



## Inequality of Human Capital Development in the Korean Labour Market, and its Effects on Korean workers' Occupational Achievements\*

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The paper deals with institutions involved with workers' human capital development and their influences on the Korean labour market. It reveals that Korea's human capital development systems generate two human capital development paths for workers. The first path is for large-firm workers who maintain their career through continuous on-the-job training and renewing of their human capital. Another path is for small-firm workers, who do not have opportunities for human capital development because of their precarious working situations. The reasons for these segregated human capital development paths are: 1) the state's neglect of its duties as regards to human capital development; 2) discrepancy in financial ability depending on firm sizes; 3) discriminative service from social protection; and 4) mismatch between the education and employment systems. All of these have important implications for policy makers as they strive to facilitate labour market integration.

**[Key Words: Inequality, Human Capital Development, Korean Labour Market, Occupational Achievements]**

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## I . INTRODUCTION: RATIONALE AND THE AIM OF THE RESEARCH

A significant feature of the Korean labour market is its increasing labour market segmentation, with the subsequent labour market inequalities between skilled and semi- or unskilled workers. Since the Asian Financial Crisis of 1997, the Korean labour market has undergone fundamental transformation, from long-lasting permanent employment and occupational welfare programmes to so-called flexible employment and market-based welfare programmes (OECD 2007a). However, previous empirical studies have shown that, in the same labour market, professional or skilled workers are still spending more time in maintaining and developing their human capital in their occupational career in safe environment whereas unskilled worker are excluded from labour market due to frequent job turnover and unemployment (Kim 2002; KLI 2005). This phenomenon may be explained that work security is secured for skilled workers by their employers, who are in need of skills biased technical change. By contrast, the labour market environment for unskilled workers is becoming more flexible and precarious (DiPrete and McManus 1996; Wood 1994).

At the same time, however, this explanation for labour market segmentation, involving increasing demand from employers and a shortage in the skilled labour supply, still may not be enough to account for market inequality. The labour market is the place where power is made into a commodity that is bought and sold in the market (Streeck 2005; Tilly. and Tilly 1994) and the end products of this buying and selling are wage levels and employment status of workers (Hamermesh and Rees 1984). However, wage levels and occupational status are not determined solely by the quantity of labour supplied or demanded (Tilly. and Tilly 1994). It takes workers a certain amount of time and money to obtain human capital development and, hence, competitive labour power.

The need of ongoing opportunities for human capital development derives from

the very nature of the labour market. Due to changes in technology and consumer taste, employers' demands on employees tends to change as well. Therefore, Human Resource Development (HRD) research on employability argues that, for workers to have the capability to move self sufficiently within the labour market and to realise their potential through sustainable employment, they should have transferable skills required to meet the changing needs of employers (Brown 2001; Gazier 1999; McQuaid and Lindsay 2005). However, the ability to realize or actualize 'employability' depends on the individual's personal and external circumstances and the mixed relationship between these two (Hillage and Pollard 1998; McQuaid and Lindsay 2005). In personal terms, workers require substantial long-term commitment to human capital investment, such as lifelong learning and on-the-job training. This effort is mainly influenced by the labour market structure, such as labour regulations, welfare support, and employer recruitment and selection behaviour (Hillage and Pollard 1998). Therefore, workers need various institutional supports to overcome these institutional barriers to their employability.

For instance, low-wage or precarious workers do not have sufficient time or financial means to develop their human capital continuously (Brown 2001; Crouch, Finegold and Sako 1999; Gallie and Paugam 2003). Their human capital loses its impact as time goes by, and they become gradually isolated from the labour market. Moreover, their unstable status in the labour market has a corrosive effect on the social networks that they possess (Gallie and Paugam 2003). Therefore, workers who are once isolated from the labour market through failure to develop human capital go on to lose the social capital even further that could have assisted them in troubled times or introduced them to new jobs.

There are negative effects on their children too. Children whose parents have low levels of human and social capital will also face difficulties in initially forming such capital (Borjas 1995; Coleman 1988; Duncan 1968; Erikson and Jonsson 1996). In particular, their parents' weak social ties will certainly not have a positive effect on their labour market entry. This is mainly because parents with

low-income jobs are likely to socialize with people from equivalent occupational status, and thus the social capital that they do possess may provide only limited information for their children.

Moreover, workers can find jobs that might give full returns on their human capital investment, either directly or through personal contacts (Coleman 1991; Granovetter 1995). Once jobseekers lose social networks with people who can match them to jobs yielding appropriate human capital investment returns, they may eventually experience job mismatches, in turn resulting in low levels of job satisfaction and frequent job turnover.

The aim of the paper is to reveal the relationships of human capital development systems with labour market segmentations in South Korea, and to discuss their implications for workers' labour market integration. Within this aim, there are three consecutive questions that we wish to address. First, what is the role of Korea's educational systems on workers' labour market entry? Second, whom among the state, employers and workers has the principal responsibility for workers' human capital development? Third, is there a difference between large and small firms in workers' human capital development paths? If so, what are the main factors?

