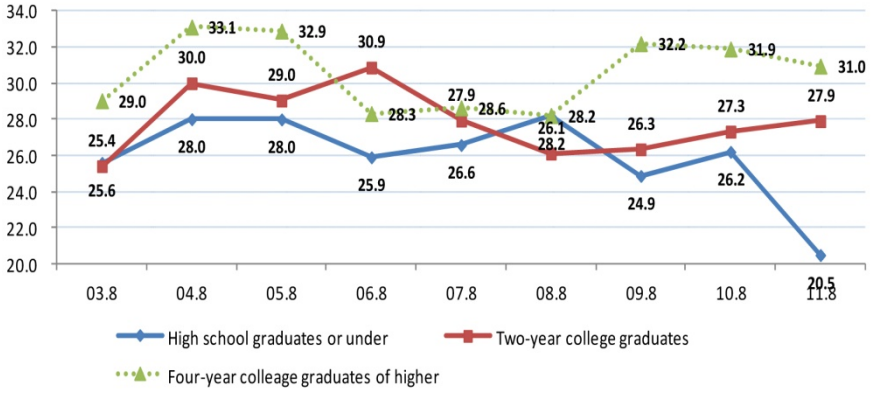

Figure 7-10. Trend of the percentage of non-regular workers among female employees age 15 to 29, by education level. From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of each year.

leges, then by those with a 4-year-university education or higher. But the percentage of non-regular workers fluctuates dramatically each year; in addition, there is often a turnaround in groups of different education levels, making it thus difficult to reach a conclusion. Meanwhile, women, as seen in Figure 7-10, tend to have higher percentages of non-regular workers as education level increases, with the exception of the 3-year period from August 2006 to August 2008. In particular, since August 2009, the gaps between female youths of different education levels appear to have widened.

Business size and youth employment. As seen in Figure 7-11 and Annex Table 4, with respect to the size of businesses at which youths age 15 to 29 who graduated or dropped out of school but who do not attend preparatory academies are employed, only 23.2% were employed at businesses employing 100 or more workers as of 2011. Meanwhile, 34.0% of these youths were employed at very small businesses, or those employing under 10 employees, meaning the quality of the jobs was very low in terms of size. Compared with all wage workers, the businesses that youths were employed at were slightly bigger than busi-

nesses that all wage workers were employed at, but the gap is insignificant. Therefore, instead of moving from a bigger enterprise to a smaller one as they age, nearly 60% of youths start off at small enterprises employing under 30 people.

With respect to gender, the size of businesses employing male youths age 15 to 29 was generally in line with enterprises employing all wage workers, but for females, companies employing youths age 15 to 29 appeared to be mostly bigger than those employing all wage workers. This indicates that whereas male youths usually work for similar sized companies whether they are in their 20s or in their 30s or older, female youths tend to work for relatively bigger companies in their 20s and later find re-employment at smaller enterprises when they enter their 30s or older.

With respect to education levels, as expected, the higher the level of education, the bigger the chances of finding employment at a larger company. Only 14.1% of youths with a high school education or less were working for companies with 100 or more employees (Figure 7-12). On the other hand, 31.9% of youths with diplomas from 4-year universities or higher-level schools were employed at such high-scale companies. In particular, almost half of youths with a high school education or less were working for small companies employing fewer than 10 workers.

Figure 7-11. Distribution of wage workers age 15 to 29 by business size: 2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, 2011.

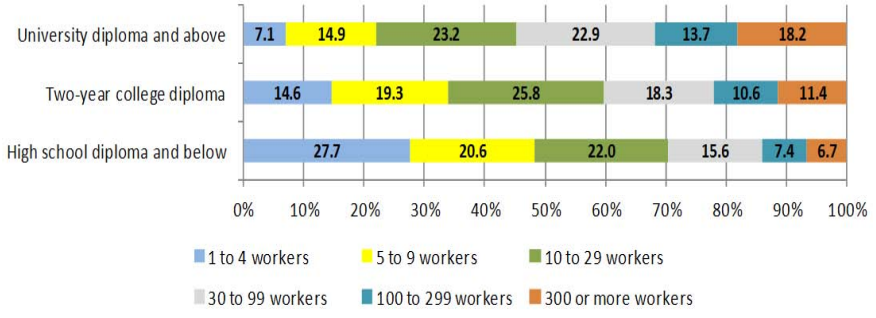

Figure 7-12. Distribution of wage workers age 15 to 29 by education level and business size: 2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, 2011.

Annex Table 4 shows the time-series trend in the size of businesses where youth wage workers age 15 to 29 who have graduated or dropped but who do not attend preparatory academies have been employed, but it is difficult to determine based on the information in this table whether business sizes are increasing or decreasing. To get around this problem, this study allocated an index value of 1 to "businesses with 1–4 workers," 2 to "businesses with 5–9 workers," and 6 to "businesses with 300 or more workers," and then observed the changes in

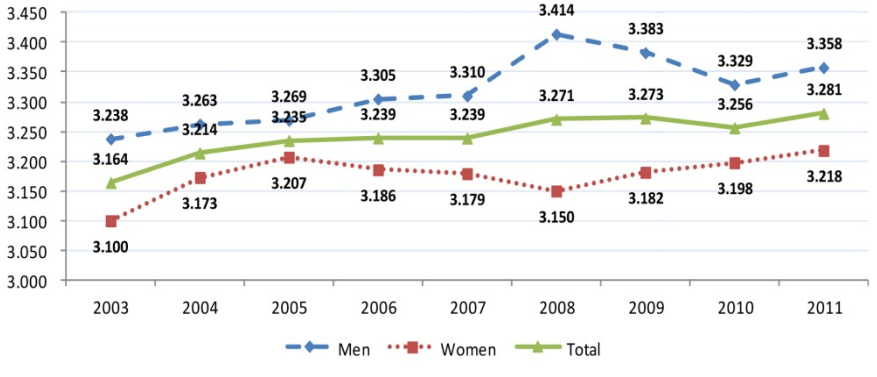

Figure 7-13. Trend of business size index value (average) of wage workers age 15 to 29. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

the average of the index value. Figure 7-13 shows the trend of the index value average by sex. In general, the index value average continues to increase after 2003, although the rate of increase is slow. This means that the businesses where youths between the ages of 15 and 29 are getting employed are getting larger, albeit gradually. Also, men were found to contribute more than women to the increase in business size.

Employment Stability

Average service period. The simplest yardsticks for measuring the level of instability of the labor market are average service period and percentage of short-service-period workers. However, indices such as a decrease in the average service period or an increase in the percentage of short-service-period workers are of limited use as measures of labor market stability. In other words, it is difficult to accurately judge whether the cause of a change in the average service period is either a change in the demographic structure, a change in the economic activity participation rate, an increase in the employment rate, or increased employment instability. Despite such limitations, this paper investigates the trend of employment stability among youths by examining changes in average service periods and the percentage of short-service-period workers.

