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Labor Problems Facing Intermediate-Age Workers

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NEXT ISSUE (Spring 2016)
The spring 2016 issue of the Review will be a special edition devoted to **Diversification of Regular Employees and New Challenges**.

Introduction

Labor Problems Facing Intermediate-Age Workers

This Special Edition highlights the aspect of age, with particular focus on workers positioned between younger and older age groups, defined here as "intermediate-age workers." Specifically, intermediate-age workers are those between around their mid-30s and their 40s. Our theme will be to consider labor problems typically experienced by this age group in Japan. In this country, the debate on labor policies has tended to focus on younger and older age groups in recent years. In the policy debate on these age groups, intermediate-age workers have been included for purposes of comparison, but attempts to understand this age group in itself are relatively rare. However, intermediate-age workers have many important roles to play, both as core human resources in the workplace and as providers of childcare and family care in the home. Intermediate-age workers are approaching the midway period in their vocational careers. For that reason, there must be typical issues faced by this age group in connection with working styles and careers, as well as contemporary issues associated with changes in the labor market. In this Special Edition, we will study these broad-ranging issues affecting intermediate-age workers in Japan from a variety of perspectives.

"Changes Experienced by Intermediate-Age Workers in Japan's Labor Market," a paper by Ryo Kambayashi and Yuko Ueno, examines changes in the labor market over the two decades since the collapse of the bubble economy, with particular focus on full-time workers of intermediate age between 35 and 50. The paper reveals that during this period, not only has the opportunity cost of changing careers decreased so that the fluidity of the labor market also impacts intermediate-age workers, but competition for promotion to management posts in internal labor markets may also have intensified. For their analysis, the authors created a panel dataset for business establishments by linking microdata from the Basic Survey on Wage Structure and the Survey on Employment Trends. This was used to make an empirical study of the relationship between rewards for promotion to management and reassignment ratios, with the result that a generally positive correlation was found between the two. These changes are consistent with the rank-order-tournament theory. It can therefore be confirmed that, even among intermediate-age workers, regarded as the core of Japanese employment practices, the structure of promotion is not entirely unrelated to changes in the labor market. However, the analysis presents the possibility that competition for promotion to department manager is still mainly between lifetime employees who had entered their companies in their youth, and not against externally hired employees. This suggests that changes experienced in the labor market are also diverse among intermediate-age workers, depending on the stage of career advancement and age. Consequently, the authors point out that it is difficult to explain the situation facing intermediate-age workers consistently just by using a simple model.

What sort of roles are intermediate-age workers expected to play within corporate organization, and what kind of issues do they face in performing those roles? Sumiko Ebisuno, Sakae Oguma and Yasuo Murasugi attempt to answer these questions in "Current Status and Issues Facing Employees of Intermediate Age in the Workplace: From the Perspective of Labor-Management Relations." In this paper, the authors clarify the actual situation and issues associated with the working styles of intermediate-age employees (aged 35–49) in workplaces significantly impacted by workplace age composition. The paper highlights situations in which employees of intermediate age are so busy that their communication with other generations becomes inadequate and they have no time to cultivate the next generation, through analysis based on a questionnaire survey and an interview survey with company unions and others. Against this background, the authors study the relationship between workplace classification based on the relative proportion of intermediate-age employees and the age composition of workplaces, confirming as a result that shortages of both younger and older employees cause an excessive work burden on employees of intermediate age. They also point out that the excessive work load on intermediate-age employees causes problems not only in their own work performance but also in connection with passing on skills and developing human resources in workplaces and companies. As an example of workplaces where steps to correct this kind of problem have been taken, cases in which older workers aged 60 or over give support to intermediate-age employees are introduced. On this basis, the authors assert that it is important to maintain an appropriate age composition by constantly hiring new graduates, as a radical measure aimed at solving problems arising from the increased workload on employees of intermediate age. And to this end, they assert that it will be essential to have dialog between labor and management on appropriate numbers for recruitment—currently a rare practice in labor relations within Japanese companies.

Intermediate-age workers are also at an age when burdens of childcare and care for elderly family members are concentrated. In Japan, particularly in recent years, finding a balance between caring for family members and work commitments is causing conflicts between work and care for an increasing number of both men and women, given progressive population aging. Based on this perception, in "Work-Life Conflict in the Intermediate Age Bracket: Trends in Working Hours and Time Spent Caring for Elderly Family Members," Sachiko Kuroda uses microdata from the Survey on Time Use and Leisure Activities to observe long-term trends in the distribution of working time and private time by people in the intermediate age bracket (30s–50s) who work as regular employees while also having responsibilities such as caring for elderly family members and raising children. According to the author's observations, while the actual number of intermediate-age workers who work as regular employees and take care of elderly family members is rapidly increasing, the time spent giving care by these workers has been decreasing over the last decade, regardless of where they give the care and whether or not they receive assistance from others. On the other hand, working hours for both male and female regular employees in the inter-

mediate age bracket are in an increasing trend; over the last 15 years, in particular, the working hours of people who take care of elderly family members have markedly increased. On the reason for the decrease in caregiving time, the possibility that social support has developed with the introduction of Long-Term Care Insurance may be suggested in some cases, but there is insufficient explanation for the significant decrease in caregiving time over the last ten years. In the paper, the author stresses the need for further analysis in future on reasons for the decrease in caregiving time, partly from the perspective of reviewing the system of Long-Term Care Insurance in Japan.

As these analyses show, workers of intermediate age also face problems in terms of work-life balance. In "Study on Legal Issues Involving Intermediate Age Brackets: Aiming to Facilitate Work-Life Balance," Toshiko Kanno considers what sort of action appears to be addressing these issues in legal terms. On the premise that workers of intermediate age (mid-30s to 40s) are a family-forming generation, this paper discusses problems in terms of labor law faced by intermediate-age workers, with focus on problems in fields where there has been an accumulation of case law doctrine in Japan. The author points out that workers in intermediate age groups are prone to face problems that arise when taking long-term leave and after their return to work, in terms of following a working life while coping with the changing needs of family life. Meanwhile, the current problem of non-regular employment in Japan is seen as one that also faces intermediate age groups. Specifically, workers currently in their 30s are in a generation that has experienced periods of difficulty in finding employment when they were younger, given a situation in which it is difficult for workers of any age to obtain regular employment opportunities. Based on this kind of perception, the author divides the problems facing intermediate-age workers into four types—problems related to leave and disadvantageous treatment, problems related to reassignment, problems related to promotions and upgrades, and problems of non-regular workers. Trends in Japanese case law are studied for each of these.

As outlined above, this Special Edition focuses on workers in intermediate age groups, and studies the realities and issues of the working styles and careers of these workers in Japan. The discussions in these papers present a profile of people in intermediate age groups faced with contemporary issues regarding the formation of careers within an organization, the fulfillment of roles in the workplace, and the balance between work and childcare or family care, amid an era of progressive birth rate decline, population aging and changes in the labor market. The importance of further empirical and theoretical research on intermediate age groups and discussion based on this is suggested. Moreover, the various discussions cause one to realize the importance of a perspective of understanding intermediate age groups in terms of their relationship with other age groups. This is because they are positioned at a transitional point in vocational lives linking younger and older age phases, and are responsible for the passing on skills to the next generation.

Of course, there are many issues that could not be fully taken up in this Special Edition. Indeed, the papers assembled in this Special Edition point out that there are still re-

search issues that remain to be addressed in their respective research fields. Nevertheless, I hope that this Special Edition will provide an impetus for readers to turn their interest to the breadth of problems facing people in intermediate age groups in Japan. Among these problems, some must surely be shared by intermediate-age workers in societies other than Japan, as an age group expected to bear many important roles both at work and in the home.

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Changes Experienced by Intermediate-Age Workers in Japan's Labor Market

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This paper examines changes in the Japanese labor market experienced by full-time workers in intermediate age groups (ages 35–50) during the two decades since the collapse of the bubble economy. The results suggest that the opportunity cost of job transfers is lower than it used to be, and that the fluidity of the labor market is also spreading among intermediate-age workers to a certain extent. Moreover, internal competition for promotion to managerial positions may have become more intense at the same time. Specifically, a panel dataset for business establishments was created for this study by linking microdata from the "Basic Survey on Wage Structure" and the "Survey on Employment Trends." The relationship between rewards for promotion to management and turnover ratios was empirically studied, with the result that a generally positive correlation was found between the two. These changes are consistent with the rank-order-tournament theory, and in that sense, even intermediate age groups, the core of Japanese employment practices, are not entirely unaffected by changes in the structure of the labor market. However, this paper also finds that experience of changes in the labor market is diverse in intermediate age groups, depending on the stage of career advancement and age, that changes in competition for promotion have not spread universally among them, and that it is difficult to explain the whole consistently by using a simple model.

I. Problem Awareness

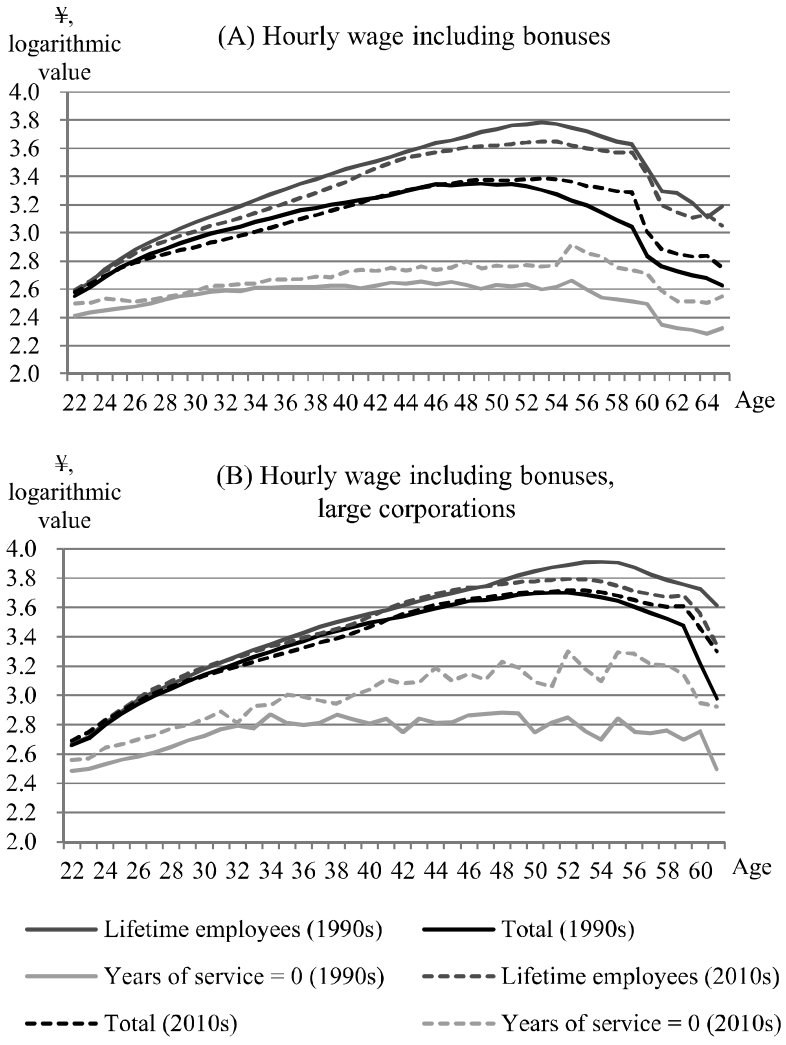
This paper discusses changes in the labor market experienced over the last two decades by workers in intermediate age groups between the mid-30s and the 40s (hereinafter "intermediate-age workers"), with particular focus on full-time workers among them.

In careers based on the long-term employment system, full-time intermediate-age workers represent an age group that has amassed company-specific human capital through a variety of OJT opportunities; they have conventionally been regarded as forming the core of the corporate labor force. The larger the investment in this human capital, the stronger the motivation for employers to keep intermediate-age workers within their organizations. At the same time, intermediate-age workers have reached a stage in their lives when opportunities for advancement to management-level posts rapidly expand. This means that they also have to take account of huge opportunity costs if opting for voluntary career changes. As a result, intermediate-age workers have consistently been regarded as a stable age group from the perspective of both labor and management, and have thus not been a subject of particu-

lar concern until now. In fact, the focus of labor policies over the past half-century since the era of low growth has shifted first to the elderly then to women and young people; intermediate-age workers have been left outside the frame. Over the two decades since the collapse of the economic bubble, the point has been made, in various contexts, that changes are gradually occurring in Japan's labor market in its systems of long-term employment and seniority-based wages. In spite of that, it seems to have been tacitly assumed that the impact of these changes is relatively minor when it comes to intermediate-age workers.

This paper will attempt to challenge these generally accepted perceptions and analyze changes affecting intermediate-age workers in recent years. There are several reasons for this. The first is that changes in skill structure in recent years have not yielded the same effects for all workers, but have tended to create disparity amongst them. For example, the two decades under discussion in this paper were not only a time when the economic growth rate fell on average compared to before, but also ushered in various other changes. These included the emergence of new technologies in the ICT field, and related changes in the industrial structure evolving in tandem with changes in companies' organizational structure. As a result, while more sectors and occupations required the development of company-specific human capital, there may also have been cases when the opportunity cost of labor mobility between companies became smaller for intermediate-age workers as the importance of company-specific human capital conversely decreased in relative terms. From the employees' side, too, changes in the attributes of groups comprising intermediate-age workers (such as the age composition, gender ratio and educational backgrounds) also progressed during the period in question. Seen from these two sides of labor demand and supply alone, there are plenty of factors that could have changed the status of intermediate-age workers in the labor market, and it is easy to imagine that these workers were not uniquely unaffected by change. Moreover, as full-time intermediate-age workers represent the core of Japanese employment practices, thus the appraisal of changes in the labor market as a whole must be affected by the nature of changes in that group.

From the next section onwards, therefore, data will be used to identify changes experienced by intermediate-age workers, as well as the factors that could conceivably lie behind them. Specifically, in Section II below, shifts in aggregated wage curves and changes in wage levels and labor turnover rates will be observed, and the overall image of the labor market for full-time intermediate-age workers will be defined. The results suggest structural change in competition for promotion associated with increased fluidity in the labor market, and this point is examined using microdata in Section III onwards. A basis for understanding competition for promotion in terms of economics is provided by the rank-order-tournament theory. Recent developments in this area are summarized in Section III, based on a simple perusal of the relevant literature. Section IV is devoted to explaining the two types of data used in this paper, namely the Ministry of Health, Labour and Welfare (MHLW) "Basic Survey on Wage Structure" (abbreviated below to "Wage Census") and the MHLW "Survey on Employment Trends" (abbreviated to "Employment Trends"). The



Source: Calculated by the authors from the *Wage Census*.

Figure1. Changes in Wage Curves (Comparison between 2010–2012 and 1991–1993)

relationship between employees' increased fluidity and tournament structure will be studied in Section V. Finally, Section VI will summarize the estimation results and serve as a conclusion to this paper.

II. Changes Experienced by Intermediate-Age Workers in Japan's Labor Market

As changes in the environment surrounding intermediate-age workers, changes in wage trends will be examined first of all. Figure 1 shows changes in wage curves by age

from the beginning of the 1990s to the beginning of the 2010s. The data are taken from Wage Census microdata, pooled into 3-year segments from 1991 to 1993 for the beginning of the 1990s and from 2010 to 2012 for the beginning of the 2010s, respectively. On this basis, the average logarithmic hourly wages by age have been plotted to depict the so-called "seniority curve." For comparison, profiles specific to the "lifetime employee" group, i.e. workers who are thought to continue working for the same establishment after leaving education, and those of career changers (shown as having 0 years of service) are also included. Finally, hourly wages have been calculated by dividing total earnings including bonuses and overtime pay by total working hours.

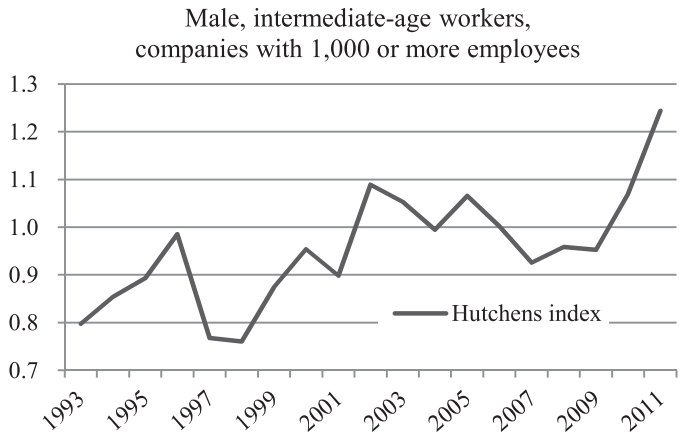
Quite in contrast to the wage curve of the lifetime employee group, which has generally shifted downwards over the last two decades, that of career changers has shifted upwards, particularly in age groups above intermediate age. For example, at age 53, the hourly wage of the lifetime employee group had decreased by about 14%, while that of mid-career recruits had increased by about 16%. As a result, the overall wage curve shifts downwards until around 40 years of age, but shifts upwards from the 40s onwards, and the 1990s and 2010s wage curves cross at around 40 years of age. Although it has long been asserted in general that the so-called seniority wage is a thing of the past, at first sight the wage curves appear to have grown more extreme, if anything.

If the sample is restricted to large corporations only, we find that, while the increase in wages for career changers is pronounced in intermediate age and onwards, the decrease in wages for lifetime employees is very limited. For example, while the increase for the former is about 42% at age 53, the decrease for the latter is only about 12%. As is well known, large corporations have developed their own internal labor markets, meaning that fewer employees are hired mid-career in their 50s. Thus, the impact on wage rises for career changers as a whole may be limited, but in reality the hourly wage has risen on average for workers in intermediate age.

In parallel with improved wage conditions for career changers, increased fluidity of intermediate-age workers has gradually progressed on a volume basis as well. Figure 2 shows the labor turnover rate of male intermediate-age workers between the ages of 35 and 49 in large corporations in time series, as gathered from Employment Trends microdata. Here, the labor turnover rate is based on the ratio of sum of job leavers and new recruits over one year to the total number of workers at the beginning of the year. Generally speaking, if this ratio were 2, it would mean that all employed workers have been replaced over the space of a year. To evaluate the turnover rate of intermediate-age workers, Figure 2 shows trends of this rate relative to that of all workers (the Hutchens index[1]).