Therefore, the structure of the paper serves to answer the questions as follows: 1) the institutional framework of labour market integration will be introduced, prior to an examination of the specific features of Korean labour market institutions.; 2) the current status of Korea's human capital development systems will be explained by using logical analysis of data and necessary citation of relevant statistics in terms of (a) the educational system and its relationship with the Korean labour market and (a) the job-training system and the inequality therein between large and small-to-medium enterprises (SMEs) will be examined, (3) the duality of Korea's labour market structure, with its unequal wages and social protection, will be looked at; and finally, 3) the paper will identify the characteristics of Korea's human capital development systems as the context of Korean workers' labour market integration and implications for future social policy.

## **II. TWO PATHS OF ACHIEVING HUMAN CAPITAL DEVELOPMENT**

One of the most important impacts of human capital development systems on labour market integration is realized in the relationship between the educational and employment systems. Thus it is necessary to investigate how the relationship between these two systems works in Korea.

First of all, Korea may be the archetypical case of a country with weak vocational training but highly competition in higher education. College education is widely considered in Korean society to be the only effective way to achieve economic and social success. In the absence of a clear vocational process, therefore, the Korean labour market is based mainly on general education, and tends to disadvantage workers without strong academic backgrounds. In particular, for employers in Small-to-Medium Enterprises (SMEs) who prefer general skills, a specific certificate from a vocational school does not seem to have much value.

There is not much initial human capital investment by employers in SMEs. As a consequence, academically weak students in Korea have been likely to become low-skilled workers trapped in low-paid jobs in SMEs, while students who are strong academically have been likely to become professionals or skilled workers in higher-paid jobs in large enterprises (LEs). Inequality between large and small-to-medium firms does not end here. New workers working at large enterprises (LEs) will enjoy new in-plant training opportunities to develop their abilities and watch their wages increase even further, whereas workers at SMEs will have few chances to do either.

Korea's schooling system has been requiring six years of primary education and six years of secondary education, which includes three years of middle school and three of high school. High schools are ranked according to the minimum admissible score in regional standardized test results from graduating middle

school students. Students who do not score well on practice exams have to attend the lower-ranked general high schools or vocational training high schools in their district. Admission to a higher-ranked high school has come to be seen as an important first step toward success in life, as graduates from distinguished high schools have a much higher probability of entering prestigious universities and joining prominent networks and professions. Under such a system, even though vocational training high schools exist, these may be only for students who fail to gain admission to highly-ranked high school, and thus hardly enjoy much prestige among students and their families.

Consequently, Korea's education system, being linked to the employment system, has contributed to nurturing a large pool of people with general education background who can adapt to almost any job given within the labour market. Therefore, as noted by Amsden (1989), the driving force behind the dramatic economic growth of Korea has been the country's well educated and highly motivated workers who are willing to do anything that are given. Even before the 1960s, Korea was expanding its education system, with as much as 17 percent of its population enrolled in school (higher than England, Wales or Germany). Today, about 83 percent of high school graduates enter university or college, the highest rate among OECD countries. As a result, Korea excelled in most indices of education among developing countries in the 1960s. In this situation, Korean employers, especially employers in LEs, have relied upon educational credentials when selecting employees, believing that workers with higher educational backgrounds will adapt more easily to workplaces and improve the skills.<sup>1)</sup> Thus both individual investment in education, and employers' selection of employees based on certain qualifications or attributes, may demonstrate a functional association between the general education and employment systems.

However, in the relationship between the education and employment systems students bear the responsibility for their own human capital investment. It is very

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1) Despite formalised vocational training high schools, the total percentage of high-tech skilled workers (7.7 percent), for instance, clearly demonstrates how rare it was at the time to train qualified labour.

likely that students' investment on human capital will be higher where competition to enter prestigious schools is intense. By contrast with such individual efforts for human capital investment with private expense, the government and corporations do not invest much at all in education or training. This is verified by the fact that among OECD member countries, Korea's private education expenditure ranks first, whereas its public education expenditure is only 32nd.

If students end up working for LEs, they will be fully compensated for their investment, through education and training; but failing this, there will be no sufficient reward. Workers who work at small firms will not have much chance of on-the-job training or further education, whereas workers at LEs can afford to invest in their human capital. Differences here may be small at the beginning, but it will lead to a huge gap in skills and incomes, which brings about inequality in Korea.

Individual and private investment on human capital has become more prevalent in Korean society since the 1997 financial crisis, as LEs now tend to require even higher levels of skill and experience (including work experience outside school) from first-time job-seekers. This kind of employment practice implies a shifting of the responsibility of the firm and government for human capital development onto individuals and the private sphere.

One of the consequences of this trend is that LEs, such as conglomerate, public corporations and financial institutions, have switched to hiring experienced people only when they needed them, rather than hiring new graduates in the traditional way, as Table 1 shows.

