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Employment Relations in the Automobile Industries of Japan, Korea and China - Focusing on Nonstandard Workers in Toyota, Hyundai and Shanghai Volkswagen

1. Introduction

Fierce global competition has led to higher concerns for issues such as whether overall working conditions are racing to the bottom or whether the bipolarization of wages will be aggravated. However, it is difficult that actors of employment relations interpret the situation accurately, because they live a reality surrounded by national laws, institutions, practices and cultures. Presenting a view with an international comparison in such a circumstance will result in a great expansion of our recognition.

In this aspect, the automobile industry is an invaluable subject for a case study, because the basic framework of product architecture and production technologies have remained mostly untouched throughout its 100-year history and since the late '80s, the so-called "Toyota Production System" or "Lean Production System" has been benchmarked all over the world as a best practice. Such features make this industry an appropriate subject for research to decide whether there is a convergence of institutions and employment relations in specific countries or continuous divergences under the assumption that the

technical conditions are as similar as possible. The automobile industry is one that represents not only advanced nations but also countries that went through industrialization at a later stage such as Korea and China, and many times acts as the pattern setter for employment relations, making it highly suitable for comparing employment relations by countries.

This paper aims to concentrate on reviewing the case of automobile industries of the three Northeast Asian countries, Japan, Korea and China, to examine the changes in each country's employment relations as well as the similarities and differences amidst fierce global competition. As Sumi(2004) summarized well, recent researches about Japanese production system are focused on finding commonalities amongst divergences of employment relations in many countries. Using the word "converging divergences", Katz and Darbishire(2000) pointed out four common employment relations types found across variations in seven countries and many companies, which are low wage, HRM, Japanese Oriented, and Joint team-based workplace practices. They noticed the decline of unions as well as growing income inequality as a research background, but It would be needed to handle nonstandard worker issue as a common pattern of employment relations in Northeast Asia while taking into account the still-militant unions in Korea and the widespread unions in China, though subordinated to Communist Party.

The three Northeast Asian countries are strongly influencing the world economy with Japan's economic recovery, China's rapid growth, and Korea's steady development. Ever increased trade and direct investments among the three

countries as well as with the western world contributed to fierce global competition, and therefore reviewing the impacts of such competition on employment relations would be significant. Japan is the origin of the Toyota Production System and China is where most prominent world brands are operating, acting as the test bed for future competitiveness, leading to an urgent need for comparing the working conditions and competitiveness related to employment relations.

“Employment relations” is a concept encompassing individual labor contract and collective industrial relations with wide-ranging sub-concepts(Bamber & Lansbury, 1998). This paper plans to examine “nonstandard worker” issue as a sub-topic to best represent the recent situation of employment relations in each country. Across the globe, the percentage of nonstandard workers is on the rise and their working conditions and labor rights are often a source of controversy, and therefore, it would be quite significant to directly handle this issue using the automobile industry, one of the world’s most representative industries. The process of comparing the working conditions of standard and nonstandard workers creates contact points with various sub-topics of employment relations such as wages and welfare, employment and promotion, and working hours, making it a valid research strategy in achieving the original objectives of comparing the employment relations of the three countries.

The cases of this paper are limited to the companies that represent the automobile industries of the three countries, namely, Japan’s Toyota Motor Corporation, Korea’s Hyundai Motor Company and China’s Shanghai

Volkswagen. The comparison points of the cases of the three countries are as follows. The first is how to secure flexibility and low-cost from the corporate perspective, what the meanings of nonstandard workers are, and how it emerged and expanded in the process. The second is the discriminative factors between standard and nonstandard workers. It would be very difficult to decide whether a certain practice is discriminative or not, but this paper will try to judge it based on 'equal work, equal pay' principle tentatively. The third is overall features of the employment relations of the given companies examined through the employment arrangements and working conditions of nonstandard workers. The third point is especially important for the issue of nonstandard workers has become the node in the recent changes in the employment relations of each country. That means the nonstandard issue would exist at the center of 'converging divergences' trend.

This paper is based on research through a visit to Toyota in March 2006 with the assistance of the Japan Institute for Labour Policy and Training (JILPT), two visits to Shanghai Volkswagen in July 2004 and April 2005 with the help of Chinese Academy of Labor and Social Security (CALSS), and frequent visits to Hyundai between 1999 and 2005. This paper also extracts much information from researches at Korea Labor Institute by Seong-Jae Cho et. al. (2004) and Seong-Jae Cho et. al. (2005), which include the three auto company cases as well as the other cases of numerous automakers and auto parts manufacturers. This paper will concentrate on the cases of the three companies for clear comparison, although cases of other companies will be partially introduced as needed. In terms of literature survey, it should be noted beforehand that a

completely equal comparison of three companies was difficult for there were less existing literature on Shanghai Volkswagen compared to the abundant existing researches on Toyota and Hyundai. However, the stylized facts organized by this paper through on-site visits and interviews of related personnel as well as the discussions based on such facts will certainly lay down the foundation for future comparative researches on employment relations.

Plan of this paper is simple. Features of employment relations at Japan's Toyota, Korea's Hyundai and China's Shanghai Volkswagen centered on the recent conditions of nonstandard workers will be followed by a comprehensive comparison and summarization of the discussion points.

2. Employment Relations at Toyota Motor Corporation

Numerous researches have already been conducted on employment relations in Japan's automobile industry. Besides the well-known three wonders of rapid growth, namely, life-time employment, seniority-based wage and enterprise labor unions, Toyota Production System which leads the world automobile industry and the related multi-skilling, teamwork methods and Kaizen activities have already become common knowledge in the academia. However, have such features of employment relations in Japan's automobile industry remained the same even with the recent increase in global competition, effects of the aging society and the younger generation avoiding factory labor? Aren't the ever increasing overseas Toyota plants affecting Japan?

The point to notice in relation to the recent Toyota employment relations is change in the composition of the labor force caused by the rapid increase in nonstandard workers. In general, Japan's nonstandard workers can broadly be classified into part-timers in the service sector and in-house subcontractors in the manufacturing sector. However, certain conglomerates such as Toyota and Denso traditionally preferred fixed-term contract workers, that means, short-term contracts for a few months at a time in preparation for seasonal or annual changes in demand. Although using nonstandard workers have a long history to respond to temporary increases in production, the percentage remained at below 10% of the workers directly working in production line for it was a way to respond to temporary needs in itself. In terms of the number of workers, this would mean some 2,000 at the most, but surprisingly, this figure soared up to 11,000. This rapid increase took place in the last five years, bringing the number of fixed-term workers to 3,140 in 2000, 4,610 in 2001, 6,650 in 2002, 7,710 in 2003 and 9,250 in 2004. (Central Research Institute for Industrial Policy, 2004)

As can be seen in <Table 1>, as of early 2006, a total of 11,000 fixed-term workers are directly participating in production. The percentage of nonstandard workers including assistance and relocation (oeru and shutkou) and dispatches stands at 38% of total direct production workforce. "Assistance and relocation" in <Table 1> is a unique method of employment management used in Japanese businesses, a practice of temporarily sending surplus manpower from another company to Toyota in cases of higher production volumes. This is not a

surprise for it has continued for decades, but the “dispatch” column is worth noting, because it is a new form of nonstandard workers Toyota introduced since March 2004 when the government authorized the dispatch of workers to production processes in the manufacturing industry. Although the percentage is still relatively low compared to directly employed fixed-term contract workers, Toyota started to utilize nonstandard workers in various forms, which is a meaningful change.