In the 1990s, we see that the Hutchens index was generally less than 1. The turnover

[1] Hutchens (1986) devised the "Hutchens index" as an indicator to ascertain corporate behavior when hiring older workers, defining it as the ratio between the recruitment rate of older workers and the overall recruitment rate. In this paper, the concept is expanded to examine the turnover of intermediate-age workers.



Source: Calculated by the authors from the *Employment Trends*.

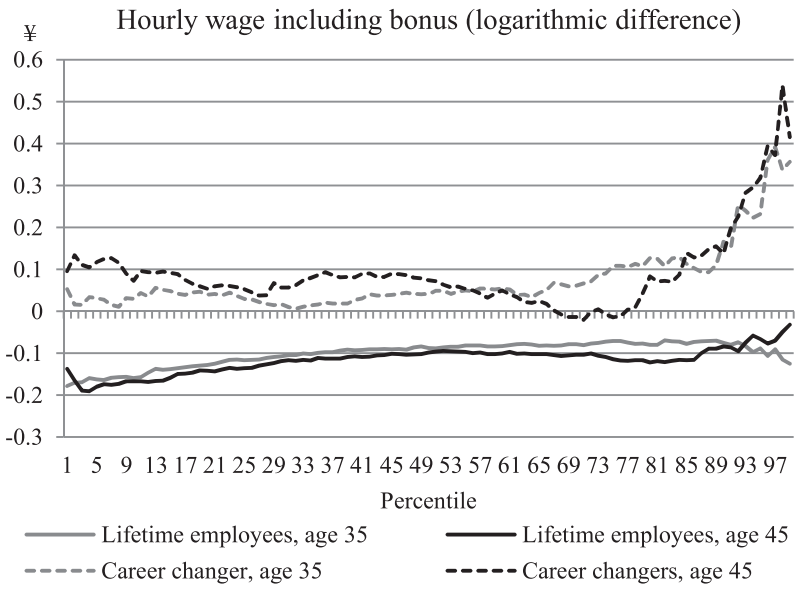
Figure 2. Trends in the Turnover Rate of Intermediate-Age Workers in Large Corporations (Ratio Compared to the Turnover Rate of All Workers)

rate of intermediate-age workers was smaller than that of the whole, and these workers thus formed a stable core of corporate organization. From the start of the 2000s, however, the rate started to increase, and has been significantly higher than 1 since the Lehman collapse. Seen in relative terms, this shows that the turnover of intermediate-age workers has risen.

Although wage disparity between lifetime employees and mid-career recruits in intermediate age has decreased as shown in Figure 1, Figure 2 reflects an increase in mid-career recruits, whose wage level was low in the first place. As a result, the ratio of wage dispersion among intermediate-age workers to that among all workers shows an increasing trend, and relative disparity in wages in this age group has widened. To examine this point in detail, shifts in the quantile points in wage distribution are shown in Figure 3.[2] Specifically, data from the Wage Census were narrowed down to those for lifetime employees as against career changers aged 35 and 45, and the hourly wage percentile was calculated for each target period. Changes in the hourly wage level for the same quantile point over the two decades were then examined on this basis.

This shows that, for intermediate-age lifetime employees, the hourly wage has fallen more or less uniformly at all quantile points, and that the wage distribution has shifted to the left overall. Also, the decrease on the left edge of the distribution is larger than that on the right edge, albeit only slightly, suggesting that the variance grew larger as the left edge grew longer. By contrast, the hourly wage for career changers rose in nearly all quantile points, showing that the distribution shifted to the right. At the same time, it can be seen that wages rose conspicuously at the right edge of the distribution and the right edge has grown longer and thicker. This would suggest that the distribution of hourly wages for intermediate-age

[2] Trends in wage dispersion are summarized in Appendix Figure 1.



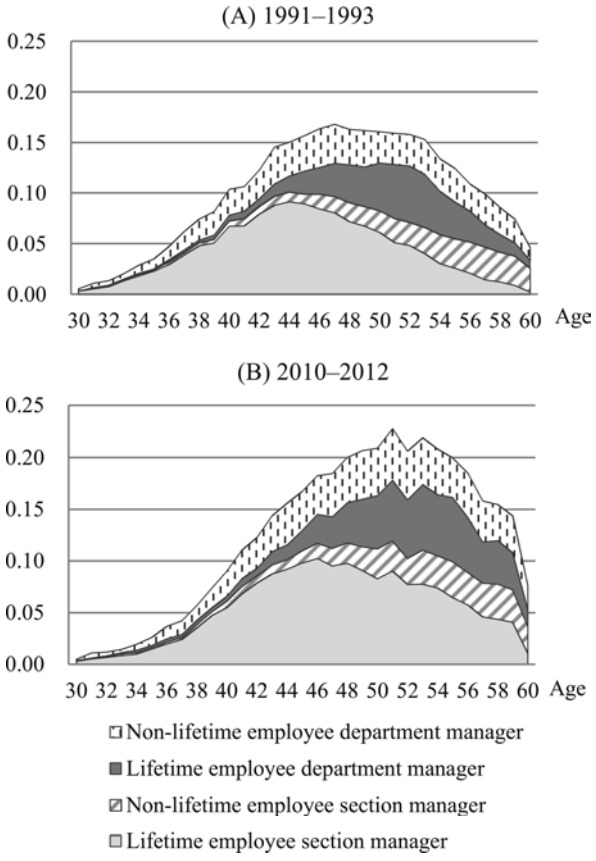
Source: Calculated by the authors from the *Wage Census*.

Figure 3. Changes in Hourly Wage (Comparing 2010–2012 with 1991–1993): Full-Time Males, Lifetime Employees vs. Career Changers

workers has widened, but a different mechanism could be at work for lifetime employees and mid-career recruits.

Taking Figures 1 to 3 as a whole, there would appear to have been a general increase in fluidity for intermediate-age workers, but at the same time an increase in the number of mid-career recruits earning a reasonable hourly wage. Thus, to consider the background to these changes in wage distribution and fluidity, we will need to confirm trends in labor mobility regarded as "headhunting," or in other words trends in managerial posts. To this end, Figure 4 compares the share of department and section managers by age at the beginning of the 1990s and the beginning of the 2010s.

For lifetime employees graduating from university, intermediate age corresponds to a period between about 10 and 25 years of service. This is a time when the likelihood of promotion to section manager increases, followed by an increased likelihood of promotion to department manager from the mid-40s onwards. As Figure 4 shows, there has been no great change in the timing of promotions over the last two decades, but the share of department managers takes rather longer to reach a peak. Moreover, the ratios of intermediate-age department and section managers are clearly in a rising trend, particularly around the age of 50. As to the ratio of lifetime employees among department and section managers, the ratio is nearly zero among section managers with up to 10 years of service and among department manager with up to 20 years of service. After this, the shares of lifetime employees increase

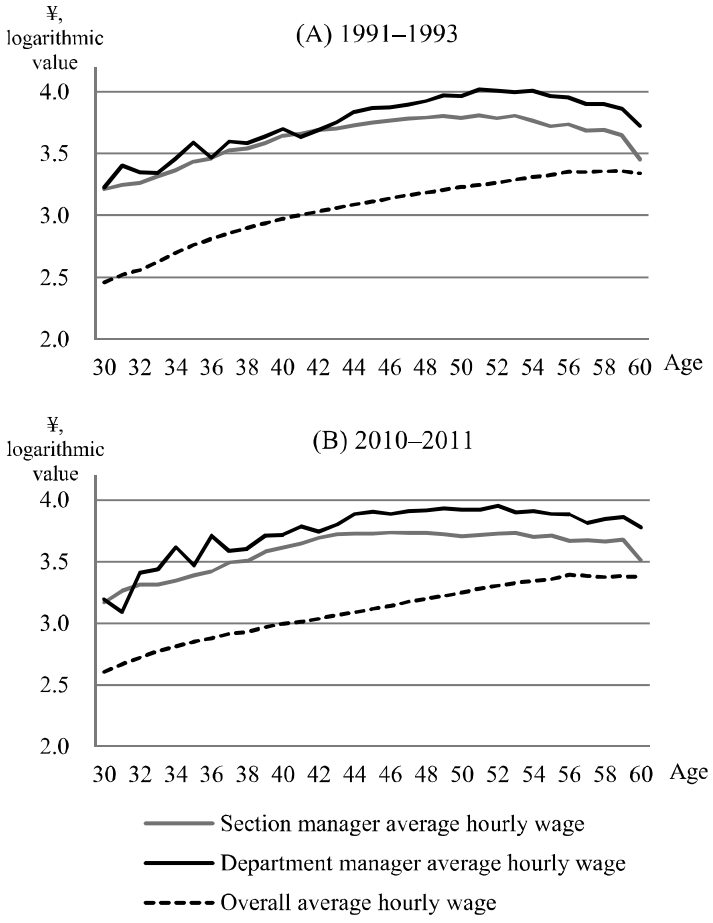


Source: Calculated by the authors from the *Wage Census*.

Figure 4. Shares of Department and Section Managers by Age: Lifetime vs. Non-Lifetime

rapidly until eventually reaching a majority (see also Appendix Figure 2). Actually, no great difference can be seen in this trend over the last two decades. At age 45, for example, the ratio of section managers among lifetime employees rises from 8.9% to 9.8% and that among non-lifetime employees from 0.9% to 1.2%, but the two periods in question show no great difference in the relative component ratios of the two. The same applies to changes in the ratio of department managers among lifetime employees (−0.3 percentage points) and the ratio of department managers among non-lifetime employees (+0.2 percentage points) at age 45.

Figure 5 compares changes in the wages of employees promoted to department and section manager, showing that the logarithmic hourly wage has decreased among intermediate-age workers for both department and section managers; the decrease is markedly large among section managers in the higher age range of intermediate-age workers (about −0.25



Source: Calculated by the authors from the *Wage Census*.

Figure 5. Average Wages of Department and Section Managers by Age (Hourly Wage Including Bonuses)

points for section managers aged 49). Though not shown in the graph, the standard deviation in the hourly wage is larger if the years of service are fewer, for both department and section managers, which could be because they are mainly hired from the outside. Among department managers there has been a rising trend but no major change over the last two decades. For section managers, an upward trend in external recruits with less than 10 years of service is seen, but the figure has gone down, if anything, among lifetime employee section managers with more than 10 years of service. In other words, the wages of lifetime employees who are not promoted to department manager but continue as section manager for a long time seem to have gone down on average, while at the same time the disparity among them has narrowed.

To summarize the foregoing, it would appear that the following changes are gradually

progressing in Japan's labor market for intermediate-age workers. Firstly, although there is an increased likelihood of lifetime employees being promoted to section manager, more of them are subsequently not being promoted to department manager but are remaining as section manager. In tandem with the increased likelihood of promotion, the wages of section and department managers are in a downward trend, and in large corporations, the wage dispersion compared to other age groups is widening. That is, the number of employees who are promoted to section manager but have no prospect of taking the next step, or whose wage increase accompanying promotion is relatively small, is gradually increasing. It may be, therefore, that competition in internal labor markets has intensified. By contrast, the proportion of externally hired section and department managers, i.e. those other than lifetime employees, is more or less unchanged in all age groups. This must mean that lifetime employees do not necessarily face more intensely competitive conditions in terms of competition for promotion with external recruits compared to 20 years ago. In conjunction with these changes, the fluidity of intermediate-age workers in large corporations is in a relatively increasing trend. Compared to the beginning of the 1990s, moreover, the wages of career changers had risen in all age groups of intermediate-age workers at the beginning of the 2010s. This would appear consistent with the fact that the conditions for career changes by intermediate-age workers have improved over that period.

III. Previous Research and Hypotheses Examined in This Paper

As stated in the previous section, structural changes in internal labor markets appear to have been in progress over the two decades from the beginning of the 1990s to the beginning of the 2010s. This is thought to have been manifest as a change in the likelihood of promotion to management and a shift in wage curves, due to the increased intensity of internal competition for promotion and ongoing competition with external recruits.

One general model that explains the relationship between promotion within a company and wage structure is the rank-order-tournament theory of Lazear and Rosen (1981). They demonstrated that this theoretical model can achieve the same efficient distribution of resources as incentive schemes in response to an individual's output, by offering workers a predetermined remuneration structure based on rank, on the premise that companies cannot adequately observe the level of effort by workers. Risks for the employer can be avoided, as the wage amounts can be fixed in advance (unlike with performance-based pay). Moreover, because this takes the form of a tournament, it suffices merely to select the right person from among the candidates, meaning that there is no need to measure absolute levels of individuals' output. Another advantage is that the only information needed is the relative merits of the candidates. Conversely, this method has the disadvantage that participants who know they cannot win the tournament drop out of the competition from the beginning and end up making no effort at all, but that wages in line with the promised minimum rank still have to be paid.

Wage increases accompanying promotion are normally explained by increased productivity due to the accumulation of human capital. However, it is known, particularly in the US, that the volume of wage increase expands as the employee's position rises higher in the hierarchy, and it has been considered difficult to explain this in terms of the accumulation of human capital. This is because, as long as the normal formulation for accumulating human capital is assumed, the additional increase in productivity is thought to decrease as the employee amasses more human capital. The tournament theory can be used to explain that the more evenly matched the competition in terms of ability, the larger the prize needs to be when winning. This theory attracted interest as a method of explaining remuneration schemes inside companies rather than one focusing on human capital.

Main, O'Reilly, and Wade (1993) used data on executive remunerations in American companies, among other statistics, to show that remuneration increases exponentially as the employees rise through the upper echelons of companies. While this produced a result consistent with tournament theory, it also showed that the rationale on wage compression presented by Lazear (1989), holding that a remuneration scheme that reduces wage disparity between individuals is efficient in upper echelons, cannot be described as consistent with the data. Chan (1996) expanded this rationale on rank-order-tournament to include competition with externally hired mid-career workers as well as competition for promotion among lifetime employees, and theoretically examined the impact of intensified competition on promotion prizes. According to Chan (1996), increasing promotion prizes leads to greater incentives for workers but also increases the potential for moral hazard. This is said to provide a reason why companies give relatively advantageous treatment to promotions of lifetime employees by setting handicaps when hiring external recruits compared to internally promoted staff. As the background to why internally promoted staff are relatively easier to promote than external recruits, in addition to the factors highlighted by Chan (1996), it has been pointed out that lifetime employees have acquired company-specific human capital and that companies have little information on external recruits. For example, Bayo-Moriones and Ortin-Angel (2006) discovered, as a result of using data from Spanish manufacturing companies to analyze the likelihood of promotion, that company-specific human capital is the most important factor. Bognanno (2001) used microdata from executives of large American corporations to analyze whether corporate salary schemes and hiring are consistent with the tournament theory, and in particular whether there is negative correlation between the likelihood of promotion and prizes accompanying promotion. The result showed that the more intense the tournament competition, the higher the promotion prize is set in order to encourage effort. On prizes for CEO promotion, results generally consistent with the theoretical model on an empirical level have been obtained. Audas, Barmby, and Treble (2004) used data on employees of companies in the UK financial sector to estimate the likelihood of promotion, arriving at the implication that increasing promotion prizes and reducing promotion risks serve to enhance motivation for workers. Finally, DeVaro (2006) used data on American business establishments, among others, to make

structural estimations of the impact on workers' motivation by companies' decision-making on promotions and the wage spread accompanying promotion, using workers' performance, salary systems and promotion as endogenous variables. The results obtained support the tournament model.

To interpret changes in the labor market facing intermediate-age workers on the premise of the debate in this existing research, as pointed out in Section II, it appears to have become easier for workers to experience promotion to section manager as the first step in promotion, but the following promotion to department manager has become more difficult owing to an increase in tournament participants. Accompanying the greater likelihood of promotion to section manager, the wages offered by companies for section manager posts have fallen. Moreover, even though these employees stay a long time in section manager posts, the portion of wage increase based on seniority has been reduced from former levels. This kind of change is more likely to result from structural factors internal to the company (for example, the age composition is weighted toward intermediate-age workers and upwards, progressively higher educational backgrounds of intermediate-age workers, etc.) rather than the increased intensity of competition with external recruits. Even if promoted to section manager, some workers who feel their chances of further promotion not to be high will pull out of the tournament. Thus, the effect of increased fluidity, whereby workers change jobs to another company where conditions seem better in the medium to long term, is gradually advancing among intermediate-age workers and others in large corporations. Enhanced wage conditions for mid-career recruits would appear to be supporting this trend.

In this paper, therefore, the emphasis will be on examining two hypotheses based on the tournament theory—that is, (i) the relationship between section or department manager wage increases as promotion prizes and business establishment turnover, for which a positive correlation is envisaged, and (ii) the relationship between the likelihood of promotion to section or department managers and business establishment turnover, for which a negative correlation is envisaged.

IV. Data

Data used in the introductory part of this paper consist of microdata from the Wage Census and Employment Trends surveys. The empirical analysis discussed in Section V is based on datasets constructed by linking these two surveys via the establishment codes.

The Wage Census is a survey of business establishments conducted in June every year, targeting all establishments in all industries except agriculture. As well as surveying the attributes of each establishment, respondents are asked to give details of the June wages and working hours of randomly selected employees, based on the payroll ledger. The survey also enables each employee's employment format, working regime, years of service, occupation, job class and other details to be ascertained. Job classes are divided into four categories, namely director (department manager), section manager, chief and foreman. For the

analysis in this paper, department managers and section managers were regarded as executives corresponding to managerial posts, and the examination focused on whether workers are in these posts or not. With regard to wages, the hourly wage was used in logarithmic form. When estimating the hourly wage, the contractual wage (excluding overtime allowance) divided by contractual working hours was taken as the hourly wage on a contractual basis. At the same time, the sum of contractual wage and bonuses (converted to a monthly equivalent) was divided by the total of contractual working hours and overtime hours to produce an hourly wage including bonuses. Both of these were used to confirm the consistency of the results. Around 60,000–70,000 establishments respond to each survey, and microdata from private businesses between 1991 and 2012 were used for the analysis this time.

"Employment Trends," meanwhile, surveys business establishments twice a year (at the end of June and the end of December). Its main objective is to ascertain employee trends (the number of employees, component ratios for each attribute, etc.) at the point of the survey as well as details of incoming and outgoing career changes (new recruits, job leavers, staff reassignments, etc.) in the six months immediately prior to the survey. Using the results of this survey enables us to calculate the turnover, new recruit ratio, job leaver ratio, job creation ratio and job loss ratio for each establishment in each six-month period. These flow indicators can be worked out for both full-time and part-time workers[3] among the regular workers[4] targeted by the survey. The parent set of survey targets consists of establishments with five or more regular workers in 16 major industries, while selected establishments are continuously surveyed throughout the year. More than 10,000 establishments respond to each survey, and microdata from private businesses between 1993 and 2011 were used in the analysis this time.