Table 1. Changes in the ratio of graduating students hiring to total hiring (Unit: %)

	Companies with more than 30 workers	Conglomerates (Chaebol)	Public companies	Financial institutions	Start-up Companies
1996	53.2	61.3	60.4	64.4	28.1
1997	50.2	56.6	47.3	63.6	28.8
1998	42.9	45.0	46.1	43.4	23.8
1999	26.8	30.6	19.5	23.6	16.5
2000	18.9	25.6	10.9	19.0	9.7
2001	17.0	28.0	8.4	14.0	9.1
2002	14.9	23.7	9.1	14.7	8.2

Source: MoL(2007).

This means that employers in LEs are increasingly demanding that workers undertake their own human capital investment, instead of providing on-the-job training. Consequently, a growing number of young graduates do not find jobs corresponding to the skills they have acquired through schooling alone. For example, around 17 percent of young graduates drop out of seeking jobs in the labour market shortly after leaving school, and become inactive or unemployed for a considerable length of time. They are not counted in the unemployment rate, whose definition excludes those who are either give up or are not seeking jobs.

Nevertheless, according to OECD figures, Korea's youth unemployment rate is 8.8 percent, the tenth highest among OECD countries as of 2008, while the proportion of temporary workers has reached 29.7 percent, the second highest among OECD countries. The figures also appear to reflect great mismatches between the skills provided by the education system and labour market requirements.<sup>2)</sup>

2) According to Crouch, high youth unemployment derives from instability and change in employers' skill needs and the occupations associated with these. If employers' skill needs and the occupations connected with them are stable or only gradually changeable, employers, educational institutions and labour market entrants can communicate or expect skill demands and supply more easily, which make it easy for firms to impart their skill needs both now and in the near future, and for educational institutions and labour market entrants to prepare therefore. In particular, young people are able to predict the kind



This indicates that, prior to entering the labour market, people must both attain competitive educational levels, and also pay for their own human capital investment. Nevertheless, at the same time, there are workplaces like SMEs with manpower shortages where the jobs are unpleasant, precarious and disadvantageous.

### **III. PUBLIC VOCATIONAL TRAINING AND ON-THE-JOB TRAINING(OJT)**

In order to understand the current features of Korea's public vocational training and on-the-job training system, it is necessary to know the historical backgrounds. When setting up the skill training system for the first time, the government asked the German government to support and help the establishment and operation of vocational training facilities in the industrialization era. However, the Korean government did not emulate the German training system, which encourages the modernization of the artisan sector through the standardization of apprenticeships, requiring long-term training. As a result, LEs, especially in the heavy-chemical industrial sector, had to set up their own (in-plant) training systems, as an alternative ways of meeting the demand for specific skilled workers. In-plant training offered by employers in the LEs usually lasts for six months at most, and processed mono-skilled workers through apprenticeship programmes.

Despite the development of public vocational training centers, what the government intended to do was not to develop a universal public vocational

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and level of skills occupation that they want to obtain at the start of their careers. However, when employers' skills needs change rapidly, entrants are confronted with the difficulty of choosing which skills to learn. Suspicion about human capital development systems among both firms and entrants is prevalent, while, at the same time, the cost of workers' individual human capital investment, such as obtaining MBAs and receiving mid-career adjustment training, is constantly increasing. This occurs amidst the retreat of the government from the main role in the human capital development (for a more detailed account, see Crouch 2005).

training system, but to encourage and subsidize in-plant training systems. The government has been unwilling to take complete charge of training for workers, with several unanticipated consequences for the Korean economy.

As Korea continued to face a shortage of skilled labour, employers in SMEs became interested in bidding for experienced workers who had worked in their competing companies, in preference to having to train new recruits. Employers in SMEs have been reluctant to set up on-the-job training systems, due to the expense involved, and so workers have tried to raise their wages by changing employers. These are common phenomena in a labour market based on general or low skills.

By contrast, large enterprises (LEs) in the heavy-chemical industry sector developed in-plant training and compensation systems, such as the “permanent employment system” and “occupational welfare system” (KLI, 2005)<sup>3</sup>). This training may have contributed to the appearance of a segmented labour market structure in Korea, comprising internal labour markets of LEs that protect workplace-specific skills acquired on the job, alongside a general or unskilled labour market of Small-to-Medium Enterprises (SMEs) suffering from a shortage of enterprise training. For so long as a reliable public training system was absent, employing young low-skilled workers and internalizing training within firms allowed the supply of skilled labour to be controlled by the employment and training policies of firms themselves.

A report published by the government reported the spread of the in-plant site outnumbered the public vocational training site, although the number of public training agencies had increased between 1992 and 1997 (MoL, 2007a). This seems to show that the Korean labour market has evolved into a general or low-skilled labour market, with a small skilled segment located in LEs with

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3) The Korean government set up an alternative training levy system in 1974 to address the shortage of skilled workers and the under-provision of enterprise training. Firms were legally required to provide on-the-job training or to pay a levy as an additional training system, usually undertaken by non-profit organisations. However, this new law did not solve the problems, because the government still avoided creating a universal training system, and tried to transfer the burdens of training to firms.

in-plant training programme. In addition, given that the average annual number of graduates from post-secondary schools was above 500,000, the annual number of trainees enrolled in public training programmes was relatively small. This means that Korea's public vocational training system has been underdeveloped, or at least unattractive for workers.