Figure 7-14 depicts an average-service-period (years) distribution that shows how long wage workers age 15 to 29 who have graduated or dropped out but who do not attend preparatory academies have been working at their current jobs. In 2011, the average service period of youths age 15 to 29 was just 1.84 years. Throughout the entire period covered by the survey, the average service period was longer for women than for men. This is a natural result considering that women begin their careers earlier than men because men are required to undergo years of mandatory military service. The time-series data show that since 2003, the average service periods of youth wage workers have

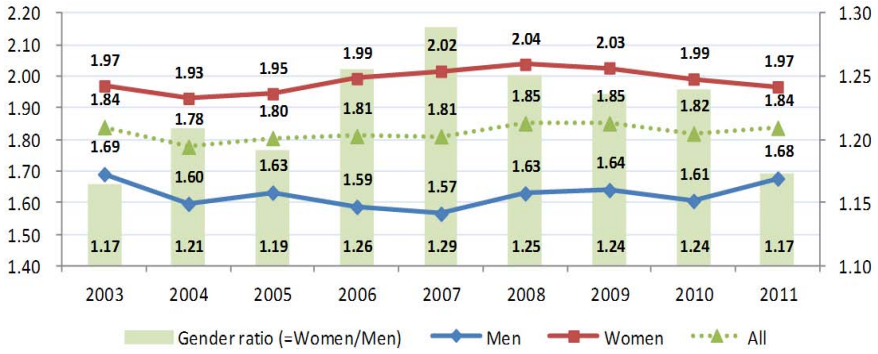

Figure 7-14. Average-service-year trend for youths age 15 to 29. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

remained at similar levels.

Change in percentage of those with "less than 1 year of service." The percentage of people who have been working at their current jobs for less than 1 year among wage workers age 15 to 29 who have graduated or dropped out but who do not attend preparatory academies was developed by Jaeger and Stevens (1999) as a criteria for measuring employment instability. Table 7-9 shows the yearly trend of

Table 7-9. *Distribution of the Percentage of Wage Workers Age 15 to 29 With Service Periods of Less Than 1 Year*

Sex and education	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males	49.7	48.8	47.3	48.6	48.1	46.7	46.1	47.8	46.6
High school & below	53.5	54.0	53.4	55.2	56.2	53.5	52.8	54.0	51.4
Two-year college	47.8	43.2	41.2	45.3	42.2	41.1	43.5	43.7	43.4
University & above	42.6	43.6	41.3	39.9	41.2	42.2	39.7	43.6	43.9
Females	44.7	45.3	44.1	42.7	42.0	41.2	43.0	43.5	43.2
High school & below	47.8	48.4	49.6	49.5	48.8	46.8	47.4	49.6	50.0
Two-year college	43.0	43.7	42.9	39.8	40.1	38.1	40.2	40.2	41.6
University & above	41.5	42.6	38.5	39.0	37.6	40.0	42.7	42.6	40.4
All workers	47.0	46.9	45.6	45.4	44.8	43.7	44.4	45.5	44.8
High school & below	50.8	51.3	51.6	52.6	52.9	50.5	50.4	52.1	50.8
Two-year college	44.9	43.5	42.3	41.8	40.9	39.2	41.5	41.5	42.3
University & above	42.0	43.1	39.7	39.4	39.1	40.9	41.5	43.0	41.9

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

of the percentage of workers with service periods of less than 1 year by sex and education level.

The percentage of workers with service periods of less than 1 year continued to fall during the period 2003–2008, and began to grow again starting in 2009 (see Figure 7-15). It is possible that the upward shift in 2009 was the result of the employment crisis caused by the global financial crisis.

The continuous drop in the percentage of workers with service periods of less than 1 year until 2008 implies that there had been improvements in job security, and that men led women in the improvement in job security. And just as with average service periods, the percentage of workers with service periods of less than 1 year was lower among women than among men, since women graduate/drop out of school earlier.[16] By education level, the rate of decrease in the percentage of workers with service periods of less than 1 year was greatest among 2-year college graduates, meaning that they led the improvements in job security (Table 7-9).

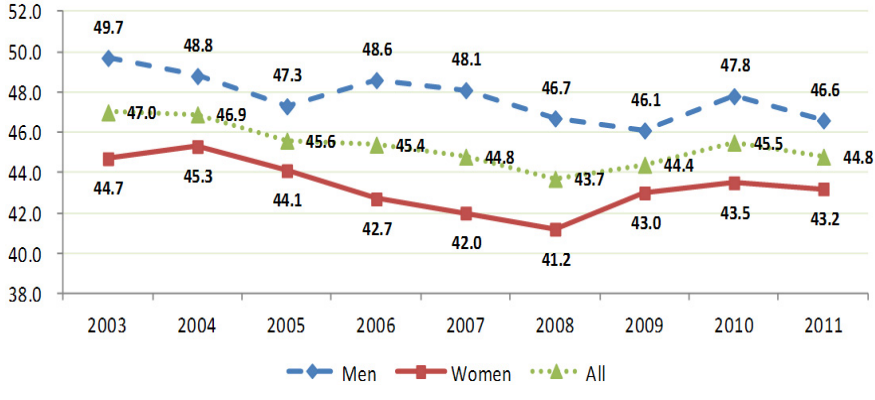

Figure 7-15. Percentage of wage workers age 15 to 29 with service periods of less than 1 year. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

[16] When looking at all wage workers, job insecurity is much greater among women than among men, and the percentage of workers with less than 1 year of service is relatively higher among women than among men.

Wage and Social Insurance Subscription Rate

Wage trends. The real average monthly wage of wage workers age 15 to 29 who have graduated or dropped out but who do not attend preparatory academies was 1,591,000KRW in August 2011, as seen in Table 7-10, which is 71.6% of that of the comparison group of wage workers age 30 to 54. The real hourly wage was 8,634 KRW, or 70.6% of that of wage workers age 30 to 54.[17] Over the 9-year period from August 2003 to August 2011, the real wage of workers age 18 to 29 increased by a mere 6.1%. Such a low increase is mostly due to reductions in working hours, evidenced by the fact that real hourly wages increased by 18.0% during the same period. In other words, the fact that the increase in real hourly wages is greater than the increase in real average monthly wages means that the number of actual working hours has decreased.

The repercussions of the global financial crisis for wages may be another reason that real average monthly wages increased by only 6.1%. Over the 5-year period from August 2003 to August 2008, real average monthly wages increased by 8.9%, but because of the global financial crisis, in August 2009, real wages fell by a year-to-year 3.6%, and this greatly reduced the increase in real wages.