<Table 1> Composition of the Production Workers at Toyota

	Standard workers	Fixed-term contract workers	Assistance / Relocation	Dispatch	Total
Production Line	20,000	11,000	500	500	32,000
Improvement, Maintenance, Overseas Projects	10,000				10,000
Production Technology, Logistics	12,000				12,000
Total	42,000	11,000	500	500	54,000

Source: Company information (March 1, 2006)

What are the reasons behind such a rapid increase in nonstandard workers? First of all, the change in production volume needs to be reviewed in relation to the employment volume. The Japanese automobile industry recorded the highest production volume in 1991 with 13.5 million followed by a production

volume of approximately 10 million during the prolonged recession after the burst of the bubble economy, but even a production volume of 10 million seemed difficult for Japan to maintain with population decreases and the consecutive constructions of overseas plants. However, the production volume in overseas plants and the export volume from Japan have been growing simultaneously since 2001. In case of Toyota, the production volume hit the peak 4.2 million units at 1990, and dropped to 3.2 million at 1995, but recently got back to over 3.6 million units. Toyota boasted a steady increase in competitiveness and could not afford not establishing a production capacity to deal with the increases in demand.

What were the reasons behind increasing nonstandard workers to deal with the increases in demand rather than hiring standard workers? This was because Toyota was not sure if such increases in demand would continue despite the increases in automobile demands home and abroad. Especially with the decrease in the population and prolonged recession in Japan, and the consecutive constructions of overseas plants, it seemed difficult for Toyota to heedlessly make the decision to increase standard workers. As a result, Toyota seems to have responded to production increases with a sharp, temporary increase of fixed-term workers.

However, with the judgment that the production increases have become stabilized, in other words, with the inference that the uncertainty has decreased, Toyota has been increasing standard workers during the last two to three years. For reference, Toyota does not include the number of employees hired following

their graduation from Toyota Academy in the employment figures for there is a system in which 100 to 120 people enter the Academy and they are employed by Toyota almost every year. Excluding these graduates, as of April 1 of each year, the number of new standard workers remained at zero in 2000, 630 in 2001, 530 in 2002, and 530 in 2003, which are low compared to the increasing number of fixed-term workers hired during the same period as has been mentioned above. However, the figures increased to 1,310 in 2004 and 1,560 in 2005 excluding the graduates of Toyota Academy as can be seen in <Table 2>.

<Table 2> Recent Employment by Toyota

Year	Recruiting of High School Graduates	Conversion from Fixed-term Worker	Toyota Academy Graduates	
			High School Division (junior high gradates, completed three-year program)	Expert Division (high school graduates, completed one-year program)
2004	720	590	100	100
2005	660	900	120	120

Of the newly employed standard workers, conversion from fixed-term workers is noteworthy. In March 2004, the numbers stood at a mere 150, but rose by six-fold, surpassing the number of newly recruited high school graduates, becoming a solid path for nonstandard worker to be a standard worker.

In any event, the number of both standard and nonstandard workers are

currently on the increase at Toyota. As has been mentioned above, it seems that Toyota is increasing the number of standard workers with the decision that the increased production volume will continue for the time being. At the same time, the so-called “problem in 2007” or the large-scale retirement of skilled workers seems to have influenced this trend. In Japan, the so-called “Dankai generation,” the post-war baby boom generation, is expected to retire in large numbers within the next few years, ultimately leading to various labor issues such as the transfer of skills to which Japanese companies such as Toyota are responding by increasing the number of standard workers.

The reason why the number of nonstandard workers is still on the rise despite the above-mentioned trends is because of the uncertainties existing in production increases and the high mobility of standard workers to help overseas plants. Toyota headquarters have provided assistance for production and quality in plants around the world such as the US, China and Thailand, and significant numbers of employees are dispatched to these plants to conduct projects in the initial stages of incorporating new models in addition to the employees residing overseas. The number of Toyota employees residing overseas is said to be at approximately 1,700 of which some 100 are technicians promoted from production workers. Plus, several times that number are working in overseas plants to assist temporarily and they will return to Japan when the level of productivity and quality at their respective overseas plant is stabilized, resulting in one of the reasons to increase fixed-term workers for their positions in Japan which can not be filled with standard workers during their absence.

It could be understood that the number of nonstandard workers increased in order to respond to uncertainties and secure flexibility, and at the same time, to provide employment security for core standard workers, but it also resulted in a significant save in labor costs with the increase of fixed-term workers due to the lower wages of nonstandard workers compared to standard workers. Under a system in which the level of skill increases with years in service accompanied by an increase in wages, the higher the percentage of fixed-term workers with shorter years in service, the lower the labor costs. Then, what is the level of compensation for nonstandard workers? For fixed-term workers, other than the monthly wages, there is also a “full service allowance” for no absences for three months equivalent to almost a full month’s wage. If a fixed-term contract worker were to receive all four full service allowances for a given year, and the figure is added to the monthly wages and the total is divided by 12, the result is slightly less (2 to 3%) than the wages of a first-year standard worker and the year-end bonus divided by 12. It is also a part of the HR policy to limit the wages of fixed-term workers to go under that of first-year standard workers.

However, for fixed-term workers, a significant indirect cost also incurs other than the direct cost of wages. Sufficient manpower can not be recruited from the nearby Aichi Prefecture, leading to a need to recruit fixed-term workers from Hokkaido to Okinawa whose extra expenses such as those for transportation and moving must be shouldered by the company. Dormitories must also be provided, leading to significant costs. Although extra costs for the welfare of standard workers also do incur, standard workers pay for their own dormitory

expenses.

Despite the large indirect costs which accompany the employment of fixed-term workers, Toyota prefers the direct employment of fixed-term workers over in-house subcontract labor unlike other Japanese companies, because direct employment provides the company with opportunities to interview and select the fixed-term workers. Toyota interviews and employs people from across the country through team leaders in order to hire people fit for Toyota's production system. This does not entail that special skills are needed, but employment depends on the basic personality and attitude of the candidates.