The Korean government came to realize that this segregated training system for workers was no longer functional and must be replaced come the Asian financial crisis of 1997. In the aftermath of the crisis, Korean workers have experienced soaring unemployment and widening income disparities.<sup>4)</sup> With even LEs gradually withdrawing employment protection and skills training support from their employees, more Korean workers are confronting the problem of developing their human capital and pursuing upward mobility in the labour market.

For Korean employers, reducing labour costs and enhancing labour market flexibility may have been the easiest ways to recover their profitability and efficiency. Among companies that underwent restructuring, the number of employer-led job separations (collective dismissals, recommended resignations, and contract terminations) reached 1.11 million in major firms between 1997 and 2002. During the five years immediately following the financial crisis, approximately 28 percent of employees suffered involuntary layoff due to employers' employment adjustment. Such trends occurred at both unionized and non-unionized workplaces.

The Korean government introduced a public training programme in 1999 to address the increasing unemployment rate and to reduce firms' in-plant training costs. This programme was originally intended to integrate LEs' in-plant training

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4) As regards the details: first of all, in February 1998 government officials, businesses and workers' representatives signed the Tripartite Agreement, which facilitated employment adjustment in the Korean labour market. As part of this Agreement, layoffs were officially permitted under the amended Labour Standard Act, and the Manpower Lease Act legalized the use of temporary workers, which signalled the advent of a more flexible employment environment in LEs. As a result, the unemployment rate shot up to 8.6 percent by early 1999, according to the MoL's figures. Temporary positions also replaced many permanent ones. Workers with regular jobs accounted for 73.2 percent of the total workforce in 2001; this had dropped to 63.4 percent by 2005.

into a public training programme. The Korean government insisted that this integration would enable all workers to benefit from on-the-job training. Nevertheless all costs for operating the programme came from employers, who subscribed to employment insurance fund introduced back in 1995, not directly from the government.<sup>5)</sup> That is, the public training programme under the EIS includes firms' long-existing in-plant training schemes, and it is designed to support and encourage on-the-job training based mainly on employers' financial contributions.

This arrangement may demonstrate that the Korean government still thinks that developing employees' human capital is essentially employers' responsibility. However, the shortcoming of this programme is that small, less well-off firms are reluctant to subscribe to employment insurance, which leaves workers in SMEs outside the new public on-the-job training scheme. In other words, as regards on-the-job training the segregation between LEs and SMEs still persist. Even if all employees, in principle, became officially entitled to employment insurance coverage, many are still not protected in practice. About half of the wage workers still fall outside the benefits system, and 67 percent of all workers, including those who are self-employed, new entrants, re-entrants to the labour market, and those outside the labour force, cannot receive unemployment benefits.<sup>6)</sup>

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5) According to the 1996 employment insurance law, Korea's employment insurance system has three components: employment stabilization schemes, job ability development schemes, and unemployment insurance schemes. In turn, the employment insurance schemes can be divided into two different types of subsidies for the unemployed: vocational training allowances, which provide subsistence to the unemployed, and employment promotion benefits, which are intended to help unemployed workers find new jobs as quickly as possible. Only workplaces with more than 30 employees were eligible for employment insurance, while those with more than 50 employees were eligible for employment stabilization schemes and job training programmes.

6) Like the Korean case in the 1990s, most advanced economies face the dilemma of how to reorganize their human capital development systems to meet the rapid change and instability caused by new technologies and intensified international competition. Crouch argues that human capital development systems work best in a situation in which all participants in the market can expect skill changes in the mid- or long-term. However, where there is great uncertainty and instability in the market, government and employers tend to avoid the responsibility of training workers.

As a result, Table 2, where participation in on-the-job training financed by the EIS is described, shows that on-the-job training is more favourable to those with higher education and in larger firms. The most striking feature is that the participation rate by company size is 131 percent, while the corresponding rate for small companies with less than 50 employees is 4.1 percent. Additionally, those with university and higher education qualifications record much higher participation rates than do those with less good education certificates.

In short, these figures imply that Korea's human capital development systems facilitate the human capital maintenance and development of Korean workers only selectively. More interestingly, they also imply that, although favourable institutional change for workers has occurred in terms of social protection, the basic characteristics of the Korean labour market that tend to be unfavourable to workers have survived or even been reinforced. That is, vocational training subsidised by EIS illustrates the strong division between large and small companies, and between highly educated and less well educated workers (OECD,

Table 2. Participation in training subsidized by EIS, 2005

	Number <sup>1</sup>	Percentage	Participants as a percentage of all insured employees in each categories	Subsidy percentage
Level of education				
Middle school and lower	36,487	1.5	5.8	1.5
High school	664,613	28.2	17.4	27.1
Junior college	263,587	11.2	22.9	12.4
University and higher	1,371,089	58.2	55.5	55.9
Total	2,355,990	100		100
Firm size				
Less than 50 employees	163,512	7	4.1	9.7
50-299	306,183	13	15.0	12.7
300-999	289,384	12.2	32.5	11.9
More than 1,000	1,596,911	67.8	131.5	65.8
Total	2,355,990	100		100

Source: KEIS(2007); MoL(2007); OECD(2007: 75).