Until August 2008, the gap in both real average monthly wages and real hourly wages for wage workers age 30 to 54 continued to narrow, but widened after the global financial crisis. Real wages for wage workers age 18 to 29 rose from 72.0% of that for wage workers age 30 to 54 in August 2003 to 74.0% in August 2008. But beginning in August 2009, the wage ratio fell again, to 71.6% in August 2011.

A trend similar to that seen in the wage ratio of real average monthly wages can also be seen in the wage ratio of real average monthly wages. When the economy becomes sluggish, initial measures taken by com-

[17] In this study, real wages were calculated by using the Consumer Price Index, with prices for the year 2010 set at 100.

Table 7-10. *Trend of Real Wages (2010 = 100) for Workers Age 18 to 29*

(Unit: persons, %)

Year and month	Monthly average real wage (10,000 KRW)				Hourly real wage (1,000 KRW)			
	Ages 18-29 (A)	Increase/ decrease (%)	Ages 30-54 (B)	Wage ratio (A/B)	Ages 18-29 (A)	Increase/ decrease (%)	Ages 30-54 (B)	Wage ratio (A/B)
Aug. 2003	149.9		208.0	0.720	7,315		10,320	0.709
Aug. 2004	151.5	1.1	209.9	0.722	7,563	3.4	10,618	0.712
Aug. 2005	154.2	1.8	210.5	0.733	7,675	1.5	10,810	0.710
Aug. 2006	157.3	2.0	212.7	0.739	7,989	4.1	11,018	0.725
Aug. 2007	159.4	1.4	219.5	0.726	8,251	3.3	11,449	0.721
Aug. 2008	163.3	2.4	220.8	0.740	8,558	3.7	11,697	0.732
Aug. 2009	157.5	-3.6	217.3	0.725	8,336	-2.6	11,752	0.709
Aug. 2010	158.9	0.8	221.0	0.719	8,526	2.3	11.996	0.711
Aug. 2011	159.1	0.2	222.4	0.716	8,634	1.3	12,226	0.706

Note. Real wages refers to the amount in wages adjusted for inflation using the Consumer Price Index with the year 2010 at 100. From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of each year.

panies to cut costs include laying off or adjust the wages of employees belonging to vulnerable classes such as women, youths, and elderly people. This tendency is seen to have had a profoundly negative impact on the real wages of workers age 18 to 29.

As seen in Annex Table 5, wage ratios in the 18-to-29 and 30-to-54 age brackets differ greatly according to sex. Whereas the wage level of workers age 18 to 29 is about 60% of that of workers age 20 to 54 in the case of men, there is hardly any difference in wage level between the two age brackets in the case of women. This implies that men are more likely to move up to high-paying jobs once they have accumulated career experience as they reach their 30s, whereas opportunities to increase wage are limited in the case of women as a result of factors such as career discontinuation and discrimination.

Social insurance subscription rate. The social insurance subscription trend of youth wage workers age 15 to 29 who have graduated or dropped but who do not attend preparatory academies is shown in Table 7-11. Subscription to employment insurance continued to increase, from 61.5% in August 2003 to 76.7% in August 2011. The increase in

Table 7-11. *Trend of Social Insurance Subscription for Wage Workers Age 15 to 29*

(Unit: %)

Year and month	Employment insurance		National health insurance		National pension	
	Age 15-29	Age 30-54	Age 15-29	Age 30-54	Age 15-29	Age 30-54
Aug. 2003	61.5	51.2	66.4	61.9	65.4	60.9
Aug. 2004	63.6	53.0	68.5	62.9	67.6	62.1
Aug. 2005	66.4	54.1	70.6	63.9	71.0	64.4
Aug. 2006	69.0	56.1	73.7	65.0	74.5	65.5
Aug. 2007	70.1	56.5	76.1	65.9	76.3	66.3
Aug. 2008	71.5	58.3	76.2	67.7	78.2	75.2
Aug. 2009	72.4	60.5	76.4	69.8	79.0	77.2
Aug. 2010	73.8	67.2	75.8	70.4	78.2	78.4
Aug. 2011	76.7	69.7	78.6	72.5	80.2	79.2

Note. Questions on National Health Insurance and National Pension subscription were adjusted in August 2008. From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of each year.

employment insurance subscription applies not only to wage workers age 15 to 29 but also to those age 30 to 54.

Just as with employment insurance, subscription rates for the National Health Insurance and National Pension have continuously increased. However, the consistency of the data has been damaged following the modification of questions on National Health Insurance and the National Pension subscription in the survey in August 2008.[18] Table 7-11 shows rates of subscription to employee insurance in the case of the National Health Insurance and employee and self-employed insurance in the case of the National Pension since August 2008. In the case of National Health Insurance, the employee insurance subscription rate for wage workers in the 15-to-29 age bracket was 78.6% in August 2011, higher than the subscription rate of 72.5% for wage workers age 30 to 54. In the case of the national pension, 80.2% of wage workers age 15 to 29 were subscribed to employee or self-

[18] Until August 2007, only employee insurance subscription rates for national pension and national health insurance were surveyed, whereas starting in August 2008, rates of subscription to employee insurance and self-employed insurance in the case of the national pension, and employee insurance and self-employed insurance, beneficiaries, and employee-insured dependents in the case of national health insurance, were surveyed.

employed insurance in August 2011. Another trend that can be identified in Table 7-11 is that in most cases, subscription to social insurance is greater among wage workers age 15 to 29 than among those in the 30-to-54 age bracket. This is particularly notable in the case of employment insurance.

In addition to subscription to social insurance, benefits such as retirement allowance, bonuses, overtime pay, and paid leaves have continuously improved among wage workers in the 15-to-29 age bracket. As seen in Table 7-12, the percentage of wage workers age 15 to 29 eligible for retirement allowance increased from 57.8% in August 2003 to 73.5% in August 2011. Similar trends can be found with respect to bonuses and paid leaves. Regarding benefits, just as with social insurance, the percentage of wage workers age 15 to 29 receiving benefits aside from wages was higher than in the 30-to-54 age group, with the exception of overtime pay.