In this paper's empirical analysis, microdata from these two surveys were matched for each establishment, and panel data were constructed at establishment level. When constructing data sets, sampling from both the Employment Trends and the Wage Census was based on a list of establishments created from the "Establishment and Enterprise Census" conducted by the Ministry of Internal Affairs and Communications. Thus, using name list information based on the latter from the 2001, 2004 and 2006 Census, establishments were linked in a cross-section between the Employment Trends and Wage Census for each year, while panel data were created as far as possible for establishments that are continuously targeted by the survey. Since name list information for establishments surveyed by Em-

[3] In this survey, "part-time workers" are defined as regular employees who have fewer scheduled working hours per day than ordinary workers in the same business establishment, or the same scheduled working hours per day but fewer scheduled working days per week than ordinary workers in the same establishment.

[4] In this survey, "regular employees" are defined as answering to any one of (i) persons employed with no defined period, (ii) persons employed for defined periods of more than 1 month, and (iii) persons employed for defined periods of 1 month or less or on a daily basis, who were employed for 18 days or more in each of the previous 2 months.

ployment Trends are only available for years from 2005 onwards, the survey years covered by the panel data were limited to the seven years between 2005 and 2011. During this time, the results of both surveys could be linked for around 2,000–2,500 establishments per year, producing an overall total of around 16,000 establishments. Of these, there were around 6,000 establishments with managerial posts of interest to this paper (i.e. both department and section managers). To align the survey frequency with that of the Wage Census, the information obtained from Employment Trends was converted to annualized rates. A point to note in connection with the panel data is that only establishments effectively coming under enterprises with 100 or more workers were analyzed, because samples are replaced every year and hardly any small-scale business establishments with large parent set numbers are included. This panelization of establishments means, on the one hand, that the majority of samples included in both surveys are placed outside the scope of analysis. However, the advantages of this method are that linking data from Employment Trends and Wage Census enables us to ascertain each establishment's promotion trends, wage system, external recruitment and worker outflow to other establishments, while the fixed effects of establishments can also be controlled.

V. Results of Empirical Analysis

1. Relationship between Executive Promotion Premium and Turnover

In the data, the executive promotion premium is reflected both in the fact that the inclination of the seniority wage curve becomes steeper upon promotion to a management-equivalent post, and in the effect whereby the wage curve itself shifts upwards (moves up to a higher wage curve). In this paper, this promotion premium is understood as an effect specific to each business establishment. Specifically, workers' microdata are used to estimate the following wage function (I) for full-time workers representing the potential pool of promotion competitors,[5] and the establishment average of the residuals is regarded as the expected value of establishment-specific effect (i.e. establishment premium).

$$\ln (w_{it}^{j}) = \alpha + \mathrm{B}X_{it} + \varepsilon_{it}^{j} \quad \ldots\ldots \text{(I)}$$

w_{it}^{j} : hourly wage (contractual or bonus-inclusive basis) of worker *i* working for establishment *j* in time period *t*

X_{it} : attributes of worker *i* (age, age squared, years of education dummy, gender dummy) or (age, age squared, years of education dummy, gender dummy, years of service, years of service squared) in time period *t*

ε_{it}^{j} : error term

[5] Specifically, samples are limited to those whose working regime is categorized as "regular" and those whose average working hours per day are fewer than 7, or those whose working days per month are fewer than 18 have been removed.

α, B : parameters

Since this establishment premium is thought to include factors specific to each establishment in reality, the ratio between the expected value of the residuals obtained from managerial post samples in a given establishment and the expected value of the residuals obtained from non-managerial post samples in the same establishment $\left[E(\varepsilon_t^{EXj})/E(\varepsilon_t^{NEXj})\right]$ ($E(\varepsilon_t^{EXj})$: expected value of the residuals obtained from managerial post samples, $E(\varepsilon_t^{NEXj})$: expected value of the residuals obtained from white collar non-managerial post samples[6]) is used in the estimations that follow as the managerial post premium in that establishment.

If years of service are added as explanatory variable X in equation (I), the establishment premium would not include the wage curve inclination in the labor market as a whole, and only the shift in the curve due to differences between establishments would be ascertained. But if years of service are not controlled, the estimation results would mean that both the difference in the curve shift and the difference in the wage curve inclination would be reflected in the premium.

The focus of this paper lies in whether a positive correlation, as envisaged in tournament theory, is seen between the managerial post premium specific to an establishment obtained in this way and the establishment's turnover. Therefore, from the need to handle the managerial post premium defined at an establishment level, we do not estimate the coefficient of the turnover rate per establishment in the normal wage function that takes individual worker's wages as an explained variable. Instead, after first estimating equation (I) using data on individual workers, we convert the data at an establishment level, and the relationship between the expected value of managerial post premium and turnover is verified in the 2nd stage. When doing so, the advantages of establishment panel data are exploited and the individual effects of business establishments are taken into account. (See [II] as an equation for estimating the fixed effect model.)

$$P_t^j = \gamma_j + \delta Y_t^j + \widetilde{\varepsilon_t^j} \quad \cdots\cdots \text{(II)}$$

P_t^j : managerial post premium obtained from estimation equation (I) (ratio of fixed effects for employees in managerial posts and those not in managerial posts)

Y_t^j: business establishment attributes (turnover rate, job reallocation rate (the sum of the job creation rate and the job destruction rate), part-time ratio, full-time employment change ratio,[7] difference between part-time and full-time turnover[8])

[6] Here, employees with specialized skills have been removed from the comparison targets.

[7] A proxy variable for the change in tournament size in which employees participate.

[8] Turnover is normally higher for part-timers than for full-timers, but the larger this difference, the more employment adjustment is mainly targeted at part-time workers at times of economic fluctuation,

γ_j : establishment fixed effects, δ : parameter

$\widetilde{\varepsilon_t^j}$: error term

Estimation equation (II) was used to estimate normal OLS in addition to the fixed effect model to confirm the consistency of the result. For OLS, the sector dummy and company scale to which the establishment belongs were added to the explanatory variables as business establishment attributes.

Table 1 and 2 show estimation results of the fixed effect model and OLS with control of establishment attributes on the basis of estimation equation (II), in connection with both the contractual hourly wage and the hourly wage including bonuses for the section manager and department manager premium, respectively. As stated above, the coefficients of establishment turnover and job reallocation rates envisaged by the theoretical model are positive, but the results do not necessarily always produce a significantly positive sign.

Viewing the results of Table 1 in detail, no significant relationship is seen between the department manager premium and turnover of full-time workers, etc., when premiums are measured in terms of the contractual hourly wage. As for the section manager premium, a significantly positive relationship is seen between premium and turnover when the impact of years of service is controlled and the shift in the wage curve is taken as a premium. Moreover, the estimated coefficient is larger in the fixed effect model than in OLS, and the interpretation could be that the difference between establishments in the tournament structure may have generated an apparent correlation.

As for the hourly wage including bonuses (Table 2), the same result was obtained for the department manager premium as for the section manager premium in terms of the contractual hourly wage. That is, a positive correlation with turnover is seen if we focus on the upward shift in the wage curve, and just as expected, the coefficient is larger when fixed effects are controlled. For the section manager premium, conversely, the coefficient of turnover is only significantly positive with OLS when years of service are controlled, and only with the fixed effect model when they are not controlled.

To summarize the above, while significant results have not been obtained for all models, there is reasonable ground to suggest that there could be a positive correlation between business establishment turnover, on the one hand, and department and section manager premiums on the other.

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etc. It is thought possible to regard this as a proxy variable for caution in employment adjustment of full-time workers.

Table 1. Determinants of Managerial Post Premium (Contractual Hourly Wage)

Estimation period: 2005−2011 (Annual)

Explained variables: Contractual hourly wage (logarithm) (1st stage), ratio between the expected value of the residuals obtained from observations in a management post in a given establishment and the expected value of the residuals obtained from observations in a non-management post in the same establishment (2nd stage)

Department Managers

Estimation I (Explanatory variable: worker's attributes)	Gender, age, age squared, education (1)	Gender, age, age squared, education (2)	Gender, age, age squared, education (3)	Gender, age, age squared, education, years of service, years of service squared (1)	Gender, age, age squared, education, years of service, years of service squared (2)	Gender, age, age squared, education, years of service, years of service squared (3)
Estimation II	OLS	OLS	Fixed effect model	OLS	OLS	Fixed effect model
Turnover rate (full-time)	0.285		-0.864	0.735		0.960
	(0.458)		(1.103)	(0.488)		(1.166)
Job reallocation rate (full-time)		-0.596			-0.655	
		(0.555)			(0.622)	
Employment change rate (full-time)	1.832 *	1.667	4.086 **	-0.596	-1.063	-4.623 *
	(1.071)	(1.089)	(2.045)	(0.594)	(1.151)	(2.188)
Difference in job reallocation rate (part-time – full-time)	-0.009	-0.052	0.139	-0.215 **	-0.253 **	-0.262
	(0.101)	(0.105)	(2.542)	(0.108)	(0.114)	(0.197)
Part-time ratio	-1.182 *	-1.130	1.296	-0.736	-1.207	1.386
	(0.624)	(0.726)	(2.542)	(0.651)	(0.770)	(2.720)
Sample size	4,063	3,609	4,063	4,100	3,641	4,100
Adjusted R squared	0.0491	0.0477	-	0.0353	0.030	-
R squared (fixed effect model)	-	-	0.0000	-	-	0.0013

Note: Includes annual dummy. 2nd stage OLS estimation includes establishment attributes among explanatory variables.
In parentheses: standard error. *, **, *** show significance at levels of 10%, 5% and 1%, in that order.

Explained variables: Contractual hourly wage (logarithm) (1st stage), ratio between the expected value of the residuals obtained from observations in a management post in a given establishment and the expected value of the residuals obtained from observations in a non-management post in the same establishment (2nd stage)

Section Managers

Estimation I (Explanatory variable: worker's attributes)	Gender, age, age squared, education (1)	Gender, age, age squared, education (2)	Gender, age, age squared, education (3)	Gender, age, age squared, education, years of service, years of service squared (1)	Gender, age, age squared, education, years of service, years of service squared (2)	Gender, age, age squared, education, years of service, years of service squared (3)
Estimation II	OLS	OLS	Fixed effect model	OLS	OLS	Fixed effect model
Turnover rate (full-time)	-0.045		-0.322	0.558 *		1.449 **
	(0.295)		(0.590)	(0.316)		(0.644)
Job reallocation rate (full-time)		-0.261			0.006	
		(0.412)			(0.435)	
Employment change rate (full-time)	1.009	1.073	-1.819	-0.423	-0.599	0.387
	(0.722)	(0.802)	(1.233)	(0.758)	(0.848)	(1.343)
Difference in job reallocation rate (part-time – full-time)	0.008	0.016	0.031	0.015	0.008	0.107 *
	(0.042)	(0.044)	(0.056)	(0.045)	(0.047)	(0.061)
Part-time ratio	-0.715 *	-1.012 **	-0.398	-0.128	-0.208	2.004
	(0.375)	(0.435)	(1.476)	(0.402)	(0.469)	(1.641)
Sample size	6,237	5,486	6,237	6,203	5,464	6,203
Adjusted R squared	0.0263	0.0274	-	0.0114	0.0109	-
R squared (fixed effect model)	-	-	0.001	-	-	0.000

Note: Includes annual dummy. 2nd stage OLS estimation includes establishment attributes among explanatory variables.
In parentheses: standard error. *, **, *** show significance at levels of 10%, 5% and 1%, in that order.

Table 2. Determinants of Managerial Post Premium (Hourly Wage Including Bonuses)

Estimation period: 2005−2011 (Annual)

Explained variables: Hourly wage including bonuses (logarithm) (1st stage), ratio between the expected value of the residuals obtained from observations in a management post in a given establishment and the expected value of the residuals obtained from observations in a non-management post in the same establishment (2nd stage)

	Department Managers					
Estimation I (Explanatory variable: worker's attributes)	Gender, age, age squared, education (1)	Gender, age, age squared, education (2)	Gender, age, age squared, education (3)	Gender, age, age squared, education, years of service, years of service squared (1)	Gender, age, age squared, education, years of service, years of service squared (2)	Gender, age, age squared, education, years of service, years of service squared (3)
Estimation II	OLS	OLS	Fixed effect model	OLS	OLS	Fixed effect model
Turnover rate (full-time)	-0.260		-0.376	0.907 **		1.784 *
	(0.365)		(0.754)	(0.400)		(0.968)
Job reallocation rate (full-time)		-0.427			0.057	
		(0.442)			(0.496)	
Employment change rate	1.445 *	1.454 *	1.513	0.244	-0.481	1.121
(full-time)	(0.854)	(0.868)	(1.395)	(0.946)	(0.976)	(1.845)
Difference in job reallocation	-0.061	-0.052	(0.069)	-0.015	-0.039	0.190
rate (part-time – full-time)	(0.080)	(0.083)	(0.124)	(0.088)	(0.093)	(0.160)
Part-time ratio	-0.981 **	-1.049 *	0.094	-0.228	-0.310	-0.362
	(0.499)	(0.580)	(1.752)	(0.550)	(0.647)	(2.264)
Sample size	4,108	3,650	4,108	4,097	3,639	4,097
Adjusted R squared	0.0502	0.0521 -		0.0279	0.0255	-
R squared (fixed effect model)	-	-	0.0018	-	-	0.002

Note : Includes annual dummy. 2nd stage OLS estimation includes establishment attributes among explanatory variables.
In parentheses: standard error. *, **, *** show significance at levels of 10%, 5% and 1%, in that order.

Explained variables: Hourly wage including bonuses (logarithm) (1st stage), ratio between the expected value of the residuals obtained from observations in a management post in a given establishment and the expected value of the residuals obtained from observations in a non-management post in the same establishment (2nd stage)

	Section Managers					
Estimation I (Explanatory variable: worker's attributes)	Gender, age, age squared, education (1)	Gender, age, age squared, education (2)	Gender, age, age squared, education (3)	Gender, age, age squared, education, years of service, years of service squared (1)	Gender, age, age squared, education, years of service, years of service squared (2)	Gender, age, age squared, education, years of service, years of service squared (3)
Estimation II	OLS	OLS	Fixed effect model	OLS	OLS	Fixed effect model
Turnover rate (full-time)	0.238		0.842 *	0.554 **		0.200
	(0.244)		(0.509)	(0.259)		(0.537)
Job reallocation rate (full-time)		0.457			-0.020	
		(0.340)			(0.357)	
Employment change rate	0.108	0.089	0.537	0.654	0.598	0.754
(full-time)	(0.590)	(0.662)	(1.074)	(0.627)	(0.695)	(1.118)
Difference in job reallocation	-0.063 *	-0.045	-0.007	-0.031	-0.038	0.036
rate (part-time – full-time)	(0.035)	(0.037)	(0.048)	(0.038)	(0.039)	(0.052)
Part-time ratio	-0.344	-0.365	1.127	-0.381	-0.232	-1.205
	(0.309)	(0.365)	(1.260)	(0.332)	(0.388)	(1.383)
Sample size	6,280	5,528	6,280	6,228	5,476	6,228
Adjusted R squared	0.027	0.0270	-	0.023	0.02	-
R squared (fixed effect model)	-	-	0.0003	-	-	0.002

Note : Includes annual dummy. 2nd stage OLS estimation includes establishment attributes among explanatory variables.
In parentheses: standard error. *, **, *** show significance at levels of 10%, 5% and 1%, in that order.

2. Relationship between Promotion Likelihood and Turnover: With Focus on Lifetime Employees

In the previous section, we examined how the promotion premium as a prize in competition for promotion is related to the increased fluidity of business establishments, based on tournament theory. As a result, it was shown that increased fluidity of employment could serve to push up promotion premiums, particularly in connection with promotions to section manager class. Another aspect of competition for promotion is the likelihood of being promoted, and this point will be investigated here. However, considering the Figures in this paper so far, whether or not there are changes in competition for promotion among lifetime employees could be more important when discussing changes in so-called Japanese employment practices and the functions of internal labor markets. To address this, Table 3 shows the result of estimating determinants behind the likelihood of lifetime employees being promoted to section manager.

Using a binary variable (i.e. '1' if a lifetime employee is a section manager, '0' if below section manager level) as explained variables, and the attributes of both the individual and the establishment as explanatory variables, workers' microdata were used to estimate the effect for business establishments by means of controlled OLS. The focus of this estimation is on whether the coefficient of turnover at establishment level is negatively significant to the likelihood of promotion, and the derived signs were negative in all models. This was invariably the case, whether using the turnover, recruitment rate, or job leaving rate of full-time workers as explanatory variables. That is, the implication is that it is harder for lifetime employees to be promoted to section manager in establishments with a rapid turnover of full-time workers. Figure 4 above showed the share of section managers among lifetime employees and non-lifetime employees by age, revealing that, although the share of section managers increases after passing 45, non-lifetime employees are also increasingly promoted to section manager. At this time, competition between external recruits and lifetime employees intensifies in establishments that have high ratios of external recruits and rapid staff turnover, suggesting that promotion becomes harder for lifetime employees.