1) The number of participants refers to the incidence of participation in any spell of subsidized training programme, and is thus subject to double counting

2007b: 74-75). Once those with lower educational attainments get jobs in smaller firms, they tend to experience difficulties in developing their human capital and achieving upward mobility in the Korean labour market.

Regarding training for the unemployed, the EIS provides free retraining programmes to assist with the reemployment of displaced workers. Insured workers who have become unemployed can obtain free vocational training for reemployment. Any educational and training institutions, such as universities and public and private training school, can participate in the retraining for displaced workers. If a vocational education and training school conducts retraining for displaced workers on commission, the institute receives the total training costs within the designated amount of training fee per trainee. This amount of training fee per trainee varies depending on the quality of the training programmes of the institute, and is set by the Ministry of Labour after evaluating this quality.

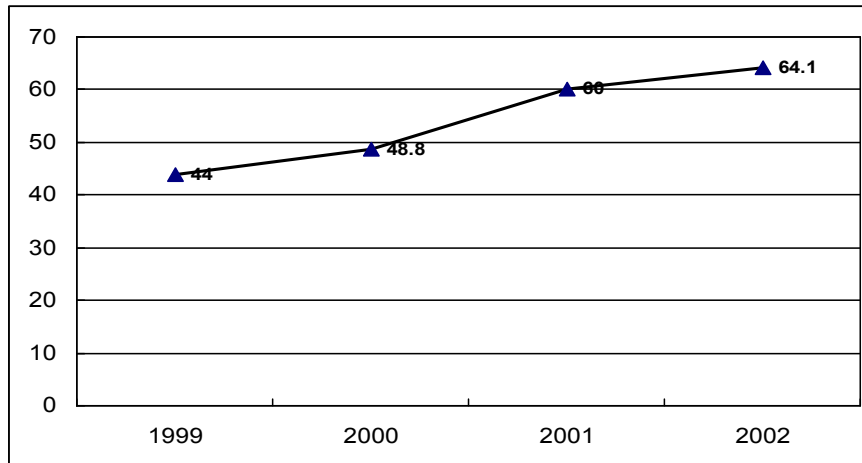
However, the public re-training programme has not been sufficient to mobilise active job searching and enables the unemployed to learn new skills to become viable within the labour market. For instance, in 2005 a government report on the effect of re-training on wages for the unemployed showed that the re-training programme had contributed slightly on downward mobility of training participants, and also that the duration of the programme affected wages and job attainment negatively.

In addition, earning certificates from training did not have any remarkable effect on wages; while females, the elderly and the low educated were recording low reemployment. This result gives workers the impression, first, that obtaining skills from re-training for the unemployed is difficult, and, second, that long-term training may involve drawbacks in the labour market.

In short, the public re-training programme may be functioning merely as a path to downward mobility, strengthening the dual structure of the market rather than encouraging flexible upward mobility. Therefore, as Figure 1 shows, the dropout rate in re-training programme for the unemployed under EIS is relatively high, meaning that many participants in the programme may not be satisfied with its

quality.

Figure 1. Percentages of Drop-Outs from the Re-Training Programme for the Unemployed under the EIS



Source: KLI(2005).

#### IV. DUAL STRUCTURE OF LABOUR MARKET AND INEQUALITY IN INCOME AND WELFARE BENEFITS

Currently, despite the ability of LEs to influence the Gross National Product (GNP), SMEs with fewer than 300 employers account for 99 percent of firms in Korea and employ nearly 90 percent of the whole labour force in 2005. Therefore, SMEs have been a more important source of jobs over the past four decades, and most Korean workers have been employed by SMEs. This SME-centric labour market may well demand human capital that could be acquired through a general training and education scheme. As Becker notes (1993: 33-34), most on-the-job general training presumably increases the future marginal productivity of workers in the firm providing that training. It also, however, increases their marginal

productivity in many other firms. Therefore, the firms providing such training may not benefit from it if their trained workers simply change employers. In view of this, Korean employers in SMEs would not provide general training simply in order to develop employees' human capital. Furthermore, Korean employers in large-firms rely upon the educational credentials of applicants. This may have been one cause of the high level of private education investment, which has been referred to as the principal feature of the East Asian welfare state.

In addition, given Korea's weak vocational training systems and competitive schooling system, employers may have little reason to support a social protection system. They may well prefer a flexible labour market that can adapt to the business cycle, and worry that generous welfare supports for employees would increase labour costs.<sup>7)</sup> It is therefore plausible that Korea's weak vocational training system and competitive schooling system may be related to the underdeveloped social protection system for workers.