Table 7-12. *Benefits of Wage Workers Age 15 to 29*

(Unit: %)

Year and month	Retirement allowance		Bonus		Overtime pay		Paid leave	
	Age 15-29	Age 30-54	Age 15-29	Age 30-54	Age 15-29	Age 30-54	Age 15-29	Age 30-54
Aug. 2003	57.8	56.8	56.8	55.0	41.7	44.2		
Aug. 2004	59.7	56.9	57.5	54.5	46.4	46.7	51.4	48.5
Aug. 2005	60.3	57.5	59.0	55.6	47.3	47.2	50.4	48.4
Aug. 2006	61.9	57.7	60.6	56.8	46.1	46.1	48.5	47.0
Aug. 2007	67.4	60.4	65.5	59.3	48.2	47.2	59.4	52.8
Aug. 2008	71.5	64.5	65.3	60.5	45.6	46.8	62.5	56.1
Aug. 2009	70.3	65.9	71.0	65.7	47.2	48.2	66.2	60.6
Aug. 2010	70.9	67.5	72.5	69.5	48.4	49.3	68.0	62.6
Aug. 2011	73.5	69.8	74.2	70.3	48.4	48.8	66.3	60.8

Note. From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of each year.

Job Characteristics and Wage

Wage Function Estimate of Youth Wage Workers

Since 2004, youth unemployment has intensified, and in response, many youths have elected to take leave from school or to delay graduation by extending their semesters instead of graduating. In general, an increase in unemployment is likely to degrade the quality of the jobs that youths work at. However, since 2004, the quality of jobs for youths age 15 to 29 who have graduated or dropped out but who do not attend preparatory academies has improved in many respects, including the percentage of permanent and regular employees, size of business, average service period and percentage of workers with less than 1 year of service, real wages, social insurance, and eligibility for other benefits. Despite the improvement in the quality of jobs, youth unemployment remains high, and the possibility that the expectations of youths may also have increased, in addition to the possibility that youths may be seeking "decent jobs" from subjective rather than objective perspectives, may partially explain this.

In order to assess such possibilities, this study, using the *Supplementary Results of Economically Active Population Survey by Job Type* for the period 2004–2011, estimated the wage function for youth jobs and analyzed the changes in the wage premium according to business size. A continuous increase in the wage premium according to business size will provide a partial answer to the question "Why is youth unemployment still high despite the improvement in the quality of jobs?"

For estimation, the ordinary least square (OLS) method was used,[19]

[19] The self-selection model in which whether to work or not is determined in the first stage and the wage level in determined in the second stage is more detailed, but because the Economically Active Population Survey Supplementary Survey by Job Type lacks information on variables that affect job searching periods and the decision to work, the use of this model would lead to credibility issues regarding the results. And since the purpose of wage function estimation is to examine the temporal changes of the effect of explanatory variables on wage, this study chose to simply make an estimate of the wage function.

and the logarithm of hourly wage was used as the dependent variable. Explanatory variables include demographic variables such as sex, age, marital status, education level, and area of domicile, and economic variables such as service period, union participation, employment type, business size, and industry. Table 7-13 shows the wage functions of wage workers age 15 to 29 who have graduated or dropped out but who do not attend preparatory academies estimated by using survey results from August 2011.

The results shown in Table 7-13 display some notable characteristics. First, in the case of youth wage workers, the age effect on wage was found to be very weak. In the case of men, although there is no statistical significance, wage decreases with age.[20] This result is probably because among youths, the age difference between workers is not great, and service period is more important in determining wage than age.[21] Second, although wages were higher among men with spouses or marriage experience than among unmarried men, in the case of women, marital status has no impact. Third, in the case of men, the impact of where they lived—cities or countries—on wage was statistically meaningless, whereas in the case of women, those living in cities tended to be paid more.

[20] Those who are found to be older than others after the factor of service period is controlled for are likely to have begun working later than others or may have transferred from another job. They may also have graduated or dropped out of school later than others. Those who began working later than others may have found employment by lowering their standards as their job-searching period became longer. In the case of those who graduated or dropped out of school later than others, they may have done so because of difficulties in finding jobs. In addition, in the case of those who have changed jobs, it may be possible that they relatively lacked the ability to adjust to their jobs. Such explanations indirectly imply the validity of the estimated negative (-) value of the effect of age on wage level.

[21] As of August 2011, the average age of youth wage workers age 15 to 29 who have graduated or dropped but do not attend preparatory academies is 26.03, with a standard deviation of just 2.53 years.

Change in Job Characteristics and Wage Premium

Table 7-13. *Wage Function Estimate for Youths Age 15 to 29 Who Have Graduated or Dropped Out But Who Do Not Attend Preparatory Academies: OLS, August 2011*

Explanatory variable	Total	Male	Female
Sex (0: female, 1: male)	0.08203(0.000)		
Age	-0.03608(0.322)	-0.05300(0.424)	0.00118(0.978)
Square of age	0.00114(0.117)	0.00148(0.257)	0.00041(0.634)
Marital status (Standard: single)			
Married	0.07425(0.000)	0.12253(0.000)	0.02219(0.273)
Bereaved/divorced	0.24642(0.011)	0.33516(0.007)	-0.07542(0.654)
Education (Standard: high school and below)			
Two-year college	0.11573(0.000)	0.09342(0.000)	0.13057(0.000)
University and above	0.22613(0.000)	0.19211(0.000)	0.25019(0.000)
Current job service period (years)	0.03324(0.000)	0.03890(0.000)	0.03049(0.000)
Area of domicile (0: county, 1: city)	0.04534(0.006)	0.01059(0.679)	0.07789(0.000)
Employment type (Standard: regular)			
Non-regular	-0.07805(0.000)	-0.10348(0.000)	-0.05300(0.001)
Trade union membership (Standard: no union)			
Union exists but is not eligible for membership	-0.00535(0.822)	0.08284(0.040)	-0.05306(0.064)
Eligible for membership but not joined	0.11784(0.000)	0.10485(0.011)	0.13964(0.000)
Joined union	0.14872(0.000)	0.13248(0.000)	0.16629(0.000)
Business size (Standard: 1-4 workers)			
5-9 workers	0.14784(0.000)	0.22154(0.000)	0.09694(0.000)
10-29 workers	0.22816(0.000)	0.29985(0.000)	0.17847(0.000)
30-99 workers	0.28269(0.000)	0.33120(0.000)	0.24500(0.000)
100-299 workers	0.33948(0.000)	0.41933(0.000)	0.26160(0.000)
300 or more worker	0.37771(0.000)	0.45701(0.000)	0.32706(0.000)
Industry (Standard: manufacturing)			
Construction	0.01019(0.733)	-0.00531(0.895)	0.07299(0.119)
Wholesale and retail	-0.02981(0.135)	-0.03256(0.271)	-0.01427(0.607)
Transportation	0.05458(0.123)	-0.00815(0.877)	0.11476(0.018)
Lodging and restaurants	-0.13798(0.000)	-0.19759(0.000)	-0.08029(0.023)
Financial services and insurance	0.10900(0.000)	0.10940(0.007)	0.12398(0.000)
Professional, scientific, and technical services	0.14418(0.000)	0.16083(0.000)	0.13520(0.000)
Business facilities management and business support	0.00546(0.848)	0.00177(0.969)	0.02841(0.438)
Public administration, defense, and social security	-0.10426(0.007)	0.08759(0.206)	-0.19315(0.000)
Education services	0.05608(0.023)	0.17721(0.002)	0.03406(0.238)
Healthcare and social welfare	-0.02810(0.192)	-0.11645(0.033)	-0.01069(0.674)
Association, group, personal services	-0.17990(0.000)	-0.15785(0.002)	-0.20291(0.000)
Other	-0.00780(0.741)	-0.00725(0.833)	0.01727(0.602)
Constant term	8.68208(0.000)	8.94655(0.000)	8.20778(0.000)
No. of samples	3,488	1,472	2,016
F-value	85.61	37.14	54.19
Adjusted *R*-square	0.4214	0.4160	0.4336

Note. Value in parentheses are $P > |t|$.