In this aspect, the recent use of 500 dispatched workers is a new phenomenon. For dispatched workers, an amount equal to double the direct wages paid to the fixed-term workers is paid to the dispatching company, and therefore, the cost is predictable, and other management costs are also stable. On the other hand, for fixed-term workers, the indirect costs are difficult to predict because for example, the further way the recruiting takes place depending on the labor market condition, the higher the transportation costs. Overall, it is assessed that the costs for fixed-term workers and dispatched workers are almost the same. In such a case, Toyota seems to prefer fixed-term workers and uses dispatched workers as supplementary means which can be confirmed through the interview results which show that Toyota has a higher opinion of fixed-term workers compared to dispatched workers.

Despite the higher cost of employment and maintenance costs for fixed-term

workers, the labor cost is significantly low compared to that of standard workers with an average number of years in service, helping to enhance cost competitiveness. However, considering the fact that the Toyota Production System relies on the high level of commitment and loyalty of multi-skilled workers for the company and work itself, such a rapid increase in nonstandard workers may result in concerns for Toyota's level of productivity and quality. In reality, such opinions are often being voiced within and outside the company, and countermeasures have also been searched from various perspectives as follows: one, to increase the rate of fixed-term workers settling down in the company as well as the level of commitment in their work; two, to strengthen education and training for unskilled workers; and three, to make changes at workplaces and in work processes to make the work easier for unskilled workers.

Concerning the first countermeasure, the Japanese government revised the labor laws to enable contracting for three consecutive years compared to the one year before the revision. Accordingly, Japanese companies seem to be utilizing various measures to encourage consecutive contracts. For example, at Toyota, the daily wage in first contracts is 9,000 yen but increases to 9,500 and 9,800 yen respectively for the second and third contracts. For the second and third year, the daily wage increases again to 10,000 and 10,300 yen, respectively. Furthermore, the expiration bonus paid for completing a contracted period starts from 700 yen/day for fourth month and increases to 2,000 yen/day for eleventh month which remains the same for up to three years. Such incentives are not paid to all fixed-term workers for the initial contract is

set for between four to six months and subsequent contracts are decided according to evaluations. As of March 2006, of 11,000 fixed-term workers, 3,500 have been working for one year or longer (or in their second working year). It is clear that the productivity of these workers is higher than that of transient workers. Moreover, as has been mentioned above, a certain ratio of these workers are employed as standard workers through evaluation and the ratio is on the increase, which will lead to a higher level of devotion for the company and work.

Concerning the second countermeasure to strengthen education and training for unskilled workers, Toyota is conducting three-day education and training for fixed-term workers. Although it is not certain to what extent education and training were strengthened compared to the past, stronger education and training could be confirmed at Toyota-related Kanto Motor and Denso. For example, Kanto Motor was preparing a building and education equipment for training fixed-term workers and Denso prepared a map to enhance the skills of fixed-term workers as well as standard workers. The Japanese companies included in <Table 3> can be interpreted to be displaying the direction of this countermeasure. Japanese companies are realizing a stronger need to educate and train not only standard workers but also the ever-increasing number of nonstandard workers.

<Table 3> Results of Companies Survey on the Education and Training for Nonstandard Workers

unit: %

	Current Situation			Future Plan		
	Same as Standard workers	Necessary Scope	Unnecessary	Same as Standard workers	Necessary Scope	Unnecessary
Fixed-term workers	12.9	77.4	9.7	18.8	71.9	9.4
Part-Time Workers	7.9	89.5	2.6	18.4	78.9	2.6
In-house Subcontract Workers	7.0	86.0	7.0	14.3	78.6	7.1
Dispatched Workers	7.9	84.2	7.9	18.4	76.3	5.3

Source: Central Research Institute for Industrial Policy (2004)

Various efforts are also being made for the third countermeasure to make it easier for unskilled workers such as fixed-term workers to perform their tasks by making changes in working methods and even in factory layout, but this is not an easy decision to make, because it involves numerous elements and high costs to be interpreted as a countermeasure for unskilled workers alone. However, the Set Parts System (SPS) recently becoming wide spread at Toyota is a prime example. The SPS originated from the Suzumi Plant to which the

visit for this paper was made means providing all parts for a car in one box to the production line unlike past methods. During the visit for this paper, the Suzumi Plant was producing seven different models using two lines and each model had various options, calling for a high level of concentration to select, pick up and accurately assemble the parts. In the end, fixed-term workers have a lower level of skills and concentration compared to the skilled workers, leading to a higher possibility of creating problems in productivity and quality. Under the SPS, parts are pre-sorted and placed into boxes according to models and options, allowing the workers to concentrate on the assembly work alone, and even unskilled workers would be able to learn the functions easily. In order to put the SPS into action, changes happened in the floor layout such as preparing a space to sort parts on the second floor of the plant according to the new method, and although such changes can not be said to be solely due to the increase in the number of nonstandard workers, it is said to have significantly influenced the decision of the management.

Thus far, the changes in Toyota's employment relations during the last few years have been reviewed focused on the expansion of nonstandard workers. As can be seen, a variety of efforts have been made in order to maintain the positive aspects of the Toyota Production System and secure the flexibility of employment and production. In other words, Toyota has responded to the rise in demand by increasing the number of nonstandard workers centered on fixed-term workers. Toyota has had an intention to prevent a situation in which the company heedlessly increases the number of standard workers without the confidence that the production volume will continue to increase and ends up not

being able to protect them later on. This also means preparing for the return of the personnel dispatched to overseas plants for assistance. Yet, productions have increased for the last few years and net profits have been recording above the one-trillion-yen each year, leading to recent increases in the employment of standard workers. This is also to prevent the vacuum of skilled workers with the retirement of the Dankai generation. Along with the consideration of elements purely related to employment, the increase of nonstandard workers will also result in a clear reduction of costs. On the flip side, however, increasing nonstandard workers may create problems in productivity and quality. Therefore, Japanese No. 1 company is making efforts to enhance the percentage of nonstandard workers settling down in companies and the level of devotion to their work through measures such as reorganizing work processes and strengthening training for even nonstandard workers, and extending contract periods and making it easier for nonstandard workers to become standard workers. Despite such efforts, it is forecasted that the increase in the percentage of nonstandard workers will negatively affect the evolution of the Toyota Production System, because it will add the burden on the standard workers to monitor and correct mistakes by nonstandard workers.

3. Employment Relations at Hyundai Motor Company

The Korean automobile industry started from the 1970s in effect and achieved the world's fifth largest production volume in the mid-1990s, recently experiencing rapid progresses in advanced markets such as the US and Europe.

Hyundai, in particular, is almost the only company with its headquarters in a developing country to achieve independent development, laying down a firm foundation in the process by independently developing engines and models, and using Hyundai's own brands. In 1999, Hyundai acquired Kia Motors which was Korea's second largest automaker, but went bankrupt just before the financial crisis of 1997. Hyundai currently possesses the world's seventh largest production capacity including Kia. Furthermore the maker surprised experts with almost same quality index to that of Toyota or Honda in the US market in the last few years.