This strong segmentation of Korean workers' human capital development courses can be also observed in Korean workers' average job tenure. The average job tenure of a Korean employee was 5.8 years in 2007, very low by international standards - it is 10 years in the EU and 11 in Japan. The figure is even lower than in typical lower-tenure countries, such as the US.

However, when analysed by firm size, it is a different story. The length of tenure in LEs (300 employees or more) is twice as long as in smaller firms (100 employees or fewer) (see Figure 3). Tenure in heavy industry is much longer than in any other industries; for example, at Hyundai Heavy Industry (ship building and industrial plants company) the average tenure is 18.3 years, and at POSCO Steel Company's it is 18.1 years, according to the Korean Financial Supervisory Service's official webpage(). Unlike in LEs, SMEs record relatively lower tenure levels, which

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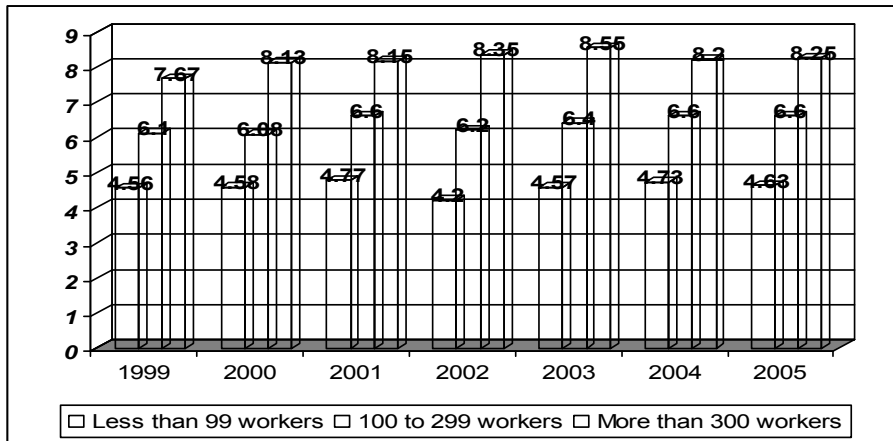
7) Employers in SMEs did not usually like the limitation of their ability to hire and fire their employees, since they would generally overcome recession through reducing labour costs. By contrast, during a period of economic boom, they were likely to hire more employees to produce more products. Therefore, social protection for workers makes it harder for employers in SMEs to hire and fire workers to adapt to the business cycle.



explain the high turnover rate within the industry. The low tenure can be explained by the fact that these firms rely heavily upon the general skilled workforce, whose members can be easily replaced by others with similar academic attributes.

Figure 2. Average Job Tenures

(Unit: Year)



Source: MoL(2007b).

Overall, currently workers' human capital development has been divided depending on whether the workers receive government and firms' protection or not in the Korean labour market. Workers in LEs can continuously augment their human capital, through aid from social insurance, or a training system; whereas workers in SMEs, who are excluded from those benefits, are much more likely to remain in low-skilled occupations.

This trend of dual partition seems to increase overall insecurity in the Korean labour market. That is, those who are in low-skilled occupations are eventually excluded from society, and the eventual number of workers who are likely to experience social exclusion will increase.

Moreover, the bipolarized human capital development experiences of large-firm and small-firm workers are especially obvious in their wage levels. Workers in LEs tend to receive high wages as a part of their investment compensation,

whereas small-firm workers receive low wages. As Table 3 shows, the gap between the average wages of large- and small-firm workers is increasing. Table 3 shows wage level comparison when wage level of workers in LEs that employ 500 and over numbers of employees is set as 100 to measure relative average wage of small firm workers. The difference between firms according to their size is increasing. This wage discrepancy among workers seems to lead to later differences in human capital investment, which in turn generate discrepancy in labour market integration.

Table 3. Wage Difference among Firms by Size

	1994	1999	2000	2001	2002	2003
5-9 employees	-	59	58	58.1	53.9	50.7
10-29 employees	72.4	68.1	68.2	69.4	62.7	59.4
20-99 employees	74.4	71.3	71.4	72.6	68.3	65.9
100-299 employees	78.1	77.3	78	77.2	76	73.3
300-499 employees	89.2	88.8	89.9	92.3	86.7	81.3
More than 500 employees	100	100	100	100	100	100

Source: MoL(2007b).

Finally, inequality among workers is also seen in discrepancy between the genders. It is clearly shown in Table 5 that the larger a firm, the greater the percentage of male workers employed. This implies that many female workers are employed in small firms, where they are likely to have difficulties in developing human capital. Female workers are likely to have less social protection than male counterparts. Table 4 shows the total rate of trade union membership. Large-firm workers are likely to collaborate within trade unions to protect themselves; small-firm workers are not protected, because the majority of trade unions are enterprise unions in LEs, not general or industrial trade unions. This means that they have weak links to political parties or union confederations and are interested only in their own employment protection and in the social security of LEs, not in public policy. That is, enterprise unions have little motives to engage in such

political activities on behalf of all workers, including the unemployed and workers in SMEs.