Though the results are not expressed graphically here, if we make the same estimation for the likelihood of promotion to department manager, this time the signs are positive in all models. The same applies whether using the turnover, recruitment rate, or job leaving rate as an explanatory variable. This could be because lifetime employees do not necessarily share the same arena of competition with external recruits, since, in contrast to section managers, most young department managers in their 30s to mid-40s are external recruits, while the share of lifetime employee department managers overtakes that of external recruit department manager from the mid-40s onwards. There is no uniform trend in turnover itself during the estimation period. After 2005, however, both the turnover and the job reallocation rate peaked in around 2008 and 2009, corresponding to the Lehman collapse and the ensuing economic downturn (Table 4). This suggests that changes in the labor market for intermediate-age workers seen so far could have been in progress during the period of

Table 3. Factors in the Promotion of Lifetime Employees to Section Manager

	Section Manager							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	OLS	OLS	OLS	OLS + establishment effect	OLS	OLS	OLS	OLS + establishment effect
Establishment attributes								
Employment change rate (full-time)	-0.115 ***	-0.110 ***	-0.137 ***	-0.301 ***	-0.122 ***	-0.112 ***	-0.139 ***	-0.173 ***
	(0.008)	(0.008)	(0.009)	(0.017)	(0.008)	(0.009)	(0.009)	(0.014)
Part-time ratio	0.017 ***	0.018 ***	0.017 ***	-0.213 ***	-0.047 ***	-0.047 ***	-0.047 ***	-0.160 ***
	(0.004)	(0.004)	(0.004)	(0.017)	(0.004)	(0.004)	(0.004)	(0.014)
Difference in job reallocation rate	0.0297 ***	0.0300 ***	0.0296 ***	0.00496 **	0.0256 ***	0.0257 ***	0.0255 ***	0.00568 ***
(part-time − full-time)	(0.001)	(0.001)	(0.001)	(0.002)	(0.008)	(0.001)	(0.001)	(0.002)
Corporate scale 5,000 or more employees	-0.0008	-0.0018	-0.0004	-	0.0824	0.0819 ***	0.0826 ***	-
	(0.003)	(0.003)	(0.003)		(0.003)	(0.003)	(0.003)	
Corporate scale 1,000−5,000 employees	0.00798 ***	0.00747 ***	0.00811 ***	-	0.0833 ***	0.0831 ***	0.0833 **	-
	(0.003)	(2.730)	(0.003)		(0.003)	(0.003)	(0.003)	
Corporate scale 500−999 employees	-0.0065 **	-0.0065 **	-0.0067 **	-	0.0574 **	0.0575 ***	0.0573 ***	-
	(0.003)	(0.003)	(0.003)		(0.003)	(0.003)	(0.003)	
Corporate scale 300−499 employees	0.0432 ***	0.0421 ***	0.0441 ***	-	0.104 ***	0.104 ***	0.105 ***	-
	(0.004)	(0.004)	(0.004)		(0.004)	(0.004)	(0.004)	
Corporate scale 300 or less employees	-	-	-	-	-	-	-	-
Turnover rate (full-time)	-0.0137 ***	-	-	-0.177 ***	-0.0146 ***	-	-	-0.136 ***
	(0.003)			(0.007)	(0.003)			(0.006)
Recruitment rate (full-time)	-	-0.0066	-	-	-	-0.0175 ***		-
		(0.006)				(0.006)		
Job leaving rate (full-time)	-	-	-0.0397 ***	-	-	-	-0.0334 ***	-
			(0.005)				(0.005)	
Other controls (worker's attributes)	Age, age squared, years of service, years of service squared, years of education				Age, age squared, years of education			
Sample size	626,204	626,204	626,204	626,204	626,204	626,204	626,204	626,204
Pseudo coefficient of determination	0.2014	0.2013	0.2014	0.4023	0.1482	0.1481	0.1482	0.3251

Table 4. Trends in Turnover and Job Reallocation Rates

Explained variable	Turnover rate (full-time)	Job reallocation rate (full-time)
Trend	0.0174 **	0.0181 **
	(0.007)	(0.007)
Trend squared	-0.00237 ***	-0.00218 **
	(0.001)	(0.001)
Peak theoretical value (year)	3.68	4.15
Sample size	5,458	4,933

Note: Results of estimation using the fixed effect model. Estimation period 2005–2011. Explained variables are the turnover and job reallocation rate for each business establishment.

economic expansion before the Lehman collapse. As such, differentiating factors that arise from business cycles is an issue that remains to be addressed.

VI. Interpretation of Estimation Results and Conclusion

The main focus of this paper lay in ascertaining what sort of structural changes have been experienced in the labor market by intermediate-age workers, who represent the core of the long-term employment system, over the two decades since the collapse of the bubble economy. As a result of examination in terms of both the wages of intermediate-age workers and trends in their promotion to executive posts, it became clear that even within the cohort of intermediate-age workers, trends in such changes varied depending on the workers' individual attributes. Specifically, different structural changes appear to have occurred in cases of internal promotion from section manager to department manager and those of internal promotion from below section manager to section manager. On the promotion to section manager, the posterior likelihood of being promoted has increased as the share of section managers has increased overall, while wages after promotion have decreased, albeit by a small margin. Meanwhile, if establishment fixed effects are controlled and other conditions are made constant, the section manager premium tends to rise as the impact of competition with external recruits grows stronger, while at the same time the likelihood of internal promotion tends to fall. These changes are consistent with the tournament structure discussed in the rank-order-tournament model. Although it is uncertain whether increased fluidity of the labor market at the point of promotion to section manager can be said to have advanced so far as to destroy Japanese employment practices, the suggestion is that frameworks discussed in economics can be applied to the mechanism behind this. We also know that the increased fluidity of the labor market and the promotional structure of intermediate-age workers are not unrelated.

On promotions to department manager, meanwhile, here again the share of depart-

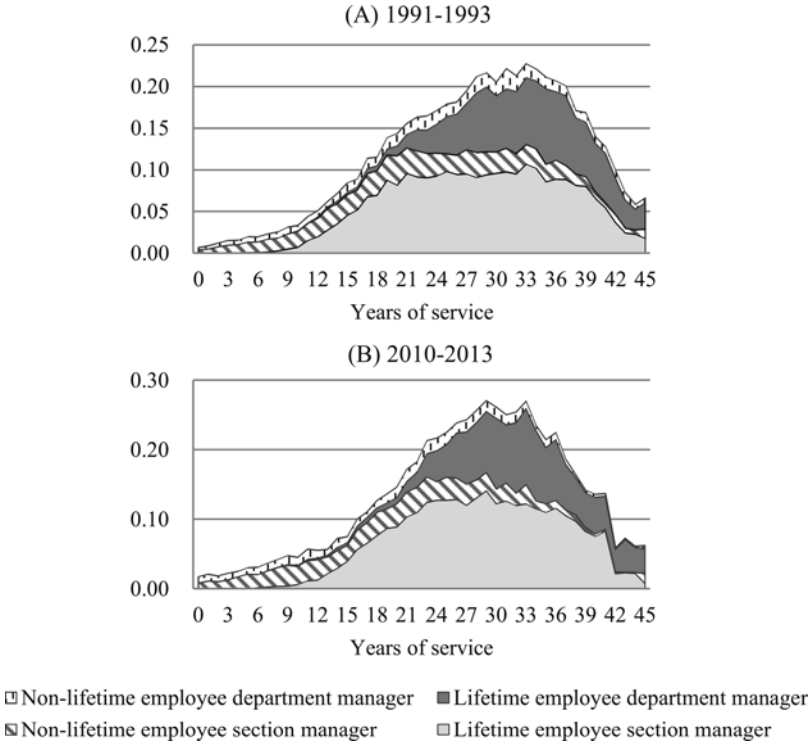
ment managers has risen and wages have also fallen somewhat, but the degree of these changes is far more limited than in the case of section managers. If the establishment fixed effects are controlled, the premium tends to be higher if the impact of competition with external recruits is stronger, just as with section managers. However, the likelihood of internal promotion is conversely higher if the impact of competition with external recruits is stronger. Therefore, the estimation results are not necessarily consistent with the tournament model. Behind this lies the fact that, while non-lifetime department managers are hired as such at a relatively early age, other non-lifetime employees have a low likelihood of being promoted to department manager even after amassing long years of service; instead, lifetime employees have a relatively greater likelihood of promotion to department manager as their age increases. We may therefore point to the possibility that there is still not much competition within companies between external recruits and lifetime employees beyond a certain age when it comes to department manager posts. In that sense, the relationship between the lifetime employee group and the mid-career recruit group is not a completely competitive one as far as department manager posts are concerned; rather, the pre-existing structure of intermediate-age workers does not seem to have changed greatly.

To examine the group of workers who form the core of labor power in Japanese companies, in this paper the term “intermediate-age workers” has been used for convenience to describe full-time workers in a certain age bracket, and their trends have been observed. It has been suggested, however, that the mechanisms behind the promotions and wage setting of these intermediate-age workers are diverse.

This kind of diversity cannot be explained easily by using a single, simple model such as the rank-order-tournament. However, the result obtained from analysis in this paper, i.e. that promotion to department manager is not necessarily consistent with the tournament model, could become explainable by expanding the model. Specifically, tournaments within companies should be understood as having an inherently multi-staged structure, and the promotion of lifetime employees to department manager, as the next step after promotion to section manager, is thought to require ongoing examination. The authors therefore aim to make this a task for future study.

Source: Calculated by the authors from the *Wage Census*.
Note: Wage dispersion ratio = (Wage dispersion of intermediate-age workers) / (Overall wage dispersion)

Appendix Figure 1. Trends in Wage Dispersion among Intermediate-Age Workers in Large Corporations



Source: Calculated by the authors from the *Wage Census*.

Appendix Figure 2. Shares of Department and Section Managers by Years of Service: Lifetime Employees vs. Others

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Current Status and Issues Facing Employees of Intermediate Age in the Workplace: From the Perspective of Labor-Management Relations

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This article outlines issues surrounding the workplace circumstances of employees of intermediate age, who act as the linchpin of enterprises' human resources. In Japanese companies there is significant correspondence between age and rank due to seniority-based promotions, meaning that in effect intermediate age (for the purposes of this article, age 35–49) is often synonymous with intermediate rank (i.e. "middle management"). These employees tend to be extremely overworked, and it is predicted that this situation will grow even more severe in the future. Excessive workload may be caused by a shortage of employees of intermediate age, or may arise when there are a sufficient number of employees at this age/rank but an insufficient number of younger workers, or even when there are more employees of intermediate age than required, but an insufficient number of both younger and middle-aged or older workers. Under such circumstances employees of intermediate age must handle tasks that ought to be performed by their juniors or seniors, and this results in inadequate time left over for training their juniors or subordinates, which in turn causes a high rate of turnover among younger workers. The problems of employees of intermediate age influence other age groups as well and affect the entire workplace. Behind this problem lies a backdrop of uneven age distribution, a primary cause of which is the widespread curtailing or suspension of hiring of new graduates at many companies in the past. As a result, workplaces today need a sufficient number of new graduates to fill the gap, but discussions or negotiations between labor and management to determine what this "sufficient number" might be only take place at around 16% of enterprises. Human resources are the bedrock on which businesses are built, and today there is an urgent need to consider this issue from a long-term perspective.

I. Recognition of Issues

Continued existence and expansion are among the main objectives of enterprises' business operations, and to achieve this, it is vital that skills and techniques be handed down from one generation to the next, and that they evolve and develop. A company is upheld by its workers, and the trajectory of a worker's career ought to begin with acquisition of predecessors' knowledge, wisdom, and skills, continue with improvement and advancement of the worker's own professional competencies, and be completed when he or she hands them down to successors. This process is what underlies both the growth of enterprises and the

maintenance and improvement of workers' standards of living. In Japan, many workers are hired upon graduation, learn their trade from square one while working for that employer, and attain competence and self-sufficiency in the workplace, becoming one of the core personnel that uphold the company and cultivate younger co-workers who will eventually succeed them. In other words, for both enterprises and their employees, the axis of time—a worker's career path involving inheriting knowledge, skills, and techniques from predecessors, developing, and growing professionally—is a crucial backbone of the workplace. For each worker, this process takes place in parallel with other members of his or her own age cohort, and bonds among members of a certain generation who have been trained and worked together are indispensable, as is mutual cooperation between different age cohorts. For this system to function effectively, the age distribution of a workplace must have sufficient balance. When workers of various age groups cooperate and fulfill their duties, business operations are smoothly executed, human resources are cultivated, and skills and techniques are handed down and develop over time. Without appropriate age balance, on the other hand, the entire system may break down.

Unfortunately, this appropriate age balance is not easily achieved. Japanese society is progressively aging, and the population of working-age adults is aging as well and is projected to shrink in the future. Educational levels are also rising and the percentage of students advancing to university now exceeds 50%, while with the enactment of the amended Act on Stabilization of Employment of Elderly Persons in April 2013, it is mandatory for companies to offer continued employment to workers who seek it through age 65. The average age at which people enter the workforce is rising, as is the average age of retirement. Workplaces as a whole are aging, and there already serious concerns in some quarters about insufficient numbers of younger workers.

Economic fluctuations also have a significant impact. During the economic bubble of the late 1980s, enormous numbers of new graduates were hired en masse, while during the prolonged recession that followed, there was a hiring slowdown referred to as an "employment ice age," with many enterprises strictly curbing or completely suspending hiring. It can be deduced that due to this legacy, many workplaces today have a worker age distribution that does not match their needs.

Age-related trends across Japanese society as a whole are also likely to impact workplace age distribution substantially in the future, and it will become increasingly difficult to maintain the status quo. As discussed earlier, workplace age balance plays a major role in regulating enterprises' continued existence and growth, workers' professional development, and workers' economic security. However, looking back over the past 20 years, and looking forward to the future trajectory of Japanese society, it is clearly evident that social and economic trends may stand in the way of securing appropriate workplace age balance. This will in turn generate a variety of problems in the workplace.

With this in mind, this article focuses on workplace age distribution and on employ-

ees of intermediate age[1] in particular, seeking to clarify their circumstances and the challenges they face on the job. Employees of intermediate age form the crux of enterprises' human resources, they play a vital role in their operations, and as a bridge between middle-aged and older workers and younger, less experienced employees, they are indispensable for business operations and personnel cultivation, exerting an enormous influence over entire workplaces because of the central role in securing overall coordination and cooperation. Analysis of the intermediate age group means not only examination of this generation's current circumstances, but by extension, clarification of the current status and issues surrounding the overall age distribution of workplaces in Japan today.

II. Current Circumstances and Existing Research

1. The Central Role of the Intermediate Age Period

For many people, the intermediate age period (age 35 to 49) is one of heavy responsibility both at work and at home. This life stage (or career phase) is understood as one in which people establish themselves, and in the workplace this means becoming highly accustomed to and competent at specific jobs, accumulating experience and fulfilling responsibilities by performing these jobs, making contributions to their occupational fields and heightening their degree of specialization, and generally advancing their careers.[2] During this period, workers grow into human resources of great value to their employers, gaining authority over subordinates and fulfilling social responsibilities through their work. They strive to heighten their own competencies further, and are expected both to grow professionally as individuals, and to contribute to the development of specialized skills and techniques in their fields of expertise.

This article discusses employees of intermediate age in their roles as the crucial core of the workforce. They are on the front lines of day-to-day business operations, and at the same time act as the "backbone" of their organizations, connecting predecessors from whom they learned their trades with younger workers whom they are guiding and cultivating. This means that if this age cohort is unable to carry out its duties and fulfill its functions properly, it will not only interfere enormously with current business operations, but can also threaten the future growth and the very survival of the enterprise. With workers of this age expected to fulfill such an important and heavy responsibility to society, and to grow professionally as individuals, this is clearly the crucial stage in career formation and the circumstances of these employees exert an outsized influence over other demographic cohorts as well.

However, research on the working styles and workplace circumstances and issues of this cohort is extremely scarce. Much attention has been paid to diverse issues relating to younger workers, such as difficulty in finding employment after graduation and the high

[1] In this article, the term refers to regular employees.
[2] See Super (1957), Super, Sverko and Super (1995).

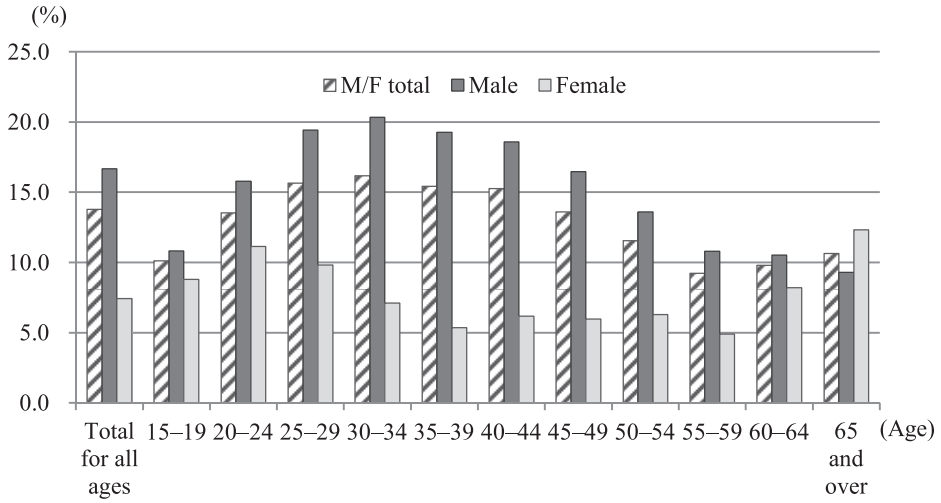
rate of resignation soon after hiring, and numerous studies have been conducted. There have also been many studies on middle-aged and older workers, analyzing their content of duties, workplace circumstances, labor conditions and so forth, with reference to the amended Act on Stabilization of Employment of Elderly Persons enacted in 2013 and problems with the pension system. Compared to their juniors and seniors, however, employees of intermediate age have relatively little impact on the external labor market, as they are generally neither entering it nor leaving it, and issues affecting this age group are not as manifest in broader society. When breaking down Japan's total unemployment rate by age group, the intermediate cohort has the lowest unemployment rate, and has not been the focus of attention in recent years, making actual workplace circumstances difficult to monitor. Despite it being such a crucial stage both for enterprises' business operations and individual employees' careers, there is a serious paucity of research that details the circumstances surrounding and issues facing employees of intermediate age.

2. Long Working Hours

With regard to the working styles of intermediate-aged employees, the area of greatest concern has been excessively long working hours. In the Japanese labor force as a whole, this area is showing signs of improvement, as government, management, and labor work together on efforts to promote work-life balance. According to the Ministry of Internal Affairs and Communications (MIC) Statistics Bureau's Fiscal 2012 Employment Status Survey, the percentage of all regular employees who work 60 or more hours per week has fallen since the previous survey in 2007. However, when these figures are broken down by age group, the highest percentage is among workers aged 30–34 (16.2%), followed by age 25–29 (15.7%), closely followed by age 35–39 (15.4%) and age 40–44 (15.3%). It is evident that workers of intermediate age, in addition to younger workers, have high rates of overly long work hours (Figure 1). With regard to male employees only, approximately 20% of both the younger and intermediate-age demographic work 60 or more hours per week. Thus, the problem of excessively long work hours cannot be called resolved.

The Ministry of Health, Labour and Welfare's Summary of Occupational Accident Compensation for Brain- and Heart-Related Disease and Mental Disabilities (2013) shows the greatest number of claims for compensation for mental disabilities in the 30–39 age group (428 cases) followed by the 40–49 age group with 421. These are between 1.5 and 2 times the totals for age 20–29 (277 cases) and 50–59 (218 cases). The number of cases officially determined to be work-related is also markedly higher among employees of intermediate age, with 382 for the 30–39 and 347 for the 40–49 cohort. The MIC Statistics Bureau's Survey on Time Use and Leisure Activities (2011) indicates a relatively high incidence of poor health among workers whose weekly work hours exceed 60, and there is no doubt that such long working hours exact a heavy toll on workers both mentally and physically.