Yet, as is well-known, Korean companies including Hyundai face numerous problems related to employment relations arising from confrontational labor relations and the subsequent yearly disputes. Although it is not the fundamental goal of this paper to shed light on the reasons behind the repeated disputes and conflicts, such a phenomenon and related elements will be indirectly revealed by reviewing the contents related to nonstandard workers.

The format of employing nonstandard workers at Hyundai is basically in-house subcontracting, which means commissioning to a small-scale company independent management of a part of the production activities. Therefore, in principle, workers of Hyundai and those of in-house subcontracting agencies do not work together, and the workers of in-house subcontracting agencies are standard workers of that agency and are not nonstandard workers of Hyundai. However, in reality, standard workers of Hyundai and workers of in-house subcontracting agencies work side-by-side in the same space using the same

tools, and therefore, the workers of in-house subcontracting agencies can be prescribed as nonstandard workers of Hyundai. Furthermore, unlike Japan, using dispatched workers directly in production processes in the manufacturing sector is still prohibited by law in Korea, and having workers of in-house subcontracting agencies and standard workers of Hyundai work side-by-side can actually be said to be dispatched labor, and charges have been brought to public prosecutors as the Ministry of Labor judged this to be illegal dispatches in late 2004. In other words, Hyundai Motor Company is involved with the accusation that there are illegal activities in relation to nonstandard workers. The judgment by the Ministry of Labor on illegal dispatched labor was a result of charges brought up by labor unions, namely, Hyundai's use of nonstandard workers is faced with criticism by the labor circle and civic groups.

How many nonstandard workers are working at Hyundai? <Table 4> displays the changes in the number of nonstandard workers in Hyundai's three major plants. According to <Table 4>, the number of nonstandard workers decreased slightly in 2005, but the figure increased sharply in all three plants in the five years from 2000 to 2004. During the same period, the number of standard workers newly employed stood at a mere 105 in 2000, 75 in 2001, but after that year, 947 in 2002, 984 in 2003, 1,286 in 2004, and 64 in 2005. As a consequence, the percentage of nonstandard workers (limited to blue-color staff) started from 16.9% just before the financial crisis and rose to 27.5% in 2002, and has remained at that level ever since. This figure is based on the number of workers employed by the in-house subcontracting agencies authorized by Hyundai, and it has been said that the actual percentage of

nonstandard workers surpasses 30% if the numbers of temporary and contract workers employed by the in-house subcontracting agencies to handle changes in production volumes are included.

<Table 4> Changes in the Number of Nonstandard Workers at Hyundai Motor Company

Factory	2000	2001	2002	2003	2004	2005
Ulsan	4,868	5,934	6,975	7,409	7,686	7,043
Jeonju	658	622	703	824	848	740
Asan	789	825	903	1,013	1,037	1,034
Total	6,315	7,381	8,581	9,246	9,571	8,817

Source: Company information

What are the levels of compensations for nonstandard workers at Hyundai Motor Company? A comparison of the compensation level of in-house subcontract workers and that of first-year standard worker reveals that the basic wage is at 80%, but the ratio falls to the 66%-level when all items such as year-end bonuses are included. Although nonstandard and standard workers have similar opportunities to acquire skills and work side-by-side on similar tasks, workers of in-house subcontracting agencies are only paid two-thirds of the compensation of standard workers of Hyundai for the sole reason of being nonstandard workers. In the end, as has been mentioned above, the labor circle and civic groups have accused this to be illegal dispatched labor and such accusations are grounded on the above-mentioned wage discriminations.

The above shows that the nonstandard worker issue at Hyundai has become a significant social issue. For Toyota, this issue can be narrowed down to economic issues such as the possibility of maintaining the Toyota Production System, but why has this become a social issue for Hyundai?¹ In order to answer this question, a detour may be necessary to discuss the point that the level of skills found in standard workers in Korea are not as high as those of standard workers in Japan and that the management does not emphasize the level of skills on the shopfloor. There is a larger emphasis on the role of engineers in relation to production technologies and production management, and, on the contrary, the role imposed on blue color workers only focuses on maximizing work ethics and minimizing mistakes in production. The trial production line installed at the R&D center absorbing massive investments is a prime example displaying such recognition by the management. In general, preparations for the mass production of new models are conducted on existing production lines and in the process, skilled workers play a large role in discovering problems and making improvements, but at Hyundai, the management does not trust the workers and their skills, and have installed a trial production line at the R&D center so that the engineers themselves can prevent all potential problems in quality. Clearly, the use of a trial production line may also be due to the lack of trust that production workers will enthusiastically search for solutions to problems amidst such confrontational labor-management relations.

¹ This is also related to the characteristics and position of union. As is well-known, Toyota union is not militant. Therefore Toyota union won't raise a nonstandard work issue as a social problem like Hyundai union.

If Hyundai does not expect the Japanese-style skills encompassing problem solving and efforts for improvement from the production workers, education and training systems similar to those of Toyota will not develop. According to related research by Seong-Jae CHO et al (2004), Hyundai puts a larger emphasis on moral and general knowledge education related to labor ethics, and job-related education is limited to certain indirect departments such as maintenance, quality control, machine tools and metal molds.

If priority is not given to the skills of the production staff and appropriate education and training to enhance their skills is not provided, it would be more profitable for the management to use nonstandard workers with lower wages rather than standard workers with longer years in service and consequently higher wages. Hyundai's wage system is similar to that of Toyota in that the wages increase according to age and years in service, but whereas at Toyota, the evaluation of skills plays a crucial role in this process, at Hyundai, the wages are increased almost automatically according to years in service. In other words, Toyota uses a competency qualification system whereas Hyundai decides the wages through collective bargaining between labor and management, leaving no room to reflect individual evaluations in wages. In a nutshell, the age-wage profile bent towards the upper right corner and the lack of skill enhancement systems and the related deficiency in education and training systems push the management to minimize the employment of standard workers and increase the number of nonstandard workers as much as possible.

Despite the recovery in production volumes since the financial crisis, Hyundai minimized the number of new standard workers and continued to increase the number of nonstandard workers due to the above-mentioned structural factor. However, Korea's labor movement is still militant and stands by its leftist position, but the Hyundai labor union, one representing Korea's labor unions, seems to have accepted such discrimination within the workplace and tolerated the increase of nonstandard workers. In order to shed light on the reasons for such a phenomenon, the following history of Hyundai's labor-management relations needs to be reviewed.

The labor union at Hyundai Motor Company was established in 1987, which was a time in Korea's history when political democratization was rapidly progressing. It was followed by the unionization of the production workers who had been thus far oppressed with very low wages and long working hours and even worse, despotic control at shop-floor. After gaining some power, union members refused to perform dirty, difficult and dangerous (the so-called "3D") tasks on the work floor and tolerated such tasks to be outsourced to in-house subcontract workers. From the employer's point of view, the more the company outsourced, the higher the savings in costs, so this was actively pursued by employers. As a result, in the mid-1990s, even before the financial crisis, the number of in-house subcontract workers surpassed 4,000 within Hyundai Motor Company.