As shown in Table 7-14, the wage premium according to business size tended to increase in both men and women during the 8-year period from August 2004 to August 2011, although there is a significant level of fluctuation depending on the date of observation. When "1 to 4 employees" is set as the standard, the wage premium of businesses with 100 to 299 employees increased from 0.2705 in August 2004 to 0.3395 in August 2011, while the wage premium of businesses with 300 or more employees also increased, from 0.3342 to 0.3777, during the same period.

Youths who are about the same age will probably not look only at wage distribution when searching for jobs. Instead, they will probably decide whether to join a company or not after looking at the overall

Table 7-14. *Wage Premium of Youths Age 15 to 29 Who Have Graduated or Dropped Out But Who Do Not Attend Preparatory Academies by Business Size: Business With 1 to 4 workers as Standard*

Business size	Year and month							
	Aug. 2004	Aug. 2005	Aug. 2006	Aug. 2007	Aug. 2008	Aug. 2009	Aug. 2010	Aug. 2011
All								
5-9	0.0978	0.1135	0.0829	0.1074	0.1021	0.0838	0.0772	0.1478
10-29	0.1838	0.2052	0.1825	0.1478	0.1667	0.1767	0.2159	0.2282
30-99	0.2234	0.2304	0.2019	0.2386	0.2317	0.2403	0.2410	0.2827
100-299	0.2705	0.2827	0.2411	0.2338	0.2977	0.2871	0.3077	0.3395
300 and above	0.3342	0.3855	0.3343	0.3712	0.3877	0.3778	0.3978	0.3777
Males								
5-9	0.0449	0.1185	0.0585	0.1071	0.0881	0.0679	0.1038	0.2215
10-29	0.1599	0.2038	0.1800	0.1008	0.1634	0.1697	0.2842	0.2998
30-99	0.1651	0.1853	0.1749	0.2060	0.2353	0.2287	0.2767	0.3312
100-299	0.2068	0.2744	0.2280	0.2258	0.3052	0.3212	0.3704	0.4193
300 and above	0.2918	0.4031	0.3185	0.3892	0.4038	0.3441	0.4387	0.4570
Females								
5-9	0.1237	0.1032	0.1035	0.1024	0.1120	0.0931	0.0628	0.0969
10-29	0.1941	0.2061	0.1829	0.1810	0.1673	0.1833	0.1670	0.1785
30-99	0.2601	0.2681	0.2206	0.2608	0.2325	0.2496	0.2224	0.2450
100-299	0.3257	0.2850	0.2455	0.2347	0.2920	0.2612	0.2579	0.2616
300 and above	0.3659	0.3797	0.3460	0.3514	0.3736	0.4039	0.3752	0.3271

Note. Questions on National Health Insurance and National Pension subscription were adjusted in August 2008.

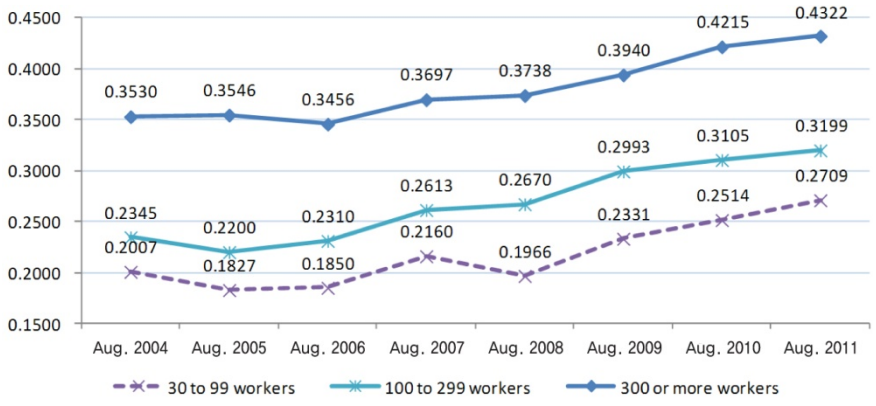

Figure 7-16. Wage premium trend by business size: From August 2004 to August 2011, all workers. Standard is businesses with 1 to 4 employees.

wage-level trend. Wage functions were estimated and the change in wage premium according to business size for all workers was analyzed with this in mind. The result is an increase in the wage premium according to business size since August 2004, as seen in Figure 7-16.One problem with the wage premium according to business size is that the standard is businesses with 1 to 4 workers, as seen in Table 7-14. The wage premium according to business size is a relative concept, and although as of 2011, 15.9% of all youths work in businesses with 1 to 4 employees, as seen in Table 7-14, the wage premium over businesses with 1 to 4 employees is rising not only at businesses with 300 or more employees but at those with 5 to 9 and 10 to 29 employees as well. Therefore, the information in Table 7-14 alone is not enough to prove that wage levels at small companies dropped. As one solution to this problem, this study estimated wage functions after categorizing businesses into two groups—those with 1 to 29 employees and those with 30 or more employees—and examined the increase in wage premium at businesses with 30 or more employees in comparison to businesses with 1 to 29 employees. The conclusion, shown in Figure 7-17, is that while there is some fluctuation, the wage premium for businesses with 30 or more employees has increased since August 2004.