With this in mind, let us examine the actual working styles and circumstances of employees of intermediate age, and analyze the reasons for disproportionate workload and



Source: Ministry of Internal Affairs and Communications, *Fiscal 2012 Employment Status Survey* (nationwide survey).

Note: Regular employees / civil servants whose number of working days/hours is "Unclear" are omitted from this tabulation.

Figure 1. Percentage of Regular Employees Working 60 or More Hours per Week (By Age Group)

imbalance in assignment of responsibilities.

III. Survey and Analysis

This section discusses the working styles of employees of intermediate age, the workplace issues they face, and measures to address them.

1. Survey Data

The survey data employed here was obtained from responses to questionnaire and interview surveys administered to enterprise labor unions by the Research Institute for Advancement of Living Standards (2014).[3] The authors also participated in this survey, which gives a clear picture of workplace age distribution, the circumstances of each age group, and the various issues that arise as a result. Here, we focus on and analyze questionnaire survey results relating to employees of intermediate age (35–49), and on results of interview surveys targeting labor unions at enterprises where employees of intermediate age are experi-

[3] Between November 2012 and May 2014, the Research Institute for Advancement of Living Standards conducted a survey by administering questionnaires and conducting interviews at labor unions so as to gauge the state of age distribution in workplaces and related issues. The results are compiled in Research Institute for Advancement of Living Standards (2014). Refer to the report for further details.

encing workplace problems and some sort of countermeasures are being adopted.[4]

2. Current Circumstances of Employees of Intermediate Age

Figure 2 illustrates the wide range of problems that employees of intermediate age experience in the workplace.[5] Among these the most commonly cited are "Increase in workload" and "Insufficient time to provide guidance and training to juniors and subordinates," both of which were experienced by 62.6% of respondents. These are followed by "Increase in overtime work" with 62.1%, and "Inadequate communication with colleagues, superiors, and subordinates" with 55.1%. From these responses it is evident that with extremely hectic work schedules, intermediate-aged employees are unable to communicate adequately with both older and younger age cohorts, and cannot find sufficient time to train the younger employees who will succeed them.

Could intermediate-aged employees' excessive workload be only a temporary situation? A look forward at projections for the next five years reveals that in fact, a rising number of enterprises are expecting the problem to worsen. More than four in five labor unions (80.8%) predict an "Increase in volume of work" five years from now, and nearly as many (79.0%) predict "Insufficient time to provide guidance and training to juniors and subordinates." Nearly as prevalent at 76.9% are labor unions forecasting an "Increase in overtime work," and for virtually all of the other survey items, 65% or more of unions foresaw the problems in question occurring in five years' time.

In short, employees of intermediate age are already extremely overworked and related problems are occurring in many workplaces, and this is far from being a temporary situation. On the contrary, the number of these workplaces is expected to rise further, and as the survey shows, the workplace circumstances faced by employees in this age group are truly severe.

Next, let us examine the working styles and workplace circumstances of intermediate-aged employees, and identify some of the reasons for their excessive workload.

3. Appropriate Balance of Volume of Work and Number of Employees

The greatest single cause of individual employees' excessive workloads is an imbalance between the volume of work and the number of workers assigned to complete it.[6] With this in mind, let us consider what an appropriate number of employees of intermediate age might be.

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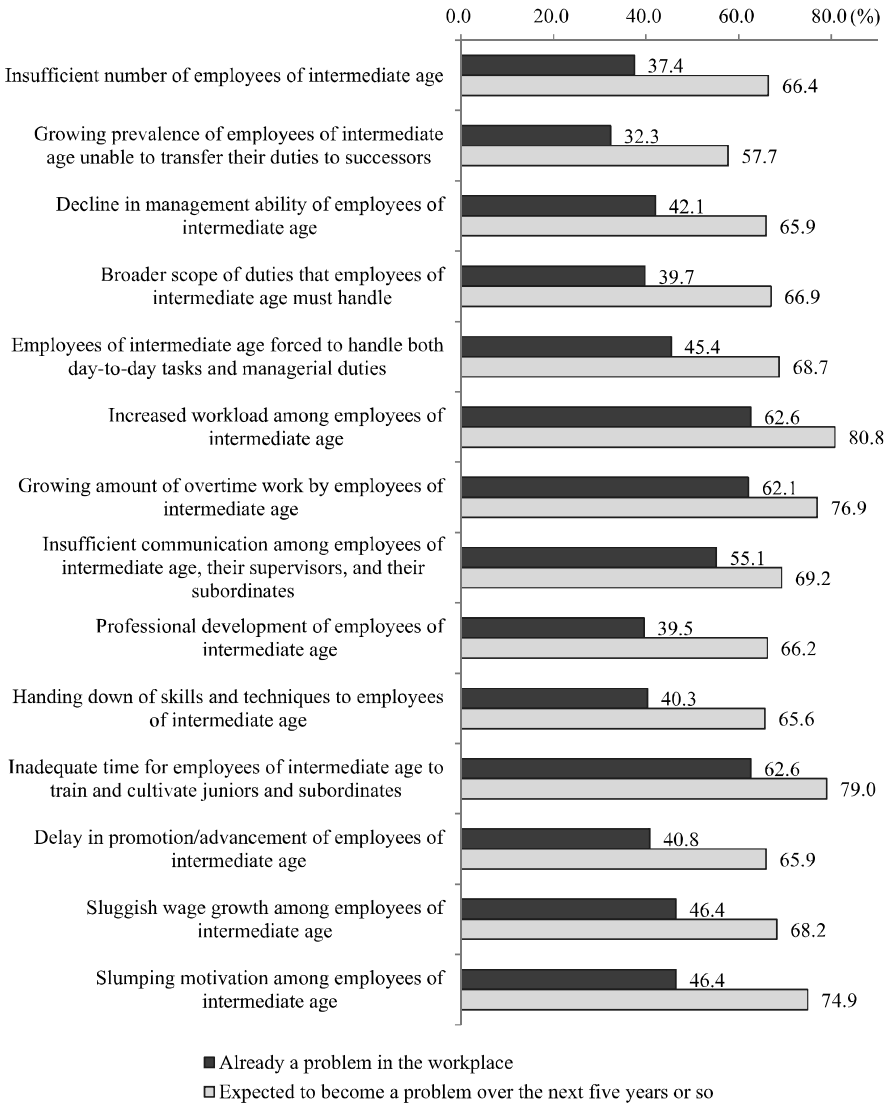
[4] In this article, "younger employees" are those up to age 34, "employees of intermediate age" aged 35–49, "middle-aged employees" aged 50–59, and "older employees" 60 and above.

[5] The responses in this paragraph are to the question on the Research Institute for Advancement of Living Standard (2014) survey question "Do the following problems currently affect employees of intermediate age in your workplace? Do you expect them to be a problem five years from now?"

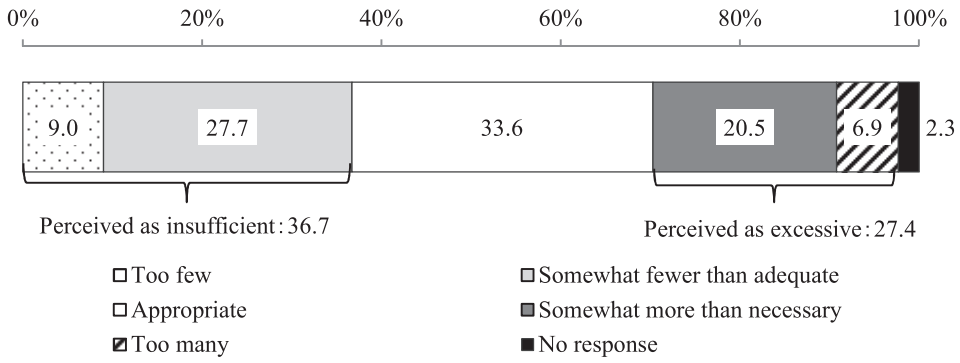
[6] In general, the most commonly cited reason for overtime work is an excessive per-person workload. See Ebisuno (2002).



Source: Prepared on the basis of the Research Institute for Advancement of Living Standards, *Questionnaire Survey on Changing Age Distribution and Labor-Management Relations (2013)*.

Note: Percentages for "Already a problem in the workplace" are the total of responses "Currently a problem, and expected to be one in the future as well" and "Currently a problem, but not expected to be a problem in the future." Percentages for "Expected to become a problem over the next five years or so" are the total of responses "Currently a problem, and expected to be one in the future as well" and "Not a problem now, but expected to become one in the future."

Figure 2. Current Workplace Issues and Future Projections for Employees of Intermediate Age (N=390)



Source: Prepared on the basis of the Research Institute for Advancement of Living Standards, *Questionnaire Survey on Changing Age Distribution and Labor-Management Relations (2013).*

Figure 3. Perception of Number of Employees of Intermediate Age (N=390)

In researching appropriate age distribution in the course of this survey, it was found that no uniform model exists for calculating it. Age distributions that in the past would have been considered optimal, such as with a preponderance of younger workers or with even distribution of ages, are today not necessarily considered ideal in all cases. Over the past 20 years or so not all enterprises have expanded, and many have seen their business shrink amid harsh economic conditions, while others have been radically reorganized through mergers, spinoffs, or other restructuring, or have downsized their domestic operations while expanding overseas. As a result the required number of employees, overall and of specific age groups, differs depending on the organization, and optimum age distribution can change over time. For this reason there is no consistent model for age distribution, and it varies depending on conditions and circumstances. Also, the rising number of non-regular employees has led to narrowing or transformation of regular employees' scope of duties or content of work, and in some cases to downsizing or complete elimination of regular employees in some workplaces. In short, changes to organizations, content of work, or management policies have the effect of altering the number of employees needed and their appropriate age distribution, and the image of optimal age balance varies depending on conditions.

With this in mind, we examined how the current situation at enterprises and in workplaces compares with the number of employees of intermediate age that would be optimal. The results are shown in Figure 3. The greatest number, approximately one-third (33.6%), responded that they had the appropriate number of employees of this age group, followed by "somewhat fewer than adequate" at 27.7% and "somewhat more than necessary" at 20.5%. However, the percentage responding either "somewhat fewer than adequate" (27.7%) or "too few" (9.0%) adds up to 36.7%, and "somewhat more than necessary"

Table 1. Top Three Areas in Which Number of Intermediate-Age Employees Is Perceived as Problematic (Too Few / Too Many)

(Single Answer, N=390)

	Increase in volume of work		Increase in overtime work		Insufficient time to provide guidance and training to juniors and subordinates	
	Current (244)	Future (315)	Current (242)	Future (300)	Current (244)	Future (308)
Perceived as insufficient	36.9	36.8	39.3	37.0	40.2	38.3
Too few	9.0	8.3	8.7	8.7	10.2	9.1
Somewhat fewer than adequate	27.9	28.6	30.6	28.3	29.9	29.2
Appropriate	31.1	32.7	30.6	34.0	30.7	32.1
Perceived as excessive	31.1	28.9	29.3	27.3	27.9	27.9
Somewhat more than necessary	22.5	20.6	20.2	19.7	20.9	20.8
Too many	8.6	8.3	9.1	7.7	7.0	7.1
No response	0.8	1.6	0.8	1.7	1.2	1.6

Source: Prepared on the basis of the Research Institute for Advancement of Living Standards, *Questionnaire Survey on Changing Age Distribution and Labor-Management Relations (2013).*
Note: Numbers in parentheses on table indicate total number of responses.

(20.5%) and "too many" (6.9%) to 27.4%, meaning that while "appropriate number" may have been the most common response, there is an obvious and almost equal three-way division between these labor unions and those that feel they have either too few or too many employees of the age cohort in question.

Table 1 shows the distribution of enterprise labor unions that feel they have an inadequate or excessive number of employees of intermediate age, by relevant issue. The top three issues are "Increase in volume of work," "Insufficient time to provide guidance and training to juniors and subordinates," and "Increase in overtime work."

Examining the number of employees of intermediate age in workplaces where the top three issues above are cited, the largest category of labor unions responding to the survey (nearly 40%) felt that there were an insufficient number of employees of this age cohort. However, this does not constitute all or even a majority of workplaces perceiving these three problems both in the present and in the future, and in fact they are fairly evenly divided into three groups, with over 30% believing they currently had an "appropriate" number of these employees, and nearly 30% feeling they had an "excessive" number. Labor unions perceiving a workplace as having an "appropriate" number of employees of intermediate age does not necessarily mean it is free of issues, and in fact many of these workplaces face the issue of excessive workload, with the proportion likely to grow further in the future.

How can overworked employees (of intermediate age), with overly hectic schedules, be reconciled with a perception of an "appropriate" or even "excessive" number of these employees? When we consider balance between volume of work and number of personnel, workplaces with too many or just the right number of personnel ought not to have chronically overworked employees. Let us examine the interview survey results in detail to determine why this might be occurring.

4. Three Patterns of Excessive Workload among Employees of Intermediate Age

Here we will examine responses from 11 enterprise labor unions participating in the Research Institute interview survey and responding that employees of intermediate age experienced problems in the workplace. Table 2 shows the nature of problems experienced by employees of intermediate age and workplace circumstances, etc.[7]

Perceptions regarding the number of employees of intermediate age can be divided into three types: A (perceiving the number of these employees as insufficient), B (optimal), and C (excessive). Let us examine the characteristics of these three types.

Type A

Labor unions responding that their workplaces have "somewhat fewer than adequate" or "too few" employees of intermediate age fit this type. Because there are not enough of said employees to handle the volume of work they must handle, each individual employee's workload is too great, and the employees are overworked. As a result, they do not have enough time to train their juniors or subordinates. Many of these respondents perceive the number of younger workers as "appropriate," indicating that personnel numbers (intermediate-age employees to younger employees) are imbalanced so that there is a relative scarcity of personnel in the position of "teaching" position and too many in that of "learning."

A notable cause of this situation is widespread curtailment or suspension of hiring in the past, with many respondents indicating that their organizations had greatly cut back on or completely frozen hiring of new graduates during the so-called employment ice age (roughly the early 90s through the mid-2000s) following the massive hiring of the economic bubble period (late 80s to the beginning of the 90s).

Type B

Workplaces in this category are perceived as having the right number of employees of intermediate age, but at the same time these employees are barely able to keep up with the workload and cannot find sufficient time to train their juniors or subordinates. One would assume that an "appropriate" number of workers would mean a good balance between number of employees and volume of work, and that employees would not be overworked,

[7] Outline of results from 11 labor unions is shown in Appendix Table (page 53). For further details, refer to Research Institute for Advancement of Living Standards (2014).

so why is this problem afflicting employees of intermediate age? Detailed examination of the responses reveals a common theme, namely the perception that there are not enough younger workers. This indicates that due to a lack of younger workers, their seniors are performing what ought to be their duties—the experienced core personnel of the workplace, who are in positions of responsibility, are executing tasks that can and should be handled by younger and less experienced personnel. In other words, there are enough intermediate-age employees to handle the tasks that should rightly be theirs, but they are overworked because they are also handling tasks that should be the province of younger employees.

Why are there too few younger workers in these workplaces? Again, we come up against the legacy of past cutbacks and freezes in hiring of new graduates, particularly during the so-called employment ice age.

Type C

Respondents in this category claimed the number of employees of intermediate age was "somewhat more than necessary" or even "excessive," but at the same time these employees appear to be overburdened, working excessively long hours and finding insufficient time to train or guide younger workers. Despite having more intermediate-age employees than would be required to handle the tasks that ought to be theirs, these workplaces report that workers in this age group are overworked. What these workplaces appear to have in common is a perceived shortage of both younger workers and middle-aged and older workers.

The problem of insufficient younger workers due to curbing or suspension of hiring of new graduates during the so-called employment ice age is shared in common with Type B, but in addition to this, middle-aged and older workers are in short supply because of large-scale employee transfers and early retirements during periods of recession. For this reason, employees of intermediate age are not able to dedicate themselves fully to their proper role as core personnel, connecting and bridging the gap between younger and older workers, but are also covering the duties of both their juniors and their seniors out of necessity in addition to their own. Naturally there is a limit to the amount of work they can perform, and as a result they are insufficiently able to perform their own management duties or keep an eye on their juniors. However, there are also not enough senior employees for them to consult when faced with these harsh workplace environments and the range of challenges they present, and some survey respondents reported suffering on the part of overly burdened and isolated intermediate-aged employees. Even with a perceived excess of employees of intermediate age, these employees are forced to perform tasks beyond their rightful scope of duties, and face both overwork and isolation in the workplace.

As we have seen, while there are three recognizable categories of workplace (A, B, and C) in terms of perceived number of employees of intermediate age, these employees are burdened with excessive workloads regardless of category, albeit for reasons that vary depending on category.

Table 2. Issues and Strategies toward

Type A: Too few employees of intermediate age

Labor union (industrial sector)	Employees of intermediate age	Younger employees	Middle-aged and older employees	Background
Labor union A (General chemical)	Somewhat fewer than adequate	Appropriate	Somewhat more than necessary	• Hired large numbers of new graduates during bubble period, cut back or suspended hiring during ensuing employment ice age.
Labor union B (Steel)	Too few	Appropriate	Too many	• Suspended hiring of new graduates from oil crisis of 70s through end of 80s.
Labor union C (Automotive)	Somewhat fewer than adequate	Appropriate	Appropriate	• Hired large numbers of new graduates in and around bubble period, cut back hiring, etc. during Asian financial crisis (1997), employment ice age, global financial crisis, etc.
Labor union D (Financial)	Somewhat fewer than adequate	Appropriate	Too many	• Suspended hiring as a result of in-house merger in late 90s.