Table 4. Proportion of Male Workers by Firm Size and Trade Union Membership Rate by Firm Size as of 2002

	Male workers	Union workers
5-9 employees	62.4	5.6
10-29 employees	68.7	15.7
20-99 employees	69.9	22.1
100-299 employees	72.7	51.8
300-499 employees	70.8	63.5
More than 500 employees	73.5	78

Source: MoL(2007b).

All these phenomena can also be said to be linked closely with Korea's welfare system as a whole. The Korean welfare system generates "insiders versus outsiders" problems, as noted by Kim (2002). The most problematic aspect of this phenomenon is that discrepancies between the level of security and social protection coverage offered by various public and private providers reinforce social stratification. One of the most significant features of insider versus outsider problems is that outsiders, who do not qualify for the social insurance system, are actually those who are most in need of secure social protection.

The national pension system itself is a prime example of discriminating structure. The subscription rate for the national pension scheme reaches 76.1 percent - below the Council of Europe's 1990 suggestion of 80 percent. The number of those exempted from monthly pension contributions due to financial difficulties remains unaltered, according to the Korea Institute of Public Finance (KIPF)'s official website ([www.kipf.re.kr](http://www.kipf.re.kr))<sup>8</sup>). Clearly, the discrepancy between

8) In addition, the proportion of outsiders — those who are not protected under the social insurance system — is lowest in medical insurance. However, the Korean Medical Insurance Corporation reported that the number of subscribers in default status for non-payment of medical insurance was 5-15 per cent of

insiders and outsiders creates problems throughout welfare programmes in Korea.<sup>9)</sup>

The provision of social (or last-resort) assistance benefits is entrenched in the South Korean Constitution, which guarantees that citizens unable to earn a livelihood due to physical disability, old age or other reasons must be protected by the state. However, in reality there is still a need for a comprehensive system, and there is considerable scope for increasing public social effort in terms of social protection.

## V. LIMITATIONS OF THE KOREAN LABOUR MARKET ENVIRONMENT AS FRAMEWORK OF INTEGRATION

The human capital development systems are supposed to help employees develop and maintain their human capital and, in so doing, to be responsive to economic change and to manage social risks. However, it is questionable whether the Korean human capital development systems have played this role. Let us look into the consequences for the Korean labour market and welfare institutions.

SMEs in labour-intensive industry, combined with LEs in heavy-chemical industry, appear to have shaped the human capital development systems. Therefore, the institutional configurations regarding workers' human capital development may have shaped firm-specific skill profiles, based on in-plant training systems in some LEs in the heavy-chemical industry area, as well as on low skills in middle-sized and small firms. The consequences of this institutional development are apparent in the labour market. In the absence of a sufficient

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the total.

9) The future development of this problem remains controversial among many scholars; some believe it will weaken over time, while others suggest that it will worsen the bipolarization of insiders and outsiders. According to Kim, this problematic condition is likely be reinforced by the increased numbers of people excluded from social insurance, as mentioned earlier.

supply of skilled and qualified workers, incentives, such as wages tied to length of service, permanent employment systems and occupational welfare systems, have helped prevent high turnover among skilled workers in LEs. Some economists argued that employers may pay a premium to foster employee loyalty and effort, or create a reward structure to reduce turnover.

However, employers in SMEs did not have the financial resources to offer such compensation, or to run in-plant training programmes. In fact, they might not even need such systems, due to their low-cost labour product strategies. In this regard, Korean workers' wages and occupational welfare are closely related to firm size, and to progression through the internal labour market in the larger firms. Furthermore, this in-plant training system and occupational welfare systems have increased firm-based unionization in LEs, because trained workers, through in-plant training, require rewards for their investment in specific skills; while employers might also need firm-based unions to operate apprenticeships among employees, meaning that firm-based wage bargaining systems, rather than any general wage bargaining system, have dominated industries in the Korean labour market.

Under these systems, Korean high school and university graduates have come to set their hopes not on a specific occupation, but on one of the LEs for which they hope to work. A preference of workplace or firm over occupation has become a central determinant of a worker's identity and work rewards. In addition, Korea's segmented wage and training system reflects differing opportunities for upward mobility. In other words, in the secondary labour market, Korean workers might experience limited wage growth because employers in SMEs had little incentive to reward tenure with wage premiums.

Moreover, these segmented human capital development courses may have shaped the welfare system. On the one hand, large firm sectors pursuing product market strategies depended on specific skills or on promises of a tenure system, and thus perhaps do not prefer strong unemployment protection in order to keep their skilled workers. On the other hand, employers in SMEs probably preferred a social protection system based on low employment and unemployment protection,

because high employment protection and unemployment would raise the costs of firing and hiring workers.