In 1998, Korea experienced the financial crisis and the operation rate of

Hyundai Motor Company fell to below 50%, leading to employment adjustments of some 10,000 people including some permanent and compulsory layoffs. This left an irrecoverable scar in the labor-management relations at Hyundai, leaving the workers feeling that there is a lack of employment security and that the employer may dismiss them at any time, resulting in lower loyalty and weaker sense of “my company” in terms of work morale. In this process, a tighter unity under the union flag to secure employment security was formed and at the same time, there was recognition for a need for a safety valve in preparation for layoffs. In the end, with the collective bargaining of 2000, the labor and management of Hyundai agreed to limit the percentage of nonstandard workers to 16.9%. From the employer’s perspective, this agreement was an official recognition from the labor union to discriminate workers within a single plant up to a certain percentage, and from the union’s perspective, this agreement meant that there was a pool of workers who would be on the top of the list for adjustments in case of rapid deterioration of economic conditions such as the experience of 1998. In other words, they were also able to secure a buffer for employment adjustments.

However, the employer and the union expanded the percentage of nonstandard workers to above the agreed 16.9%, and in the end, the percentage rose to 30% of the total production staff considering all direct and indirect department. Nevertheless, the level of skills and functions of Hyundai’s standard workers is not high, leading to a reason for the employer to increase nonstandard workers as much as possible regardless of direct or indirect job. Besides, as could be seen after the late 1980s, the standard workers avoided hard work and

tolerated the request by the employer to increase nonstandard workers without much resistance. In the process of production increases since 1999, the number of nonstandard workers soared for they were used to accelerate production speeds. Even if the union executives attempted to maintain the 16.9% level, it was difficult to discover all tacit agreements between union representatives and heads of departments on the shop-floor, and in the end, union executives failed to prevent the steady increase in nonstandard workers.

However, even though Korea's labor unions are composed of only standard workers in an enterprise, and although Hyundai union made a collusion with the employer for the sake of their stable status and easier tasks, the unions achieved significant progress in improving the conditions for nonstandard workers by pressuring the employers with their militant features and strong sense of egalitarianism. The unions made efforts to reduce economic discrimination at the very least, even if those efforts do not go up to employment status itself. As a result, although the compensation for in-house subcontract workers is two-thirds of that of first-year standard workers, the wage level of standard workers at Hyundai is so high that the wages of nonstandard workers have become higher than the standard workers of most SMEs in these years. This created yet another distortion in the labor market, leading to concerns about aggravating the shortage of labor at SMEs.

In sum, the increase of nonstandard workers at Hyundai ironically stems from the low level of skills possessed by standard workers. If the level of skills possessed by standard workers is low and the production system relies mainly

on engineers, employers are attracted to increase as much as possible the number of nonstandard workers who receive lower wages. Especially under a system in which the wage automatically and mechanically increases according to the years in service unlike the West where the wage is based on the job or work performed, the employers all the more would hesitate to employ new standard workers and attempt to increase nonstandard workers. Such a situation was aggravated by the consultation between the employer side and the union of standard workers who did not feel they had employment security and saw nonstandard workers as a buffer for their own employment security. However, due to the criticism and accusation by external labor movements and civic groups concerning such employment status and wage discriminations, Hyundai Motor Company was judged by the Ministry of Labor to be illegitimately using dispatched workers and is currently subject to judicial judgment. Such judicial judgment would become meaningless if dispatched work is legally authorized for direct participation in production in the manufacturing sector as is the case in Japan. However, even in such a case, social conflicts surrounding discrimination will not die down easily. Furthermore, the recently revised Labor Act still prohibits dispatched workers directly participating in production in the manufacturing sector, leading to the inevitable result of Hyundai continuing to be involved in the current complex game surrounding nonstandard workers. Besides, concerning economic compensation, the absolute wage level of nonstandard workers experienced ground-breaking increases thanks to the efforts of the union of standard workers during the past few years, but such changes left workers at SMEs feeling relatively deprived.

4. Employment Relations at Shanghai Volkswagen

The Chinese automobile industry experienced rapid growth with the active introduction of foreign capital following the period of reforming and opening the economy in the 1980s, recording the third largest production volume only after the US and Japan in 2005 and surpassing Germany. Most world-renown automobile makers are currently operating in China including GM, Toyota, Volkswagen and Hyundai mainly in the form of 50:50 joint ventures with Chinese companies, because the Chinese central or local governments do not allow these MNCs(Multi-National Corporations) to have majority.

Shanghai Volkswagen is a joint venture company between Germany's Volkswagen and one of China's top three automakers Shanghai Automotive Industry Corp, created in 1985 as the first company with foreign capital. At one time it boasted market dominance with a market share of above 60%, but its leading position is being challenged with multi-national corporations competitively making inroads into the market resulting in a market share of below 10%.

Shanghai Volkswagen also utilizes nonstandard workers widely. Compared to the total of 15,000 standard workers, some 6,000 are employed as dispatched workers(lao-wu-gong by Chinese). In China, "lao-wu-gong" is a concept similar to dispatched workers in Korea or Japan with labor supply agencies recruiting workers from rural areas as well as nearby and providing them to the demand companies, and therefore, sometimes called "rural factory workers,"

but at Shanghai Volkswagen, most dispatched workers are residents of Shanghai metropolitan. They are employed by the labor agencies, whatever it is public or private, but receive instructions from and work at the company to which they are dispatched, working side-by-side with the standard workers of Shanghai Volkswagen.

The dispatched workers at Shanghai Volkswagen are said to receive a direct wage similar to that of first-year standard production staff. The costs for recruiting and maintaining are paid to labor agencies by Shanghai Volkswagen, and of the five social insurances, some are paid by the Shanghai Volkswagen directly to the government and others are paid through labor agencies. Some of these social insurances are linked with private insurance companies and for these insurances, the conditions are less satisfactory compared to that of standard workers. Dispatched workers join on one-year contracts, renewable for up to three years, and the wages for the pre-contracted period are guaranteed even if Shanghai Volkswagen does not need the dispatched worker any more. Some may become standard workers at Shanghai Volkswagen, but most who did become standard workers were those higher levels of education and skills from the recruiting point. Dispatched workers are classified into sub-groups by their skill levels in this company.

The contract and working conditions of dispatched workers at Shanghai Volkswagen are much better than those of other Chinese companies, but nevertheless, the working conditions and compensation level of dispatched workers are below that of standard workers. Why is Shanghai Volkswagen

operating a discriminatory employment system in China where there is abundant low-cost labor? In order to understand this situation, the working time system and rank system used by Shanghai Volkswagen needs to be reviewed.