Employees of Intermediate Age, by Type of Workplace

Issues	Strategies
• Some workplaces have no workers younger than 40. Heavy workload compared to number of employees causes frequent overtime work, work-life balance issues. • Not enough late-30s (assistant manager level) workers. • Middle-aged and older employees in charge of guidance for younger employees, major generation gap causes communication problems.	• Considering assigning rehired employees in their 60s to train and cultivate younger employees. Motivation among older employees expected to rise due to pride in skills and techniques amassed over the years and sense of achievement from handing them down to juniors.
• Before younger employees can absorb and inherit skills and techniques, they need to be handed down to employees of intermediate age. • Employees of intermediate age do not have enough time to train and guide juniors and subordinates. • Major age gap between workers in charge of training (age 60+) and younger employees. • Delay in promotion of employees of intermediate age.	• Assign employees in their 60s to train and guide younger employees, building on their extensive experience.
• Increase in workload and in number of subordinates lowers management quality, impairs communication, and interferes with training and professional development, and problems are expected to worsen. Younger employees have too few role models.	• Introduced training program aimed at achieving handing down of skills and techniques on an organization-wide basis. • Labor union carries out unique in-house cultural and athletic activities in a lively fashion, while company promotes intergenerational communication through QC activities and small-group activities.
• Employees of intermediate age have heavy workload and hectic schedules, not enough time to train juniors and subordinates. Cultivation of younger employees is inadequate.	• Consider it important to boost competency level of employees in trainer position.

Table 2

Labor union E (Bread)	Somewhat fewer than adequate	Too many	Too few	• Stepped up recruiting about 20 years ago due to success of diversification strategy.
Labor union F (General heavy industry)	Somewhat fewer than adequate	Somewhat fewer than adequate	Somewhat more than necessary	• Severely curtailed hiring of on-site workers so as to survive fierce competition from South Korean and Taiwanese manufacturers in the 80s and super-strong yen following 1985 Plaza Accord.

Type B: Appropriate number of employees of intermediate age

Labor union (industrial sector)	Employees of intermediate age	Younger employees	Middle-aged and older employees	Background
Labor union G (Chemical)	Appropriate	Too few	Somewhat more than necessary	• Curtailed hiring of new graduates from 2000 onward due to severe business environment.
Labor union H (Apparel)	Appropriate	Too few	Somewhat more than necessary	• Hired new graduates in large numbers during bubble period, suspended hiring from 1989 through 1998, and from then on shifted production overseas or to rural areas of Japan.

(*Continued*)

• Severe shortage of employees of intermediate age compared to younger employees, causing undeniably insufficient training of subordinates and handing down of skills and techniques. • Increased workload, and increasing demand to play role of evaluator for younger employees. • Consistently long working hours and difficulty taking paid vacation days.	• Focusing resources on training for younger employees such as "junior step-up training" (one-day course including talk by top management, business manners, safety and health training, group discussions etc. to raise awareness) and "assistant manager training" (for employees aged around 30).
• Employees in their 30s particularly need to inherit skills and techniques from seniors, but there are too few in this age group, and process is not adequately implemented, giving labor union a sense of crisis.	• Introduced "meister" program in 2002 which certifies older, highly experienced employees in their 50s and 60s and puts them in position of mentoring "sub-meisters" in their 30s and handing down skills and techniques.

Issues	Strategies
• Root of the problem lies in handing down of skills and techniques. High expectations are placed on highly skilled and experienced intermediate-aged, middle-aged and older employees. There is an urgent need for the company to clarify what needs to be handed down.	• Enterprise has introduced a workplace advisor program for new (high school or university) graduates. An employee 3 to 5 years the new graduate's senior is appointed as advisor, and provides comprehensive guidance on both job-related and daily life-related matters for one year.
• Employees of intermediate age have high degree of specialized skill, but difficulty in transferring duties to juniors. Difficulty in keeping up with workload, and in self-managing workflow (handling tasks more efficiently so as to generate extra time). As a result, there is insufficient time to train and cultivate juniors and subordinates. • In the future, problems with delayed promotions and stagnant wages are foreseen.	• Labor and management need to work together on reviewing the roles and day-to-day tasks of employees of intermediate age, and render the process more visible. • The labor union views employees of intermediate age as a cohort for which work-life balance is a particularly difficult and important challenge, and sees a need for labor-management discussion "flexible approaches to time management." • As the number of older employees continuing to work after retirement age is expected to increase, both labor and management have expectations for some older workers to play the role of cultivating successors.

Table 2

Labor union I (Department store)	Appropriate	Too few	Somewhat more than necessary	• Cut back on hiring of new graduates amid decreasing personnel needs and consideration of sales capacity improvement strategies.

Type C: Too many employees of intermediate age

Labor union (industrial sector)	Employees of intermediate age	Younger employees	Middle-aged and older employees	Background
Labor union J (Construction)	Too many	Too few	Somewhat fewer than adequate	• During the bubble period, large numbers of new graduates were hired, but hiring was curtailed during the ensuing employment ice age. Since the late 1990s the construction industry has also been in a slump, and the number of employees has been slashed through solicitation of early retirements.
Labor union K (Electrical industry)	Too many	Too few	Somewhat fewer than adequate	• During the bubble period, large numbers of new graduates were hired. Afterward, in the 1990s many were transferred to other Group companies, and many more to new companies generated by spinoffs from 2008 onward.

Source: Prepared on the basis of Research Institute for Advancement of Living Standards, *Age Labor-Management Concerns (2014)*.

Note: The "bubble period" refers to the Japanese economic boom years of the late 1980s and following the bubble's collapse (1993–2005).

(*Continued*)

• Range of duties handled by employees of intermediate age has expanded, leading to increased workload. • Insufficient time for employees of intermediate age to train juniors and subordinates. (Decline in number of opportunities for younger employees to accompany buyers and obtain OJT.)	• Labor and management create opportunities for communication and sharing of in-house information from both parties' perspectives. • Programs involving competition between workplaces introduced to generate sense of unity spanning all generations (wrapping skill contests, sales/budget target achievement rate competition, etc.).

Issues	Strategies
• High expectations are placed on employees aged 30–39 to cultivate younger employees. However, intermediate-aged employees (aged 35–49) have a significantly greater workload than other generations, and work excessive amounts of overtime, meaning they do not have time to take care of younger employees. (About 10 years ago, the number of resignations among younger employees began increasing noticeably.) • An increasing number of people find themselves hitting a ceiling in terms of wage increases, promotions, and career advancement.	• The labor union has formed "young employees' circles," and with the cooperation of the enterprise, many union chapters are holding meetings once to four times a year during working hours, where opinions and views are exchanged. • For newly hired employees, the company appoints a mentor (aged 20–59) to follow their progress for three months. Specifically, this entails new employees submitting reports once a week, based on which the mentor gives advice. Training for mentors is also provided to ensure consistent quality of mentorship. (Nonetheless, there are persistent concerns over future decline in cultivation of younger employees.)
• Employees of intermediate age have disproportionately large workloads. They are expected to serve as core personnel for short-term profit generation, and do not have spare time to spend on cultivating younger employees. • Labor union sees working hours for this age group as excessively long, and sees the need for correction of overlong working hours and support for employees who have family obligations.	• Career design training segmented by age group (30s, 40s, 50s) is implemented. There is also a program of career counseling offering across-the-board guidance for career formation. • For the first two years after being hired, younger employees are given OJT by an employee with several years of experience, to ensure their basic life skills and professional competencies are on track.

Distribution Imbalance and Related Issues: Study on Changing Labor Force Composition and

beginning of the 1990s. The "employment ice age" refers to sluggish hiring during the recession

5. Significance and Impact of This Issue

The problem of excessive workload among employees of intermediate age, which is expected to become even more widespread in the future, does not only interfere with these employees' ability to complete their rightful duties, and place them in a difficult position—it also has a significant negative impact on other age groups, that is on the workplace as a whole, and on the operations of entire enterprises.

Employees of intermediate age are supposed to be core personnel that inherit knowledge, skills, and techniques from middle-aged and older workers, grow professionally as individuals while contributing to the advancement of these skills and techniques, and cultivate younger co-workers who will eventually succeed them. If employees of intermediate age are unable to play this crucial role, the entire process will grind to a halt, threatening the growth and very survival of enterprises and severely detracting from their competitiveness and business performance.

The intermediate age cohort plays a crucial role not only in the greater arc of enterprises' development, but also in day-to-day business operations in which they serve on the front lines, while fostering their juniors as well. Their inability to fulfill this role affects the entire workplace and has a substantial negative effect on the efficacy and professional development of younger workers. In recent years many workplaces have reported serious problems with high rates of turnover (i.e. resignation not long after hiring) among younger employees, and with their professional development, and these issues facing employees of intermediate age clearly contribute to this. Because intermediate-aged employees are overburdened and cannot keep up with their own tasks, they are unable to keep an eye on younger workers, and this means they are not only unable to spend sufficient time cultivating them, they may also miss important signs that their juniors are struggling on the job, and be unable to pay attention to, care for, and discuss issues with them, often creating a negative workplace atmosphere and environment in which people feel unable to consult others about their concerns. This in turn stunts younger workers' professional development and leads them to resign soon after being hired. As shown in Figure 4,[8] among both university and high school graduates, rates of turnover are higher in workplaces where employees of intermediate age have insufficient time to provide guidance and training to younger workers than in others. Conversely, among enterprises with a low rate (below 5%) of resignation within the first three years after hiring, more than half (56.4%) reported sufficient time devoted to training and guidance, and only 35% (with regard to university graduates) and 41% (with regard to high school graduates) reported insufficient time. It is often difficult for younger workers who have not yet developed professionally to resolve problems on their own, and it is extremely important to have a system in place in which they can easily consult their seniors when issues arise. However, when these seniors are overburdened and can

[8] Indicates responses to question about rate of resignation within three years after hiring among new graduates (university graduates and high school graduates). "No new graduates hired" and "no response" omitted from tabulation of results.

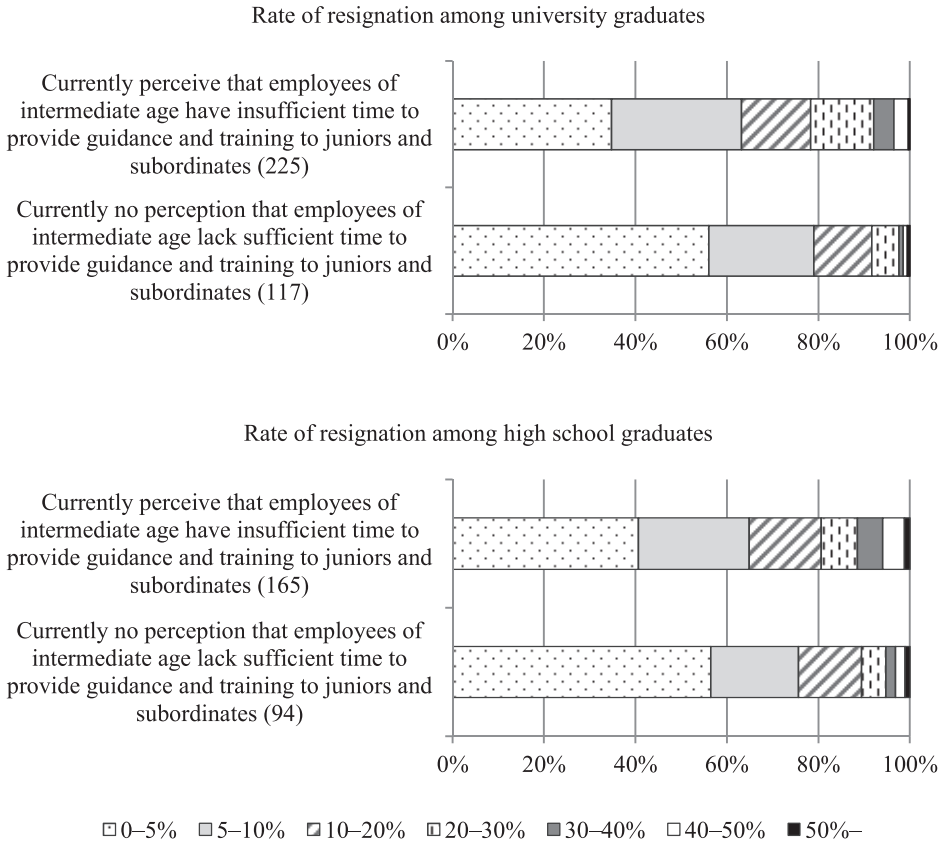


Figure 4. Rate of Resignation among University Graduates and High School Graduates Depending on Whether or Not Intermediate-Age Employees Have Insufficient Time to Train and Cultivate Younger Workers

barely keep up with their own duties, younger workers feel reluctant to consult them, yet are unable to resolve issues on their own, and end up quitting before long.

The flow of handing down skills and techniques to successors, cultivating human resources, and performing day-to-day operations is one that the entire workplace must work together to achieve, and partnership and cooperation among different age groups is essential. When intermediate-age employees who form the crux of this partnership and cooperation are unable to fulfill their duties and functions, younger workers, and indeed the entire workplace and enterprise are enormously affected. As predictions point to this problem growing more widespread and severe in the future, it must be considered an issue of the utmost urgency.

6. Countermeasures

In this section we will examine case examples of countermeasures described by labor unions responding to the survey. No doubt the most effective strategy is to secure the appropriate age distribution in the workplace, for example by reinforcing the ranks of employees of specific age cohorts. However, this is not easily done, as illustrated by imbalanced age distribution resulting from lackluster hiring during the oil crises of the 70s, which persists 30 years later and will not be resolved until this generation reaches retirement age. Once a pattern of age distribution is entrenched it is difficult to make significant adjustments to it. Some enterprises have attempted to modify the age balance with mid-career hires, but this has not resolved the problem, due to difficulties such as training these employees effectively in the required skills and techniques.

A common strategy to address the situation was support from older workers aged 60 or above. It is mandatory for companies to offer employment up until the age of 65 to those wishing to keep working, and providing support for overworked employees of intermediate age has been seen as an important role of senior workers with extensive experience and a command of sophisticated skills and techniques. It has also been viewed as an effective strategy for resolving serious difficulties in finding enough appropriate tasks for older workers as their ranks increase. Providing advice and training for employees of intermediate age is an area that can only be handled by older veteran employees with many years of experience, and enables them to feel rewarded and motivated on the job, while their support can alleviate the overly hectic schedules of employees of intermediate age. This, in turn, can help them find time to develop their own professional competencies and devote attention to training their juniors. A system in which older employees provide support to employees of intermediate age has significant benefits for both groups, and also has a positive impact on the working styles of middle-aged to older workers between the two age groups who base their own practices on this model. Naturally, having an effective training structure in place benefits younger workers as well. In short, having the oldest employees in the workplace provide support to overworked employees of intermediate age is a strategy that significantly benefits the entire workplace.

As described earlier, problems with cultivating younger workers have been noted in recent years, and it is frequently suggested that having the oldest employees train the youngest workers could be a solution. However, this survey found a considerable number of case examples in which the large age gap caused difficulties. Older employees report not knowing how to teach things to workers much younger than themselves, and younger workers find it difficult to ask questions or seek advice from older workers due to a lack of common ground in terms of topics. It appears that the most effective strategy for handing down skills and knowledge and training younger generations is for employees of intermediate age (35–49) to play their rightful role in training younger employees (up to 34), with support from older employees (60 and above). When each age cohort plays its proper role, and older employees are able to make effective use of the competencies they have devel-

oped over many years, it serves to heighten the morale not only of older employees but of everyone in the workplace.

IV. Summary

Compared to the youngest and oldest employees, society pays scant attention to the issues faced by employees of intermediate age, but examination of their working styles and circumstances reveals serious problems with excessive workload. In the future, it is predicted that these problems will only grow worse. This section encapsulates the matters discussed thus far and summarizes issues to be dealt with going forward.

1. Issues Facing Employees of Intermediate Age Affect the Entire Workplace

The greatest single cause of excessive workloads is an imbalance between the volume of work and the number of workers, but when we drill down on the root causes, we find three main patterns. These are: workplaces with too few employees of intermediate age to handle the volume of work they must handle; workplaces with the right number of employees of intermediate age but too few younger workers, meaning that intermediate-age employees must cover for younger employees and become overworked; and workplaces with somewhat more intermediate-age employees than necessary, but a shortage of both younger workers and middle-aged and older workers, meaning that the employees in the intermediate age cohort are still overburdened because they must complete tasks that are rightfully the province of their juniors and seniors, and are isolated without older mentors to consult.

Excessive workloads interfere with the duties employees of intermediate age ought to fulfill, such as management duties, building their own competency, contributing to the advancement of knowledge, skills, and techniques, and cultivating younger co-workers who will succeed them. This means issues affecting intermediate-age employees have an impact extending beyond that age cohort, contributing significantly to the serious problems that have affected younger employees recently, such as difficulty with training and a high rate of resignation soon after hiring. Employees of intermediate age are the “backbone” of workplaces’ human resources, playing crucial roles on the front lines of day-to-day business operations, and at the same time inheriting knowledge, skills, and techniques from predecessors and handing it down to younger workers whom they are guiding and cultivating. This means that this age cohort exerts an enormous impact over all other age groups and the entire workplace, and the abovementioned problems with younger employees are a prime example of this.

Looking back at the past, the problems currently facing employees of intermediate age similarly represent the legacy of influence from other age groups, and in the future they will go on to impact others significantly. It is precisely because employees of intermediate age are the linchpin of workplaces’ human resources that they are both highly subject to influence from other age groups, and exert an outsized impact on them. Various age groups

in the workplace are inextricably intertwined with deep and enduring ties, and problems affecting one of them are by no means limited to that group, nor can that group resolve the problems alone. Neither difficulties in cultivating younger workers nor problems with excessive workload among intermediate-age workers can be resolved unless workers of all ages tackle problems together in a cooperative and coordinated fashion.

2. Issues for the Future

The most effective means of resolving the problems we have been examining is to secure the appropriate age distribution in the workplace. However, the imbalanced age distribution that leads to excessive workload for employees of intermediate age has roots going all the way back to time of hiring, such as the curtailment or suspension of hiring of new graduates during the so-called employment ice age (roughly the early 90s through the mid-2000s). Some enterprises have attempted to modify the age balance with mid-career hires of personnel in underrepresented age groups, but this has not resolved the problem due to problems such as training these employees effectively in the required skills and techniques. The pattern of age distribution is essentially created and entrenched at the time of hiring of new graduates, its influence persisting indefinitely thereafter. Enterprises that are attempting to resolve the problem do so by rendering it visible, specifying the tasks with which intermediate-age employees require support and assigning abundantly experienced older employees to provide it. Only these employees can play the role of supporting and cultivating employees of intermediate age, and it enables the veteran employees to feel rewarded and motivated on the job. This is evidently an appropriate task for older employees, whose ranks will grow in the future. Having the oldest employees train the youngest workers results in communication difficulties caused by the large age gap, so it appears that they are more suited to supporting employees of intermediate age. It is a highly effective strategy that benefits both age groups and, by extension, the entire workplace.