It was rational that the Korean government should choose a selective or residual welfare system. The Korean welfare state has been composed predominantly of social insurance programmes for core-industrial (skilled) workers, whereby people are required to pay contributions before being entitled to social benefits. In other words, workers who stayed at their workplace for long periods would be entitled to social benefits; and social insurance could help to reduce skilled worker turnover in large firm. In particular, although national welfare programmes, such as medical insurance and workmen's accident compensation, were launched by the Korean government in the 1960s, these programmes were effectively meaningless until the 1980s, because the Korean government did not have the financial capacity to run them. For instance, the national medical insurance scheme, introduced in 1963, was notional until the late 1970s. Not until the 1980s did medical insurance come into effect, gradually broadening its coverage from public servants, military personnel and employees in LEs to people generally. In particular, many welfare programmes were devised to target special groups such as industrial workers, civil servants and military personnel, before gradually being extended to the rest of the population.

This demonstrates that eligibility is a privilege that can help generate loyalty to employers and to the ruling elites. As a result, only selected groups of people have access to social protection, leaving the vulnerable section of the population outside. Central to this phenomenon is the way in which Korean employers shaped the welfare system.

Finally, the Asian financial crisis of 1997 and the subsequent economic restructuring process seem to have left the Korean labour market, with its weak human capital development systems, an even less suitable framework for labour market integration. After the Asian financial crisis of 1997, even workplace welfare for employees of LEs, such as in-plant training and employment protection, has not operated to employees' best interest in terms of workers' human capital development and upward mobility. The education system does not

serve as medium to bridge knowledge into practice.

## VI. CONCLUSION

This research reveals that Korea's human capital development systems generate two segregating human capital development paths for workers. The first path is for large-firm workers who maintain their career through continuous on-the-job training and renewing of their human capital. Another path is for small-firm workers, who do not have opportunities for human capital development because of their precarious working conditions. The reasons for these divided human capital development paths are: 1) the state's neglect of its duties as regards to human capital development; 2) discrepancy in financial ability depending on firm sizes; 3) discriminative service from social protection; and 4) mismatch between the education and employment systems.

Although all of us are living in an age of insecurity where risk and instability have become distinguishingly defining features, employment and remuneration in the Korean labour market have become more insecure and less predictable, and contingent factors that are under employers' discretion. Furthermore, the trend towards insecure employment has been compounded by changes in the external labour market and national systems of employment and unemployment protection, which again serve to exacerbate job insecurity in Korea. Workers who once enter a low-skilled labour market are highly likely to remain in low human-capital development arena, and this in turn leads to increased possibilities of ending up being in socially precarious positions.

Additionally, it is thought that, for Korean workers in general, human-capital development in the labour market environment is not likely to be positive. It is likely that human-capital development in Korea is regarded as an one's own responsibility rather than of the government or the employers. Thus there is a constant risk and high possibility that workers' efforts for investment in human

capital development are not likely to be rewarded later. Moreover, even in cases where human-capital investment fails, through either lay-off or personal accident, the institutional supports for recovery are very limited in the labour market.

Overall, the Korean labour market seems to becoming increasingly insecure and unstable, at least for the time being; it seems to provide insufficient institutional support for workers to promote sufficient human-capital development, prevent foreseeable social risks and further develop their insufficient skills.

To suggest constructive alternatives to labour market integration,

First, publicly provided job training as a brand new service to expand the government's role towards fair human resource development is an essential. By doing this the government can reduce individual's human capital development cost which may have aggravated inequality amongst social classes in entering the labour market.

Second, problems of supply and demand mismatch between LEs and SMEs must be resolved. SMEs which lack in training facilities and programmes require comprehensive solution. The government can actively subsidize institutional support for SMEs to enable them to produce more customized workers.

Third, selective yet wide coverage service for socially protected population, namely, the disabled, women, low income households, should be provided. Many in this population experience difficulties in self initiated human capital development through job training, therefore, publicly funded support in terms of social provision is a requisite for them.

Fourth, more closely linked functional cooperation between universities and industry to produce labour-market-fit workforce must be launched. In order to achieve this universities have to reduce programmes that are targeted to raise general skilled workers and switch to accommodated curriculum to meet labour market demand.



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## 한국 노동시장에서 인적자본개발의 불평등과 노동자의 직무성취에 대한 효과

정지아  
동국대학교  
최석현  
연세대학교  
조창현  
연세대학교

본 연구는 노동자의 인적자원개발과 한국노동시장에 대한 영향을 다루고 있다. 연구 결과, 한국의 인적자본개발시스템은 근로자들에게 두 가지의 인적자본개발경로를 제공하고 있다. 첫째 경로는 인적자본에 대한 지속적인 현장훈련과 개선을 통해 경력을 유지하는 대기업 노동자에 대한 것이며, 두 번째 경로는 불안정한 근로 상황 때문에 인적자본개발의 기회들을 가지지 못한 소기업 노동자에 대한 것이다. 이처럼 분리된 인적자본개발경로의 원인들은 1) 인적자원개발에 대한 국가역할의 미흡, 2) 기업 규모에 의존하는 재정능력의 불일치, 3) 사회보호의 차별적 서비스, 4) 교육과 고용 시스템의 불일치 등이다. 이 모든 것은 노동시장통합을 촉진시키려는 정책결정자들에게 중요한 시사점을 제공한다.

**[주제어: 불평등, 인적자본개발, 한국노동시장, 직무성취]**

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