From August 1, 2004, Shanghai Volkswagen introduced the working time account system. This is a system that had been used in Germany from some ten years before by German automakers such as Volkswagen, which allowed workers to accumulate the hours they worked overtime in individual accounts to use in times of recession, enabling workers to receive stable income regardless of the production volume and ultimately protecting them to a certain extent from the risk of employment adjustment during recessions. From the employers' perspective, they freely adjust the plant operation time according to the changes in demand while being able to guarantee stable income for the workers at the same time. The so-called "decoupling" of the plant operation time and individual working time is made possible, creating a win-win situation.

Shanghai Volkswagen named such a working time account system the "breathing system," meaning that the plant operations could be adjusted as freely as breathing. As can be seen in <Table 5>, various methods can be combined and used within the breathing system, but the breathing system across a job lifecycle mentioned in the last line has not been applied in China yet because wages can not be carried over for more than one year in China unlike Germany. The maximum deposit of working time is 432 hours per year within the scope of legal framework, but in reality, up to 500 hours are allowed

per year, and can fall to minus 168 hours, but if it falls to below minus 168 hours, various forms of employment adjustments are incorporated.

<Table 5> Types of Breathing Systems at Shanghai VW

Flexible Working Hour System	Adjust work hours daily to enhance work efficiency
Shift System	Adjust shifts such as two or three shifts according to market demands
Work Days	Adjust work days flexibly within the fixed weekly hours
Job Lifecycle	Adjust work hours flexibly during the period of the ages between 22 and 55 (early retirements are also possible)

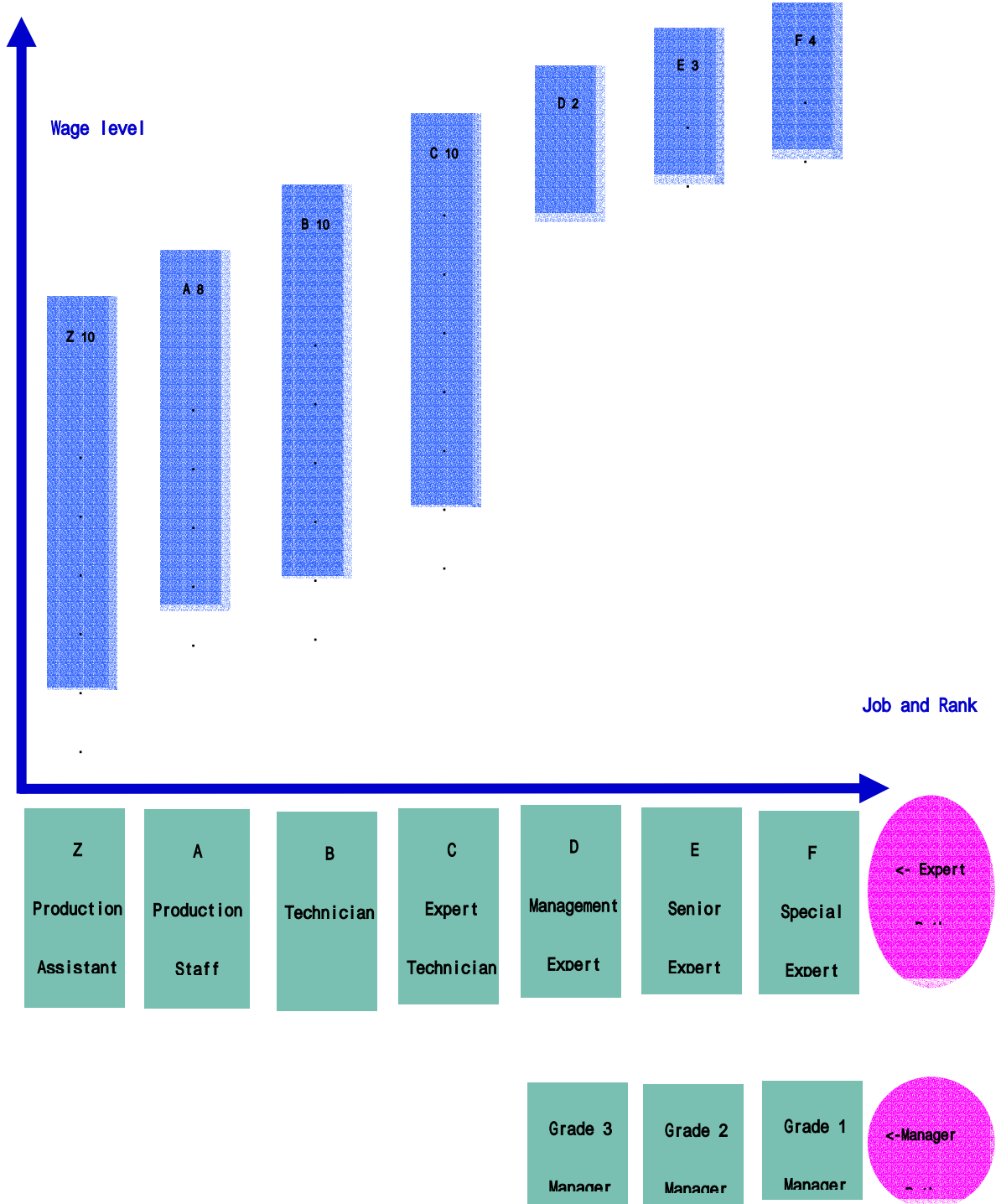
Source: Organized according to interviews in July 2004

However, when such breathing systems are introduced, difficulties arise from not only having to manage individual time accounts, but also to allocate workers to perform various tasks at various time periods. For breathing systems to be established, the multi-skill level of the workers needs to be upgraded and a workplace culture to incorporate various tasks and layouts needs to exist. Shanghai Volkswagen clearly notifies the workers of such frequent changes in allocation when signing a contract, and some 3,000 people have actually changed positions in one year. However, this alone is not enough to complete the complex workplace according to the working time account system, and the number of dispatched workers increased in order to fill the gap created by the lack of a functional pool to the extent necessary for the working time account system. Furthermore, if wages are decided according to the job and work performed, changes in allocation will not as easy as expected, leading to a need

for a third party to fill the gap. For this reason, dispatched workers with various levels of skills exist at Shanghai Volkswagen unlike at other Chinese companies.

The wage system of Shanghai Volkswagen needs to be reviewed at this point in order to clearly understand the relation between standard and nonstandard workers. <Diagram 1> displays the new framework for wages and promotions in use since April 2004. As can be seen in this diagram, Shanghai Volkswagen has seven job categories, and different competency levels exist within each job category with promotions and compensations measured with comprehensive consideration of job and competency level. Upper job groups are divided into management and expert paths. In the lower groups of Z, A and B, the highest possible competency levels according to jobs are predefined and therefore, there is internal competition to move to better job groups. Under such system of wages being decided according to jobs and competency levels, changes in allocations may be more difficult than expected, and a need for manpower to supplement the gap created by free choice of working time arises. At Shanghai Volkswagen, almost 30% of the manpower is made up of dispatched workers, created in the process of operating the above-mentioned time and wage system.