However, there remains a need for measures that directly impact age distribution itself, which is shaped by hiring, entrenched, and becomes the source of problems later when imbalanced. In this survey, workplaces that did not report problems involving employees of intermediate age were those that hired new graduates constantly, and ensured appropriate age distribution.[9] This points to the importance of closely examining the workplace situation, identifying who handles which tasks, and determining how many employees of each age cohort are needed. In fact, however, unions where labor and management held discussions or group negotiations on the number of new graduates to hire accounted for a mere 16% of the total (Figure 5).[10] This means that conversely, over 80% of organizations held no labor-management talks on hiring levels, which are the greatest cause of problems

[9] Refer to interview survey by Research Institute for Advancement of Living Standards (2014).

[10] Indicates responses to survey question about whether labor and management held discussions on the number of new graduates hired. It should be noted that in Japan, labor-management discussions and negotiations primarily take place between enterprises and enterprise labor unions.

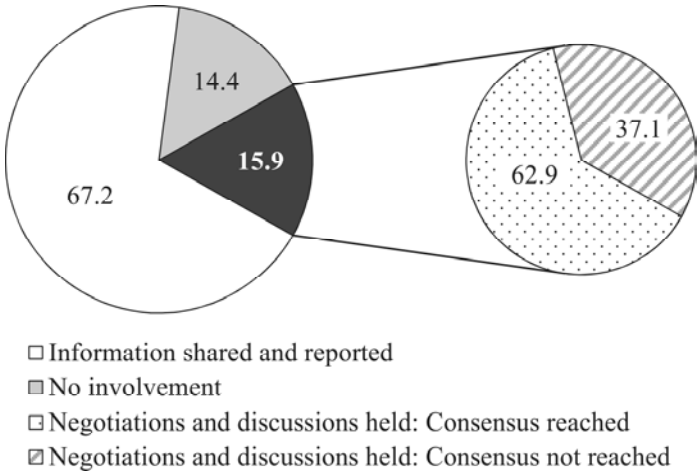


Figure 5. Percentage of Unions Engaging in Labor-Management Negotiations/ Discussions on Number of New Graduates to Hire

afflicting employees of intermediate age, despite the severity of age distribution imbalances in so many workplaces. The number of new graduates hired each year fluctuates greatly depending on broader economic conditions, companies' business performance, and management policies. A framework in which older employees support those of intermediate age is currently being implemented as an immediate countermeasure, and appears effective as a means of soothing the simmering pressures of the workplace. However, the problem is sure to grow even more severe in the future, and there are concerns over the impact of even more imbalanced age distribution. If human resources are not sufficiently cultivated today, even if their numbers are reasonably sufficient, the next generation of employees of intermediate age may not be able to fulfill their proper functions, the next generation of middle-aged and older workers may not be able to play their rightful roles, and so forth. Problems that are latent today may manifest themselves in more obvious form. Going forward, we may face a shortage of human resources in a qualitative sense.

Workplace age distribution has a significant influence on enterprises' continued existence and growth, workers' professional development, and workers' economic security. Once this age distribution is entrenched, it is very hard to modify it after the fact. This means it is crucial to look at human resource needs from a medium to long-term perspective, and to resolve problems by addressing their root causes. As we have seen, there is no consistent model for age distribution, making it all the more important for labor and management at each enterprise to monitor and assess workplace circumstances and appropriate numbers of personnel for each age group. While taking into account the number of older employees, which is expected to grow in the future, and the roles they play, there is also a pressing need to consider the number of new graduates to hire, as they will eventually be-

come the core personnel upholding the enterprise. Even if management makes the final decision on number of people hired, it is vital for the long-term growth and development of both management and labor for both parties to have an accurate understanding of the situation in the workplace, and to work together on resolving personnel-related issues.

Finally, the limitations of this survey should be noted, along with issues for future study. In its analysis of enterprises' core personnel, this survey focused on regular employees. However, as we have seen, the root causes of age distribution problems extend back to the time of hiring, and here the role of non-regular personnel cannot be ignored. Today, non-regular personnel handle many tasks that were formerly the province of regular employees, and this has a considerable impact on the number of regular employees needed. As a rule, non-regular employees are hired and utilized based on the tasks they are to perform, with age not taken into account, and their working styles and circumstances are essentially unrelated to the axes of age and time that are central to this study. There is an urgent need for further examination of the composition of the labor force, which takes into account the relationship between these fundamentally different types of personnel.

Appendix Table

Labor union	No. of union members	No. of employees	Year of union establishment	Parent organization	Unionization of eligible non-regular employees
A	9,470	17,555	1946	The Japanese Federation of Textile, Chemical, Food, Commercial, Service and General Workers' Unions (UA Zenzen)	Non-regular employees rehired after retirement
B	16,087	16,755	2003 (established after merger)	Japan Federation of Basic Industry Worker's Unions	Non-regular employees rehired after retirement
C	9,871	12,034	1946	Confederation of Japan Automobile Workers' Unions (JAW)	No unionization
D	919	1,093	1997 (established after merger)	Federation of Labour Bank Workers Union of Japan	Non-regular employees, including those rehired after retirement
E	3,480	3,764	1963	Federation of All Japan Foods and Tobacco Workers' Unions (JFU)	Non-regular employees rehired after retirement
F	9,506	7,448	1963	Japan Federation of Basic Industry Worker's Unions	Non-regular employees rehired after retirement
G	1,196	1,411	1946	Japanese Federation of Energy and Chemistry Workers' Unions (JEC)	No unionization
H	226	266	1955	The Japanese Federation of Textile, Chemical, Food, Commercial, Service and General Workers' Unions (UA Zenzen)	No unionization
I	1,708	1,148	1964	The Japanese Federation of Textile, Chemical, Food, Commercial, Service and General Workers' Unions (UA Zenzen)	Part-time employees and non-regular employees rehired after retirement
J	1,366	1,761	1949	Council of Japan Construction Industry Employees' Unions (JCU)	No unionization
K	2,490	3,810	1945	Japanese Electrical Electronic & Information Union (JEIU)	Non-regular employees rehired after retirement

Note: Numbers of people are as of April 1, 2013. Figures for Union F refer to employees of the main company only, and employees of affiliates are not included.

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Work-Life Conflict in the Intermediate Age Bracket: Trends in Working Hours and Time Spent Caring for Elderly Family Members

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In Japan's super-aging society, there is growing concern due to the fact that the number of intermediate age workers who need to take care of elderly family members has increased rapidly in the last few decades. However, there is limited research investigating the time use of those workers who are giving care to elderly family members. Using Japanese time-use data, this paper investigates how the time use of intermediate age caregivers has evolved in the last few decades. The main findings are as follows. Firstly, according to our estimation, the number of caregivers has increased from 3.56 million people in 1991 to 6.83 million people in 2011. Secondly, contrary to the growing number of caregivers, the time used for giving care has decreased tremendously since 2001. On the other hand, working hours have increased during the same period. Thirdly, using Oaxaca-Blinder decomposition, we tried to investigate the reason for the decrease in time spent giving care to elderly family members. Although the decline in time spent giving care is partially explained by the implementation of the Long-Term Care Insurance Act in 2000, for the most part it remains unexplained.

I. Introduction

Japan is currently encountering a new era as a super-aging society, with over 25% of its total population—in other words, at least one in four people—aged 65 years or older in 2015. In the face of such population aging, Japan is seeking to promote a "society of dynamic engagement of all citizens" (*Ichioku sokatsuyaku shakai*), a society in which anyone with the ability to work has the opportunity to engage in employment, as a means of curbing the decrease in the labor force as far as possible and sustaining the potential for growth. In order to support this, it urgently needs to be ensured that workers who also bear family responsibilities such as caring for elderly family members or raising children are not drawn into the culture of focusing solely on work which has traditionally been prominent in Japanese society, but are able to consider a greater range of options for flexible and diverse ways of working that allow them to balance their work with their private time. This is particularly true in the case of members of the intermediate age bracket (defined here as age 30–59), as they occupy important roles within their places of work as key players who form the core of

[*]Microdata from the Survey on Time Use and Leisure Activities was provided by the Statistics Bureau of the Ministry of Internal Affairs and Communications. The author would like to express sincere gratitude to the Statistics Bureau for permitting the use of the data. The author is solely responsible for any errors in this paper. This research ("Economic Analysis of Time Use and Health"; Project number: 25380372) was supported by an FY2015 Grant-in-Aid for Scientific Research (C) from the Ministry of Education, Culture, Sports, Science and Technology.

the labor force and managers who are responsible for supervising and training their team members and younger colleagues, while also often tackling a number of responsibilities in their private lives, such as raising children or caring for elderly family members, as a result of increasing trends of later marriage, later childbirth, and population aging.

In Japan, the term "work-life balance" was initially often used specifically to refer to support for working women raising children. However, in recent years the increasing number of both women and men who face conflict between work and care giving for elderly family members has come to be recognized as a social problem, as progressive population aging has led to an increase in the number of people who struggle to balance caring for family members with work commitments. For example, the 2012 Employment Status Survey (Statistics Bureau, Ministry of Internal Affairs and Communications) reveals that as many as 100,000 people each year have to quit their jobs in order to care family members, and there is significant concern regarding the potential rise in the number of such people in the future.

However, as far as the author is aware there is insufficient research using statistical data to ascertain how people facing such work-life conflict actually approach work and daily life. While the numbers of people caring for family members are known, there is only highly limited information available on how much these numbers have increased in comparison with previous years, how much time is required for giving care, and whether such caregiving time has increased over time along with population aging.[1] Research urgently needs to be conducted using statistical data to carefully ascertain the actual circumstances and elucidate what kinds of needs and issues exist, in order to establish the structure that is required to ensure that everyone is able to support the super-aging society. With these challenges in mind, this paper aims to provide basic information on how people in the intermediate age bracket who have responsibilities such as caring for elderly family members and raising children divide their time between work and other daily activities.

In the main body of this paper, Section II will look at the changes regarding people caring for family members over time, including the extent of the increase in the number of people who care for family members and changes in the percentages of people within the intermediate age bracket who care for family members over the past two decades. Section III then ascertains the changes over recent decades in how workers—particularly those in regular employment—in the intermediate age bracket divide time between working and other daily activities. Section IV observes the changes in the time that regular employees spend giving care to family members and how this relates to working hours.

[1] Sugiura and Arayama (2013a, 2013b, 2013c) are good examples of prior research that uses aggregate data to carefully observe the relationship between caregivers and their work. Ministry of Health, Labour and Welfare (2013) is also a valuable study that uses data from commissioned surveys and other sources to provide insights on topics such as the problems of balancing caregiving with work, and information regarding people leaving work to provide care.

II. Trends regarding People Caring for Family Members

1. Changes in the Number of People Caring for Family Members

The Survey on Time Use and Leisure Activities (STULA), conducted by the Statistics Bureau of Japan's Ministry of Internal Affairs and Communications, provides official statistics that allow us to determine the approximate number of people who give care to family members (hereafter "caregivers") in Japan over an extended chronological period. Conducted every five years, it is a major survey under which data is collected from around 200,000 respondents on the way in which they use their time over a single day and their everyday lives in general. This paper uses microdata from the STULA to determine information on the numbers of and trends among caregivers in Japan.

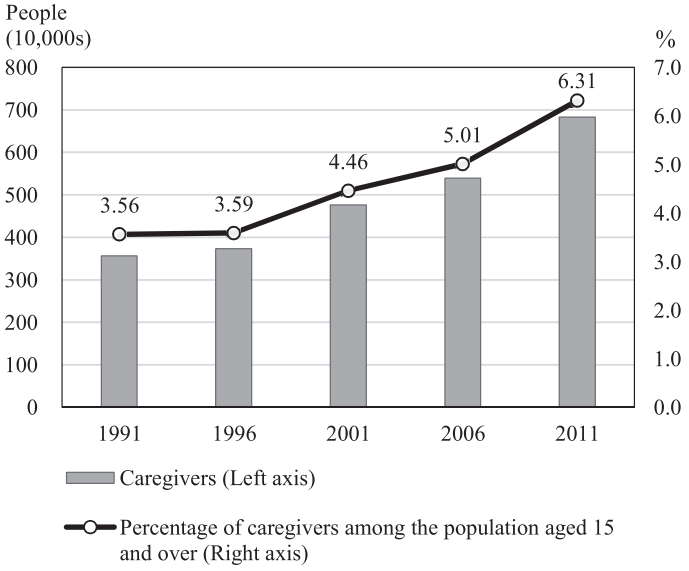
Firstly, let us look at how the number of caregivers has increased over the last twenty years along with the progress of population aging. Since 1991, the STULA has included the question "Do you usually care for a member of your family?" for respondents aged 15 and over.[2] In the STULA, "caring" is defined as "helping in daily activities such as bathing, dressing, going to the toilet, moving around the house, or taking a meal." This definition of "caring" also covers care that is given to people who have not been officially certified as "requiring long-term care" under the Long-Term Care Insurance system (but does not include care given to those who are confined to bed with a temporary illness). It also includes not only care given to family members in the same home, but also care provided to family members who live away from the caregiver. Figure 1 shows the changes in the estimated number of caregivers, calculated using sampling weights for data tabulation attached to each sample of the STULA, and the percentage that caregivers account for within the population aged 15 and over.[3]

Figure 1 shows that in Japan the number of people who care for family members has surged in the last two decades, from 3.57 million people in 1991, to 4.76 million people in 2001, and 6.83 million in 2011. The percentage that caregivers account for within the population aged 15 and over has also risen from 3.56% in 1991, to 4.46% in 2001, and 6.31% in 2011.

Figure 2 shows how the distribution of the ages of the caregivers has shifted as their number has risen sharply over the last twenty years. The figure demonstrates that while in 1991 caregivers under 60 years of age accounted for around 75% of all caregivers, this percentage dropped to around 55% by 2011. On the other hand, the percentage of caregivers

[2] "Usually caring for a member of your family" is defined as "providing care for 30 days or more per year."

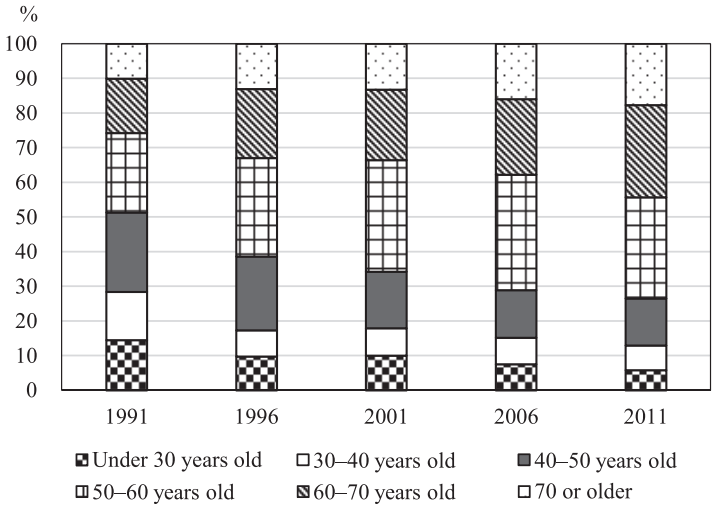
[3] The STULA is a major survey of around 200,000 household members aged 10 and above, for which respondents complete a two-day record of their daily living pattern. The estimated population can be calculated using these samples and the multiplying factors for data tabulation. More specifically, the estimated population is the sum of the sampling weights attached to each sample, divided by seven, the number of days in a week. Genda (2013) provides a detailed account of the methods of calculating the estimated population.



Sources: Microdata from the 1991, 1996, 2001, 2006, and 2011 editions of the *Survey on Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications).

Note: "Caregiver" is defined as those who responded that they "usually care for a member of family." The same applies to all figures and tables hereinafter.

Figure 1. Changes in the Number and Percentage of Caregivers since 1990



Sources: Microdata from the 1991, 1996, 2001, 2006, and 2011 editions of the *Survey on Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications).

Figure 2. Changes in the Percentage of Caregivers by Age Bracket

Table 1. The Percentage of Caregivers in the Population by Age Bracket

(Units: %)

	Male			Female		
	30−39 years old	40−49 years old	50−59 years old	30−39 years old	40−49 years old	50−59 years old
1991	1.73	2.86	3.04	4.38	5.46	7.17
1996	1.24	3.06	4.86	2.39	5.06	8.09
2001	1.38	3.24	5.92	3.01	6.36	10.07
2006	1.59	3.06	6.92	2.82	6.53	11.92
2011	1.72	4.12	9.07	3.82	6.68	16.12

Sources: Microdata from the 1991, 1996, 2001, 2006, and 2011 editions of the *Survey on Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications).

in the 60 years or older age bracket has increased. The fact that almost half of all caregivers are aged 60 or older clearly shows that Japan is now in an age in which the elderly are caring for the elderly. As a result, the percentage that the intermediate age bracket (age 30–59) accounts for within the total number of caregivers has been on the decrease, dropping from 60% in 1991 to around 50% in 2011.

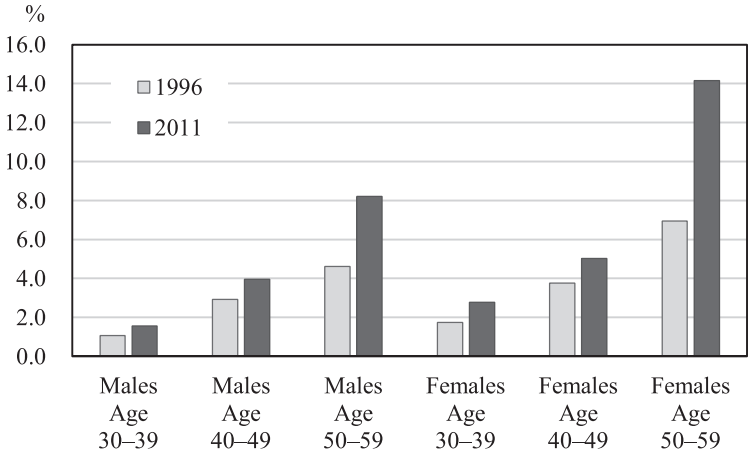
At the same time, while the number of caregivers aged 60 or older is steadily increasing, caregivers in the age group that forms the core of the labor force—namely, the intermediate age bracket—still account for around half of the approximately 6.83 million caregivers in Japan. In 2011 the number of caregivers in the intermediate age bracket was around 3.4 million people, almost the same as the total number of caregivers in 1991.