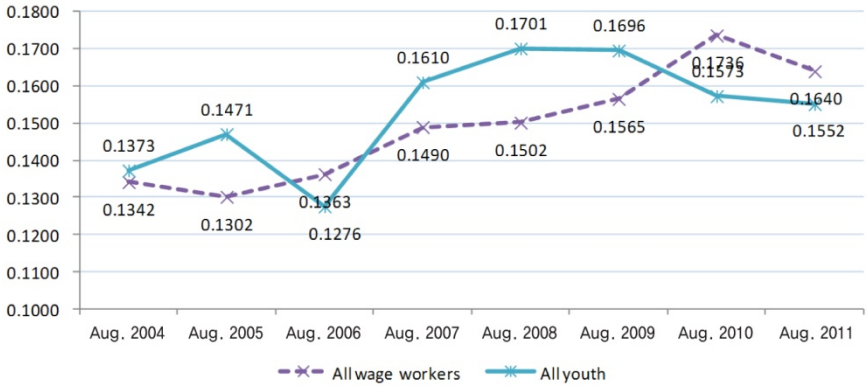

Figure 7-17. Wage premium trend by business size: From August 2004 to August 2011. Standard is businesses with 1 to 29 employees.

The above analysis shows that wage gaps between companies of different sizes have increased since 2004, and as a result, despite improvements in the overall quality of jobs, more youths are taking leaves or postponing graduation from school in order to compete to work at large companies. In addition, it shows that in order to solve the youth unemployment problem, although it is important to create "decent jobs," it is also important to make efforts to improve the distribution of job quality.

Conclusion and Policy Implications

Youth employment rates, which show the employment situation of youths, have continued to deteriorate since 2004, as shown in Figure 7-1. An analysis of raw data from National Statistical Office of Korea's *Economically Active Population Survey* and *Supplementary Results of Economically Active Population Survey on Youths* performed to confirm whether youth unemployment affects all youths found that the percentage of youths who were delaying graduation or taking leaves of absence due to unemployment had increased. Also, the degree of hardship experi-

enced was found to differ among youths: the younger and less-educated tended to suffer more, and women tended to suffer more than men.

Meanwhile, in an analysis using the same raw data to see whether the unemployment problem had a negative impact on the quality of youth jobs, contrary to economic theories, during the period between 2004 and 2011, the quality of jobs was found to improve or at least remain the same in almost every respect including wage levels, percentage of permanent or above-one-year contract positions, and social insurance subscription. According to a time-series analysis of the effect of business size on wages performed to investigate the cause of this phenomenon by applying an estimated wage function, during the period 2004–2011 the wage premium according to business size increased not only among youths but among all wage workers. This result contradicts the government's previous claim that youth unemployment can be solved by creating "decent jobs." While it is important to create "decent jobs," what is also important is to bridge the gap in the quality of jobs. In other words, it is necessary to improve the quality of jobs located in the margins of the job ladder in order to solve the youth unemployment issue, and achieving this requires improvement of the competitiveness and working conditions at small and medium-sized enterprises and middle-standing enterprises.

The analyses in this study also present some additional policy implications. First is the need to develop an index that can accurately assess the youth unemployment problem.

The official unemployment rate for youths age 18 to 29 in 2011 is 7.6%, but the unemployment rate actually felt by youths is much higher. NEET and "employment difficulty class" are concepts that are used to supplement the official unemployment rate and to measure felt unemployment.[22] However, the analysis that youth unemployment leads to an increase in leaves and in the number of semesters taken by students

[22] Refer to Nam (2006), Jeon and Jo (2007), and Chae et. al (2008) for more information on NEET(Not in Education, Employment, or Training).

and thus increases the length of time it takes to graduate from school shows that NEET and "employment difficulty class," both of which are supplementary indices, underestimate the intensity of the youth unemployment problem.

This study also presents the need to categorize youths into incumbent/on-leave students and graduated/dropped-out youths and to conduct separate analyses in order to accurately understand the youth unemployment problem and establish measures to resolve it. Students either attending or on leave from school are highly likely to be temporarily employed in non-regular work such as part-time side jobs, instead of permanent jobs, and including these temporary jobs as employment would risk distorting the unemployment problem.

It is also necessary to look at the differences in the unemployment problem in young men and young women. This study found the drop in employment rate to be higher for men than for women, and this can be understood as the result of a bridging of the gap between men and women since the 2000s. But women have not yet surpassed men in terms of competitiveness. The economic status of female youths is far lower than that of males, and this can be seen in Annex Figure 3 and Annex Figure 4. According to Annex Figure 3 and Annex Figure 4, which show the trend of economic activities of youths who have graduated from 4-year universities or higher by age, men and women display different employment-rate patterns. Women tend to become employed at 24 to 26 years of age, or right after they graduate from university. However, for reasons of marriage, child rearing, and housekeeping, the number of non-employed women increases: just 51.8% of women age 33 to 35 were found to have jobs. On the other hand, the employment rates for men tell a completely different story. Employment rates for men are lower than those for women up until their mid-20s because Korean men must complete mandatory military service. However, the employment rate for men surpasses that of women at the age of 27, and by 30 to 32 years of age, most men will have found jobs.

Even as they age, men tend to find jobs by lowering their standards, but in the same situation, women tend to give up job-searching. This means that while youth unemployment affects both men and women in their 20s, women are the ultimate victims of the unemployment problem, and that the socioeconomic status of women is lower than that of men.