<Diagram 1> Wage Levels according to Job Classifications and Skill Levels at Shanghai VW



Source: Organized relying on interviews, therefore, comparison of wage levels by each level may not be accurate

More fundamentally, Shanghai Volkswagen wished to introduce various models at various times to the Chinese automobile market for which the competition is constantly becoming fiercer, and in this process, needed to secure flexibility. With the business environment in which Shanghai Volkswagen has had a secure number one position in the market for two decades is changing, Shanghai Volkswagen looked to the working time account system as a measure to secure the flexibility of plant operations. However, can the need to secure flexibility alone sufficiently explain the high rate of nonstandard workers recording 30%?

Another company related to Shanghai Automotive Industry Corp, one that created a joint venture with GM, Shanghai GM, had a percentage of dispatched workers at below only 1% at the time of July 2004. In order to interpret the reasons for such a difference, the employment system for standard workers and company history needs to be reviewed. In China, it is common for standard workers to work on one-year contracts or two to four-year contracts according to companies and job categories. However, they can not be forced into layoffs after ten years in service, meaning that work until the retirement age is guaranteed. For Shanghai Volkswagen, there were already a significant number of workers with long periods of service since 1985 at the time of proceeding with the joint venture, coupled with the lack of flexibility in the operation of the manpower created by the some 4,000 workers transferred from the Shanghai Automotive Industry Corp on two different occasions in the late 1980s. Compared to Shanghai Volkswagen, Shanghai GM, which opened its

doors in 1996, had hardly any workers transferred from the Shanghai Automotive Industry Corp and had a flexible operation of the manpower centered on younger workers thanks to its short history, resulting in a percentage of dispatched workers of less than 1%.

Another reason behind the high percentage of dispatched workers at Shanghai Volkswagen is the need for cost cuts. The protection of employment for standard workers with long-term services and working time account system coupled with rigid job and competency level systems also exist at the headquarters in Germany to a certain extent, but the percentage of nonstandard workers in China is much higher, which needs to be explained. This is because price competitiveness has become vital with fiercer competition in the Chinese automobile market. Also, the Chinese situation in which almost an infinite supply of dispatched workers is facilitated unlike Germany needs to be considered. Dispatched workers are utilized in various ways such as allocating dispatched workers to perform simple tasks in Z and A job groups, or using dispatched workers with higher competency levels to temporarily substitute empty positions for skilled workers.

Concerning the last factor, the unique production technology and job organization system of Shanghai Volkswagen needs to be noted. Within the workplace, there are high-tech ergonomic facilities such as tilting systems or natural lighting methods which can also be seen in the German factories, but at the same time, numerous workers can also be seen conducting welding processes which have already been substituted by robots in all advanced plants.

There is abundant floor space and the equipment and plant facilities are very advanced, but such features exist along with labor-intensive methods in the operation of the work organization commonly found in underdeveloped countries. Under such a situation, a need for numerous low-wage workers to conduct peripheral tasks arises along with an incentive system for workers with higher class jobs to manage and supervise these workers. The fact that the above-mentioned system which determines the wages and promotions according to job and competency was introduced relatively recently at Shanghai Volkswagen displays that it needed desperate measures to handle the fierce competition with its HR structure.

In short, Shanghai Volkswagen still relies on labor-intensive technology systems and work organizations, has a higher percentage of high-cost workers with long-term services compared to Shanghai GM due to its longer history, and has a somewhat rigid wage system based on job and competency level; and under these conditions, must equip themselves with price competitiveness and introduce the working time account system to secure flexibility of plant operations, which ultimately resulted in nonstandard workers making up 30% of the total manpower. There is hardly any discrimination concerning wage for nonstandard workers compared to one-year standard workers, but discriminations exist in social insurances and above all, nonstandard workers are exposed to a lack of employment security.

5. Comparison of and Implications from Employment Relations in the Automobile Industries in the Three Countries

A look at the automobile industry case as well as the overall economy reveals that there are some areas of concern related to employment relations in Northeast Asia, which boils down to the rapid increase in nonstandard workers during the recent few years at Toyota, Hyundai and Shanghai Volkswagen, the companies that represent the three Northeast Asian countries. Nonstandard workers refers to those who are not standard workers *per se*, therefore, possesses an innate instability, leading to a need to limit the grounds for the utilization of nonstandard workers such as the wishes of the labor supply side and the temporary needs of the labor demand side. However, the cases of the three companies show that nonstandard workers are generally used in regular tasks, which should be viewed from the perspective of overall lower quality of jobs. It should also be pointed out that whether it be social or economic, there is a possibility for discrimination for the key factor was to create peripheral manpower to secure the employment of core standard workers, as could be seen in all three companies.

Despite the similarity of increases in nonstandard workers, the type, reasons behind the increase and the state of utilization differ significantly among the three companies of each country. First, the basic type of nonstandard workers differed with fixed-term contract workers at Toyota, in-house subcontract workers at Hyundai, and dispatched workers at Shanghai Volkswagen due to differences in the institutions, labor market environment and management

strategies of each country. For example, as Japan authorized the use of dispatched workers in direct production in the manufacturing sector, Toyota which preferred fixed-term contract workers prior to the authorization started to employ dispatched workers, and in China, workers are dispatched by public agencies (or semi-public agencies) to manufacture plants, which are institutional environments significantly different from that of Korea which prohibits dispatching workers to directly participate in production in the manufacturing sector. Even amidst the legal restrictions in Korea, a mixed work organization with standard and nonstandard workers working side-by-side which is actually similar to dispatched labor is in operation and as a result, Hyundai is faced with strong criticism by the labor movement and civic groups.

It is difficult to clearly compare the percentage of nonstandard workers in the three companies. At face value, the 38% Toyota admits using in direct production process appears to be the highest, but the figures for Hyundai and Shanghai Volkswagen using the same criteria can not be found, and the criteria used by Hyundai and Shanghai Volkswagen are significantly different from those of Toyota. Therefore, comparison against the number of total employees regardless of job category shows that the figures at Shanghai Volkswagen are surprising the highest with Toyota and Hyundai recording similar levels. The high percentage of dispatched workers at Shanghai Volkswagen reflects the fierce competition in the Chinese automobile market, but at the same time, is related to the practice of actually using dispatched workers similarly to standard workers. In China, it is common for even standard workers to renew contracts every year until a worker reaches ten years of service, and dispatched workers

at Shanghai Volkswagen have their contracts almost automatically renewed for up to three years. Furthermore, some dispatched workers possess significant skill levels and unlike other Chinese companies, are recruited from the Shanghai metropolitan area rather than rural areas. Nevertheless, a comparison of the percentage of nonstandard workers at the three companies itself does not hold much significance due to the difference conditions in which each company operates. What is more important is the fact that the percentage of nonstandard workers have continued to increase in all three companies.²

The high percentage of nonstandard workers poses a problem not only because they lack employment security, but because there is a possibility of discrimination compared to standard workers. Compared to the first or second-year standard workers with similar years in service, nonstandard workers at Hyundai face significant discriminations even in overall wages, and nonstandard workers of all three companies face discriminations related to welfare and social insurances. However, the discriminative elements were relatively smaller in Toyota and this seems to be due to the serious shortage of labor and the tendency of younger workers to avoid the manufacturing sector in Japan unlike Korea and China. Despite these features, the percentage of nonstandard workers increased due to its contribution to higher price competitiveness whether intentional or not, displaying a reality of working conditions racing to the bottom in all three countries.

² I could not grasp how many nonstandard workers at SVW had been increased in recent years. However, I heard that the number had become higher.

<Table 6> Comparison of Employment Relations of Nonstandard Workers at Companies Representing Japan, Korea and China

	Japan	Korea	China
Representative Company (Case)	Toyota	Hyundai	Shanghai Volkswagen
Visits	In March 2006	Frequently between 1999 and 2005	In July 2004 and April 2005
Number of Standard workers	64,000	50,000	15,000
Number of Nonstandard Workers	12,000	10,000	6,000
Percentage	15.8%	16.7%	28.6%
Basic Form of Nonstandard Workers	Fixed-term Contract Labor	In-House Subcontracting	Dispatch
Overall Wage	Almost equivalent to that of first year standard workers	66% of that of first year standard workers	Almost equivalent to that of first year standard workers
Indirect Compensation	Free use of dormitories, transportation expenses, etc	Lower level of welfare compared to that provided to standard workers, but better than external SMEs	Lower than standard workers in terms of social insurance, etc

Work Organization	High functional flexibility	Low functional flexibility	Numerous labor-intensive processes
Other	Rapid increase in the number of nonstandard workers in the recent five years	Labor-management conflicts and social controversy concerning the issue of nonstandard workers	Secured flexibility with the introduction of various working time systems and used nonstandard workers to supplement such systems

How far will the number of nonstandard workers continue to increase? Or will it be oppressed by socioeconomic factors? In relation to the economic factors of the technical systems and work organizations, the conditions of the Toyota Production System, for example, should be reviewed along with issues related to social factors such as the labor movement directions and changes in collective labor-management relations. According to visit to Kanto Motors, an affiliate of Toyota, in October 2005, the percentage of nonstandard workers stood at 50%. This figure is even more shocking considering that this company produces Lexus, the luxury models, exported to the US. Using strategies to gain price competitiveness by increasing nonstandard workers is certainly a concern related to employment relations. Nissan Shatai Company Limited, to which the visit was also made in October 2005, also had nonstandard workers making up 50% of the manpower at production line, and therefore, the percentage of nonstandard workers in large companies such as Toyota may not increase any more, but the possibility that the percentage of nonstandard workers will become higher in Japan overall can not be ruled out. Such a possibility can be confirmed in the Japanese electronics industry which

is exposed to even more international competition compared to the automobile industry, and as a result, has a high propensity to use in-house subcontracting(Ukeoi by Japanese) very widely.

In China, the high-tech industry and the traditional industries are developing at the same time, and therefore, technological systems and work organizations related to employment relations are also complex. However, according to visits to some 20 automakers, auto-part makers and electronics companies, the basic production methods were still labor-intensive, even at leading companies such as Shanghai Volkswagen, and in this aspect, incentives for using low-wage labor will inevitably continue to exist. However, the Chinese labor market, compared to the Japanese or Korean labor market, strongly resembles the features of the Western labor market based on job evaluation and high mobility; and workers with superior skills and higher education are experiencing rapid increases in their income, and therefore, the wages of workers with relatively lower levels of skills and competencies are suppressed even further and the wage gap with skilled workers is expected to widen more and more.

In Korea, there are more cases of technology-intensive production methods centered on automated processes rather than the labor-intensive production systems of China or the Japanese production system centered on skills and organizational capacities, and therefore, the demand for supplementary labor to provide assistance to machinery is expected to increase. However, a certain portion of workers perform such simple labor with the position of standard worker due to the institutional factor of protection by labor unions which already

have vested rights, and the others are outsiders working with the status of nonstandard workers, lacking rational economic compensation, inevitably leading to the aggravation of social conflicts. Ultimately, there is a high possibility that the use of nonstandard workers will not expand any further due to social criticism and legal and institutional constraints. Recently in China also, the protection of labor rights is being strengthened due to widening wage gaps and increasing labor-related disputes, and therefore, it is forecasted that discrimination of nonstandard workers will be suppressed to a certain extent due to not only economic and technological factors but also social factors even in China. However, the existence of workers to perform simple tasks infinitely supplied from rural areas will prevent a noticeable reduction of the wage gap in the short-term, and in the end, the minimum wage policy of each province is expected to act as standards for the protection of unskilled workers.

Amidst the current global competition, securing flexibility is becoming increasingly more crucial and in this aspect, the companies representing the three countries are responding in somewhat different ways. As have been explained before, from the aspect of employment flexibility, all three companies are utilizing nonstandard workers, but the forms and factors are quite complex. The differences in employment flexibility among three companies are related to the structures and strategies each company take while choosing the flexibility of working hours, wages and work organizations. Shanghai Volkswagen introduced the working time account system developed in Germany leading to a somewhat complex condition. Toyota has focused on functional flexibility centered on multi-skill in the workplace and seems to be opting for strategies to

utilize fixed-term workers within the limit of not disturbing functional flexibility. Hyundai Motor Company is strongly relying on mechanical flexibility within automated processes and is utilizing overtime and weekend labor to secure operational flexibility.

The more crucial such flexibility becomes in global competition, the more it results in the side-effect of lower stability from the labor perspective. This paper reviewed the weakening of employment security centered on the issue of nonstandard workers, but even for standard workers, the stability of working hours, wages and tasks is continually becoming lower. Furthermore, institutional devices such as labor unions have become much weaker with the exception of Korea, making negotiated flexibility through labor-management cooperation more difficult for the time being.

Thus far, through a prism of nonstandard workers, the employment relations of Japan, Korea and China were compared centered on the cases of automakers representing the three countries. The comparison revealed that despite the world-wide use of the Toyota Production System and the similar pressure of fierce global competition, the details still remained very different. Such diversions in employment relations of the three neighboring countries in Northeast Asia can be interpreted as an implication of the importance of institutions and practices, and of the ever more importance of the strategies by the labor, management and government. We live in the times of 'converging divergence'.

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