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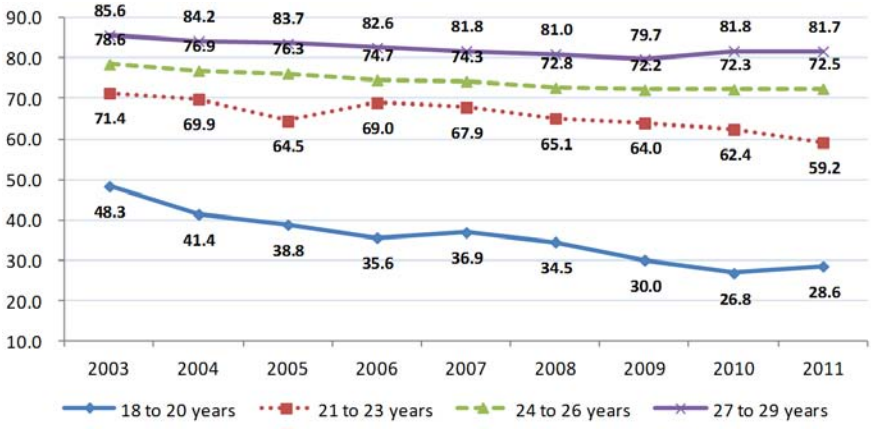
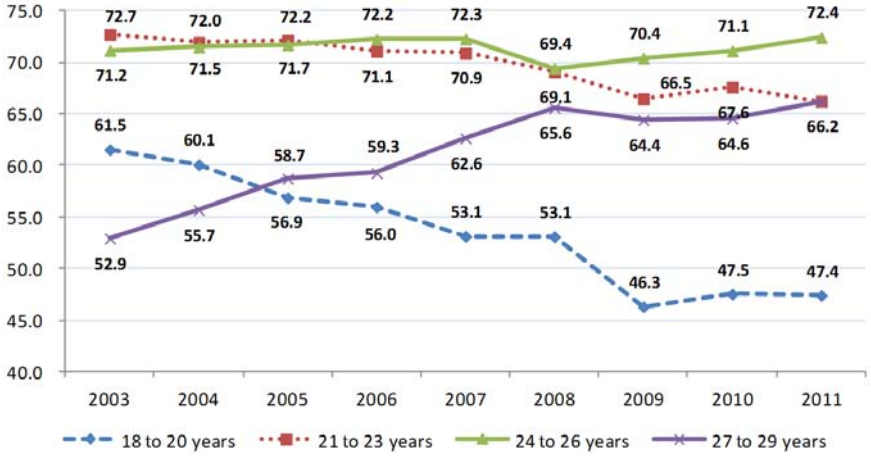
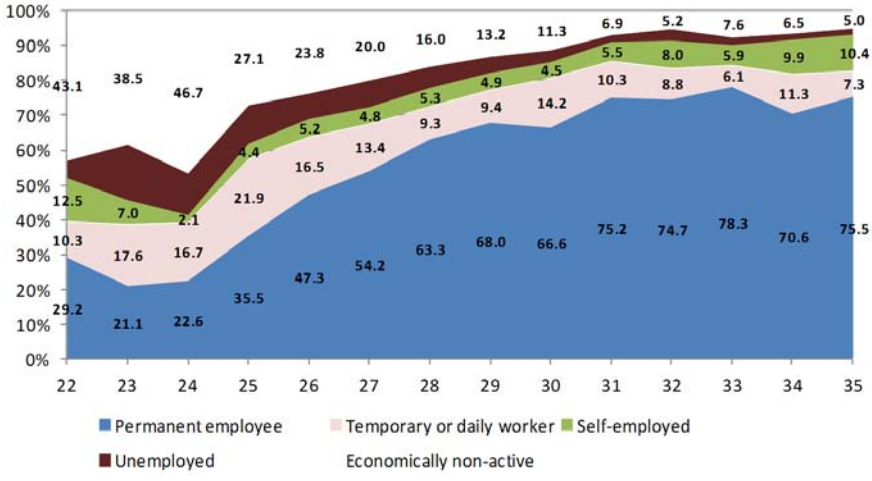
Annex Figures



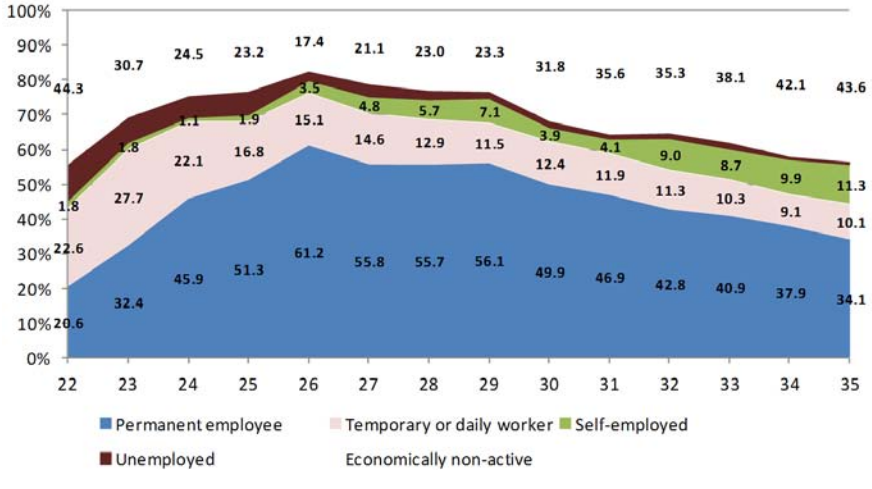
Annex Figure 1. Employment rate trends of male youths who have graduated or dropped out but who do not attend preparatory academies. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.



Annex Figure 2. Employment rate trends of female youths who have graduated or dropped out but who do not attend preparatory academies by age. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.



Annex Figure 3. Employment rate of 4-year university graduate males by age: 2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, 2011.



Annex Figure 4. Employment rate of 4-year university graduate females by age: 2011. From *Economically Active Population Survey*, by National Statistical Office of Korea, 2011.

Annex Tables

Annex Table 1. *Change in Working Status of Youth Workers Age 15–29, by Education Level*

(Unit: %)

Year and education level	Wage workers			Self-employed			Total
	Perma-nent	Tempo-rary	Daily	Employer	Own account worker	Unpaid worker	
2003							
High school & below	37.4	42.1	9.0	1.9	5.3	4.2	100.0
Two-year college	57.3	33.3	2.7	1.4	2.7	2.6	100.0
University & above	67.5	23.8	1.3	2.0	4.2	1.3	100.0
2005							
High school & below	39.4	41.8	9.7	1.1	4.6	3.4	100.0
Two-year college	60.7	30.5	3.5	0.4	2.7	2.2	100.0
University & above	67.4	23.8	1.6	1.3	4.2	1.7	100.0
2007							
High school & below	41.3	41.3	9.9	0.8	4.0	2.8	100.0
Two-year college	64.5	28.2	2.2	0.9	2.4	1.8	100.0
University & above	71.8	19.9	1.2	1.3	4.4	1.5	100.0
2009							
High school & below	42.9	40.1	8.1	1.6	4.1	3.2	100.0
Two-year college	65.1	27.0	2.5	0.9	2.8	1.8	100.0
University & above	71.8	20.8	1.7	1.0	3.6	1.1	100.0
2011							
High school & below	45.6	38.6	6.8	1.4	4.1	3.6	100.0
Two-year college	69.2	24.7	1.9	1.4	1.8	1.0	100.0
University & above	75.2	17.7	1.1	1.1	3.5	1.4	100.0

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Annex Table 2. *Change in Percentage of Permanent Workers by Sex and Age*

(Unit: %)

Year	Male			Female			All		
	Ages 15-29	Ages 30-54	All ages	Ages 15-29	Ages 30-54	All ages	Ages 15-29	Ages 30-54	All ages
2003	49.5	43.5	39.6	50.2	18.2	23.2	49.9	33.9	32.8
2004	51.1	44.2	40.5	51.4	20.1	24.4	51.2	35.0	33.8
2005	52.6	45.3	41.1	53.7	21.7	25.6	53.2	36.2	34.6
2006	52.8	46.1	41.6	56.8	23.6	27.0	55.0	37.3	35.4
2007	56.1	47.2	42.7	59.8	25.7	28.7	58.1	38.8	36.8
2008	59.4	48.9	44.2	59.3	28.2	29.9	59.4	40.8	38.2
2009	59.5	51.9	46.2	60.2	30.3	31.2	59.9	43.5	40.0
2010	59.4	53.8	47.9	63.6	34.4	34.5	61.7	46.3	42.3
2011	61.8	55.2	48.9	65.8	38.2	37.1	64.0	48.6	44.0

Note. Ages 15–29 and ages 30–54 refer to workers who have graduated or dropped but do not attend preparatory academies, while all "All ages" refer to all workers above 15 years of age regardless of graduation or dropping out.

Annex Table 3. *Change in the Percentage of Non-Regular Wage Workers Age 15–29, by Sex and Education Level*

(Unit: %)

Year and month	High school and below			Two-year college			University and above		
	Male	Female	All	Male	Female	All	Male	Female	All
Aug. 2003	24.5	25.6	25.1	23.0	25.4	24.5	20.5	29.0	25.3
Aug. 2004	30.7	28.0	29.0	26.5	30.0	28.7	28.0	33.1	30.9
Aug. 2005	29.1	28.0	28.6	25.8	29.0	27.9	24.0	32.9	29.0
Aug. 2006	25.7	25.9	25.8	24.2	30.9	28.4	22.3	28.3	25.9
Aug. 2007	27.7	26.6	27.2	27.0	27.9	27.6	28.8	28.6	28.7
Aug. 2008	26.8	28.2	27.4	25.7	26.1	26.0	22.6	28.2	25.8
Aug. 2009	28.2	24.9	26.7	24.9	26.3	25.8	24.4	32.2	28.9
Aug. 2010	24.2	26.2	25.1	21.2	27.3	25.1	24.7	31.9	29.0
Aug. 2011	25.9	20.5	23.4	22.2	27.9	25.7	23.3	31.0	27.7

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Annex Table 4. *Distribution of Wage Workers Age 15–29, by Business Size*

(Unit: %)

Sex and year	Business size						
	1-4 workers	5-9 workers	10-29 workers	30-99 workers	100-299 workers	300 and above workers	Total
Male							
2003	17.5	17.2	23.0	20.0	10.9	11.4	100.0
2004	17.5	16.2	22.8	20.7	11.7	11.1	100.0
2005	17.1	18.0	21.8	19.2	12.1	11.9	100.0
2006	16.2	17.6	22.6	19.2	11.7	12.7	100.0
2007	16.1	17.1	22.0	21.0	11.7	12.1	100.0
2008	15.0	15.8	21.9	21.1	12.6	13.6	100.0
2009	14.8	16.1	22.6	21.1	13.3	12.1	100.0
2010	15.2	16.2	23.4	21.7	13.0	10.6	100.0
2011	14.2	16.9	23.8	21.2	12.2	11.8	100.0
Female							
2003	20.3	18.6	22.9	18.4	8.6	11.2	100.0
2004	18.3	19.7	21.8	18.8	9.7	11.8	100.0
2005	18.1	19.7	21.5	17.8	10.0	12.9	100.0
2006	18.7	18.8	21.8	18.9	9.7	12.2	100.0
2007	19.2	18.4	21.4	19.2	9.9	11.9	100.0
2008	19.5	18.9	22.0	18.2	9.5	11.9	100.0
2009	18.5	19.0	22.5	18.0	10.2	11.9	100.0
2010	18.3	18.9	22.3	18.2	10.1	12.3	100.0
2011	17.3	19.1	23.7	17.5	9.6	12.9	100.0
All							
2003	19.0	17.9	22.9	19.2	9.7	11.3	100.0
2004	17.9	18.1	22.2	19.6	10.6	11.5	100.0
2005	17.6	18.9	21.6	18.4	10.9	12.5	100.0
2006	17.6	18.3	22.1	19.0	10.6	12.4	100.0
2007	17.8	17.8	21.7	20.0	10.7	12.0	100.0
2008	17.5	17.5	22.0	19.5	10.9	12.7	100.0
2009	16.8	17.7	22.5	19.4	11.6	12.0	100.0
2010	16.9	17.7	22.8	19.8	11.4	11.5	100.0
2011	15.9	18.1	23.7	19.1	10.8	12.4	100.0

Note. From *Economically Active Population Survey*, by National Statistical Office of Korea, each year.

Annex Table 5. *Trend of Real Wage (2010=100) of Wage Workers Age 18–29, by Sex*

Year and month	Monthly average real wage (10,000 KRW)				Hourly real wage (KRW)			
	Ages 18-29 (A)	Increase/ decrease (%)	Ages 30-54 (B)	Wage ratio (A/B)	Ages 18-29 (A)	Increase/ decrease (%)	Ages 30-54 (B)	Wage ratio (A/B)
Male								
Aug. 2003	164.8		251.3	0.656	7,799			0.640
Aug. 2004	165.7	0.5	252.8	0.655	7,841	0.5	12,192	0.629
Aug. 2005	170.6	3.0	253.8	0.672	8,143	3.9	12,468	0.639
Aug. 2006	171.2	0.4	256.4	0.668	8,265	1.5	12,738	0.634
Aug. 2007	172.0	0.4	265.5	0.648	8,612	4.2	13,030	0.632
Aug. 2008	178.0	3.5	265.2	0.671	9,066	5.3	13,630	0.656
Aug. 2009	171.7	-3.5	262.5	0.654	8,819	-2.7	13,946	0.632
Aug. 2010	169.3	-1.4	266.8	0.635	8,824	0.1	14,243	0.619
Aug. 2011	173.1	2.2	268.3	0.645	9,207	4.3	14,454	0.637
Female								
Aug. 2003	137.0		132.7	1.033	6,900		7,065	0.977
Aug. 2004	139.8	2.1	136.7	1.023	7,333	6.3	7,464	0.982
Aug. 2005	141.3	1.0	138.4	1.021	7,304	-0.4	7,592	0.962
Aug. 2006	145.5	3.0	142.7	1.020	7,757	6.2	7,792	0.996
Aug. 2007	148.6	2.1	145.6	1.020	7,939	2.3	7,944	0.999
Aug. 2008	151.1	1.7	149.2	1.013	8,135	2.5	8,288	0.982
Aug. 2009	145.8	-3.6	145.7	1.000	7,935	-2.5	8,271	0.959
Aug. 2010	150.5	3.2	149.7	1.005	8,286	4.4	8,497	0.975
Aug. 2011	147.9	-1.7	151.1	0.979	8,173	-1.4	8,765	0.933

Note. Real wage refers to the amount in wage adjusted for inflation using the Consumer Price Index with the year 2010 as 100. From *Supplementary Results of Economically Active Population Survey by Job Type*, by National Statistical Office of Korea, August of each year.

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