2. Trends within the Intermediate Age Bracket

The following sections of this paper focus on the intermediate age bracket and the trends regarding caregiving among this age bracket. Firstly, Table 1 shows the percentage of caregivers among the 30–39, 40–49, and 50–59 age brackets respectively.

Table 1 shows that in the 30–39 age bracket the percentage of caregivers has shown slight fluctuations but essentially remained level over the last twenty years, for both males and females. On the other hand, in the 40–49 age bracket the percentage of caregivers has risen gradually. The 50–59 age bracket shows the most marked increase, with the percentage for males rising from 3.04% in 1991 to 9.07% in 2011, and the percentage for females rising from 7.17% in 1991 to 16.12% in 2011. Japan has now reached an age in which one in every ten males aged 50–59 and one in every six females aged 50–59 are caring for family members.

Figure 3 shows the shifts in the percentages of caregivers within the number of people in regular employment, by age bracket and sex. In this figure, changes are given for the period between 1996 and 2011, because the question on employment status that provides information on whether or not respondents are in regular employment was first included in



Sources: Microdata from the 1996 and 2011 editions of the *Survey on Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications).

Figure 3. Changes in the Percentage of Caregivers among Regular Employees by Age Bracket

the STULA in 1996. As in surveys such as the Labour Force Survey (Statistics Bureau, Ministry of Internal Affairs and Communications), the STULA classifies a respondent as a "regular employee" (*seishain*) if their type of employment is referred to as such by their place of employment.

Figure 3 shows that in 2011 the percentages of people caring for family members while in regular employment had reached around 4% for males in the 40–49 age bracket, over 8% for males in the 50–59 age bracket, 5% for females in the 40–49 age bracket, and over 14% for females in the 50–59 age bracket. This reveals notable increases over the last 15 years in the percentages of people giving care while in regular employment, as since 1996 they have risen from 3% for males in the 40–49 age bracket, 5% for males in the 50–59 age bracket, just under 4% for females in the 40–49 age bracket and 7% for females in the 50–59 age bracket. It is also interesting to note that the percentages of caregivers among employed people overall (namely, both regular and non-regular workers) are roughly the same as those for regular employees; in 2011, around 9% of employed males in the 50–59 age bracket, and around 14% of employed females in the 50–59 age bracket were caring for family members.

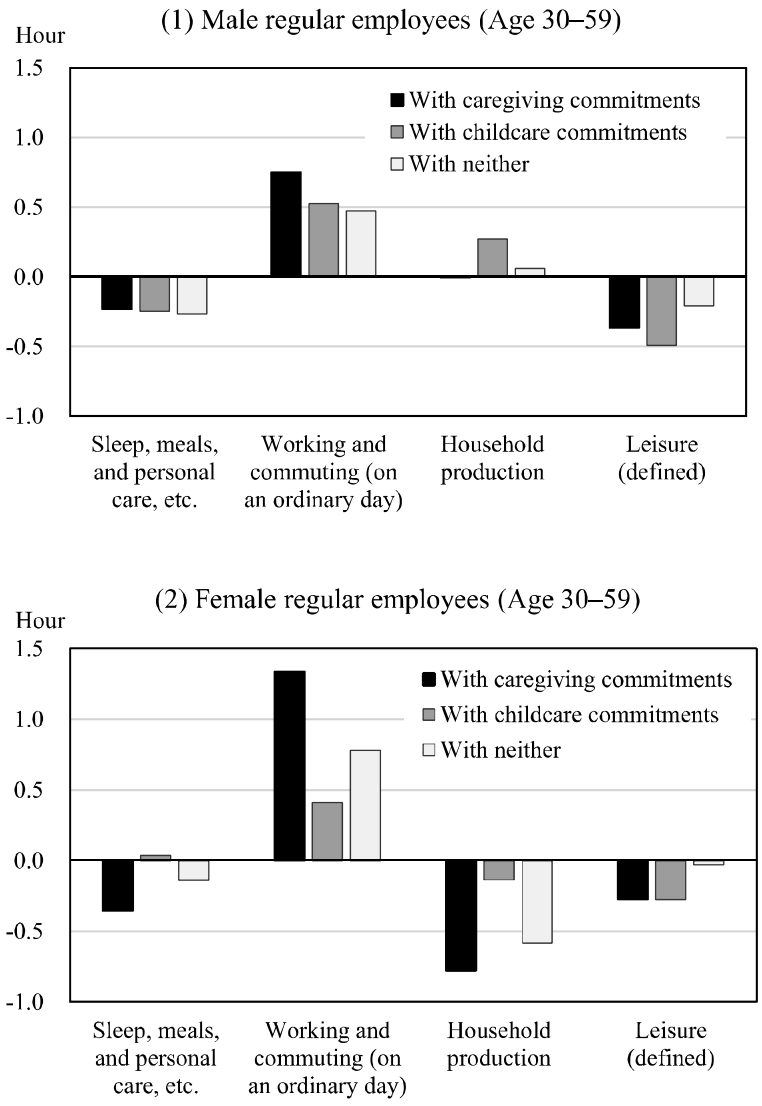
III. Time Use among the Intermediate Age Bracket

While the existence of people in the intermediate-age bracket facing such work-life conflicts is recognized by society, the actual conditions of their lives have not been eluci-

dated using statistics. Taking into consideration the fact that in recent years a growing number of people have weekly days off on days other than Saturday and Sunday, the responses to the STULA question asking respondents to select the type of day for which they were completing the record of their time-use ("response day") were used to focus on respondents' time use on working days. Here, the types of response day were divided into three categories: (i) Day off or vacation, etc., (ii) Special day (A combination of the options "Travel or excursion," "Event, wedding, or funeral," "Business trip or training," "Work at home," "Medical treatment," "Childcare leave, etc.," "Nursing care leave, etc." in the STULA question), (iii) Ordinary day ("Other" in the STULA question). Analysis was then focused on the changes in time use on days in the third category, "ordinary days." For a regular employee, an "ordinary day" would be a day on which they engaged in work as normal—namely not a day off or a day on which they had special plans or commitments.

Figure 4 divides male and female regular employees in the 30–59 age bracket whose response day was an "ordinary day" into three groups—those "with caregiving commitments," those "with childcare commitments," and those "with neither"—and demonstrates how the time spent on daily activities has changed over the 15 years between 1996 and 2011. As mentioned above, the STULA is a survey to investigate how people use their time over the course of each day; for each 15 minute block on the record of time use respondents fill in the activity they engaged in from a list of twenty options, such as "work" or "sleep." Figure 4 demonstrates changes in the use of time, with the activities for which time is used divided into four categories. Firstly, "sleep, meals, and personal care, etc." is the sum of the time spent sleeping, eating meals, and on one's daily personal care, such as taking a bath. While the time spent on these three activities is not time spent being directly productive, it is an intermediate input that is essential for productivity. Secondly, the category "working and commuting" includes both working hours and time spent commuting as here both are treated as time spent working. The third category, "household production," is the sum of time spent on housework, childcare, caring or nursing, and shopping, and the fourth category, "leisure (defined)," is the sum of time spent on "watching television/listening to the radio, etc.," "social life," "rest and relaxation," "sports," "hobbies and amusements," "learning and self-education, etc." and "volunteer activities, etc." The STULA also includes options for time spent "traveling (excluding commuting)," receiving "medical examinations or treatment" (by the respondent themselves), and any "other activities" not covered under those given above, but these are excluded from Figure 4.

Figure 4 (1) shows that although for a number of years importance has been placed on work-life balance and support for coping with nursing or childcare alongside work, the working hours of people in the intermediate age bracket have in fact tended to become longer over the last 15 years. Looking at the changes over the last fifteen years, particularly people caring for family members have seen the greatest increase in the time spent "working and commuting." The time that has been decreased as a result of this increase in working hours is the time spent on "sleep, meals, and personal care, etc.," and the time allocated



Sources: Microdata from the 1996 and 2011 editions of the *Survey on Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications).

Note: "Household production" is the sum of time spent on housework, childcare, caring or nursing, and shopping. "Leisure (in a defined sense)" is the sum of time spent "watching television/listening to the radio, etc.," "social life," "rest and relaxation," "sports," "hobbies and amusements," "learning and self-education, etc." and "volunteer activities, etc."

Figure 4. Changes in Time Use over an Ordinary Day (Between 1996 and 2011)

to “leisure (defined).” There is little change in the time spent on “household production,” although with slight increases among the group of those “with childcare commitments” and the group of those “with neither” caregiving nor childcare commitments.

Looking at the trends for female regular employees in Figure 4 (2), as in the case of males, those caring for family have seen the greatest increase in “working and commuting” time. The fact that “household production” time has decreased across all female age brackets differs from the trend demonstrated among males. However, as the decrease in “household production” time does not cancel out the increase in “working and commuting” time, the time spent on “sleep, meals, and personal care, etc.,” and the “leisure (defined)” time has decreased across almost all groups. This demonstrates that over the past 15 years the ordinary day has become busier for both female and male regular employees.

To summarize the above, for both males and females there has been an increase in working hours on ordinary days, and in the past 15 years this increase has been particularly great for those who are caring for family members. As a result, the difference in working hours between those who care for family and those who do not have such responsibilities is on the decrease. Both males and females are supplementing the extra time needed for working hours on ordinary days by reducing their leisure time, sleep, and other such activities. Furthermore, among women the significant decrease in household production time is also contributing to the increase in working hours.

IV. Caring for Family Members and Work: The Decrease in Caregiving Time

In Section III, we observed that on the whole the number of working hours on ordinary days is increasing for both the group with family responsibilities such as caring for elderly family members and raising children, and the group with no such responsibilities. This suggests a reverse in the trend of promoting work-life balance. However, given that the implementation of the Long-Term Care Insurance system in 2000 has allowed Japan to develop a system by which society as a whole supports the care of older people, the fact that families have assistance with providing care may also be a factor behind this change in time use. Using this hypothesis as a basis, this section focusses in particular on regular employees in the intermediate age bracket who are caring for family members, and looks at how the time that such people spend giving care (“caregiving time”) has changed since 2001, the year after the Long-Term Care Insurance system came into effect.

Table 2 uses data for regular employees in the intermediate age bracket who responded that they were giving care to family members, and shows the changes in the average time spent giving care between 2001, 2006, and 2011. The rows marked “total” show the samples for males or females overall, and the “at home” and “outside home” rows beneath demonstrate the changes in the caregiving time for the sample of those who care for family members “at home,” and the sample of those who provide care to family members

Table 2. Changes in the Average Caregiving Time per Week of Regular Employees (Age 30–59) Caring for Family Members

(Units: Hour)

	2001	2006	2011	2001→2006	2001→2011	Sample size
Male						
Total	2.22	1.24	0.92	-0.99 **	-1.30 **	6295
				(0.18)	(0.18)	
At home	1.71	1.31	0.77	-0.39 +	-0.93 **	3491
				(0.20)	(0.20)	
Outside home	2.89	1.15	1.07	-1.73 **	-1.82 **	2804
				(0.32)	(0.30)	
Without assistance	1.90	1.18	0.86	-0.71 **	-1.04 **	4285
				(0.22)	(0.21)	
With assistance	3.04	1.36	1.10	-1.69 **	-1.94 **	2010
				(0.34)	(0.33)	
Female						
Total	3.11	3.27	2.21	0.16	-0.90 **	4205
				(0.28)	(0.27)	
At home	3.28	2.77	2.37	-0.50	-0.91 **	2197
				(0.33)	(0.33)	
Outside home	2.95	3.82	2.05	0.87 +	-0.90 **	2008
				(0.45)	(0.44)	
Without assistance	2.94	2.99	1.87	0.05	-1.07 **	2945
				(0.33)	(0.33)	
With assistance	3.61	3.97	2.90	0.36	-0.71	1260
				(0.52)	(0.50)	

Note: "At home" and "outside home" figures are the sample that provides care to family "at home," and the sample that provides care to family "outside home" respectively. The "with assistance" and "without assistance" items are samples of those who answered "yes" and those that answered "no" respectively in response to the question "Does anyone other than your household members usually give your family nursing care?" Figures in parentheses are standard errors. +,* and ** indicate that the difference between the two given years has statistical significance at the 10, 5, and 1% levels respectively.

"outside home."[4] Below that, the "with assistance" and "without assistance" items show the caregiving times when respondents are divided into the sample of those who answered "yes" and the sample of those that answered "no" in response to the question "Does anyone other than your household members usually give your family nursing care?". "Nursing care by someone other than your household members" is defined as "care provided by a relative who is not living with you or by a care service provider (for instance, a home care attendant or day care service)," and nursing care includes "care given to people who have not been

[4] The 2011 survey includes questions that divide the nursing care provided outside home into "in the same site as the caregiver's residence, or, in the neighborhood" and "other," but in Table 2 these two groups are combined as the "outside home" sample, in order to make it possible to look at the change chronologically.

officially certified as 'requiring long-term care' under the Long-Term Care Insurance system."

The "2001," "2006," and "2011" columns in Table 2 show the average weekly caregiving time as it was recorded in the survey conducted in each of the years. Firstly, looking at the changes across the totals for males and females, the time spent providing care was around two to three hours per week on average in 2001, and this time has decreased over the last ten years. In the center of the table are the results of a significance test of the differences between 2001 and 2006, and 2001 and 2011. The results demonstrate that the decreases in caregiving time between 2001 and 2011 for both females and males are statistically significant.

Let us look at whether or not such a decrease in caregiving time is related to the fact that with the increasing trend toward nuclear families, there has been an increase in the percentages of people who give care outside home and people who place their relatives in a special nursing home for the aged. Of the regular employees in the intermediate age bracket caring for family members in 2001, 477,000 people (males and females) were giving care at home, and 409,000 were giving care outside home—in other words, more people were giving care "at home" than "outside home" in 2001. This has reversed in the last ten years, and the figures for 2011 demonstrate that the number of people giving care to family members outside home has shown a greater increase, with 561,000 people caring for family members at home and 583,000 people caring for family members outside home. Looking at the change in caregiving time by samples for at home and outside home, caregiving time has decreased over the past decade for both males and females, regardless of whether the care is provided at or outside the caregiver's home.

Let us now look at whether the fact that the implementation of the Long-Term Care Insurance system has increased the number of people who are able to receive assistance from others in giving care is contributing to the decrease in the per capita time spent providing care. Of the regular employees in the intermediate age bracket who are providing nursing care, the percentage of males who responded that they receive some form of assistance from someone outside the household actually decreased from 28.5% in 2001 to 26.4% in 2011. However, there is a difference in the trends for males and females, as in the case of females the percentage of people receiving assistance increased from 25.6% in 2001 to 32.8% in 2011. Potential factors to explain the increase in the percentage of females receiving assistance are a possible increase in the number of males who engage in providing care, a possible increase in the number of people who share the responsibility of providing care with relatives living in another location, and a possible increase in the number of people using Long-Term Care Insurance. Looking at the changes in caregiving time according to whether or not respondents do or do not receive such assistance, in the case of males time spent providing care is decreasing regardless of whether or not there is assistance, while in the case of females the time spent providing care is in fact decreasing for the group that does not receive assistance. These observations seem to suggest that the decrease in care-

giving time is not necessarily entirely due to the impact of the Long-Term Care Insurance system. Incidentally, while the analysis in this paper is focused on people in the intermediate age bracket who are in regular employment, analysis of the data for people not in employment and in other age brackets reveals that caregiving time is decreasing across all age brackets on the whole, regardless of whether respondents are employed or unemployed, and regardless of their employment type or age bracket.

Moreover, it is also important to note the fact that even now, a decade since the Long-Term Care Insurance system came into effect, around 70% of both males and females are giving care to family members without receiving assistance from others. This may be due to the fact that the person they are looking after has not been officially certified as requiring long-term care services, but needs some form of help in their daily life (such as being taken to the hospital for outpatient treatment, or general housework such as putting out the trash, cleaning, laundry, and shopping), or that although the person they are looking after would be eligible for long-term care services, the caregiver is providing care alone due to a lack of knowledge or information. It will also be necessary to pursue initiatives and incorporate the use of other statistics in order to ascertain more information on such people giving care without assistance.

As established early on in this paper, Japan has seen a rapid increase in the number of people caring for family members, but at the same time, as demonstrated in Table 2, the time that such caregivers spend giving care has decreased over the last ten years, regardless of where they give the care or whether or not they receive assistance from others. In order to look a little deeper into the factors behind the decrease in caregiving time, Table 3 and 4 use the samples from 2001 and 2011, and show the results of Oaxaca-Blinder decomposition of the factors for change in caregiving time, by sex. The following explanatory variables were used: age dummy (base = 30–39 age bracket), marital status dummy, interaction term of the marital status dummy and the both partners working dummy, educational level dummy, with child under six years dummy, hospitalization dummy (1 in the case that a member of the household is hospitalized), at home care dummy (1 in the case that care is provided at home), annual household income (the value in real terms calculated by dividing the median of the values for each income level group by the consumer price index [national average]), assistance with providing care from someone outside of the household dummy (1 in the case that assistance is received), and the interaction term of the assistance with providing care dummy and the frequency of assistance (one day a month, two-three days a month, one day a week, two-three days a week, four or more days a week).

Moreover, the time required for care is dependent on the degree to which care is required, but as it is not possible to ascertain this from the STULA, Table 3 and 4 also include as additional variables the percentage of persons officially certified under the Long-Term Care Insurance system as "requiring long-term care" (*yo-kaigo*) among the 65–74 year old and the 75 years and above population, and the percentage of those certified as "requiring support" (*yo-shien*; namely, people for whom the degree of care required is relatively low)

Table 3. Oaxaca-Blinder Decomposition (Average Caregiving Time per Week of Male Regular Employees [Age 30–59] Caring for Family Members)

	Average		Regression coefficient		OB decomposition	
	2011	2001	2011	2001	Explained	Unexplained
Caregiving time (Dependent variable)	0.9324	2.2648	-	-	-0.3375	-0.9948 +
	(0.104)	(0.291)	-	-	(0.452)	(0.508)
Explanatory variables						
Age dummy Age 40−49	0.2864	0.2934	0.1274	1.9344 **	0.0294	-0.5717 *
	(0.452)	(0.455)	(0.218)	(0.675)	(0.026)	(0.224)
Age 50−59	0.5918	0.5699	0.3929	1.0505 +	-0.0127	-0.3595
	(0.492)	(0.495)	(0.243)	(0.591)	(0.017)	(0.346)
Marital status (has partner = 1)	0.7871	0.8268	0.1448	-0.3009	-0.0004	0.3621
	(0.409)	(0.378)	(0.294)	(0.799)	(0.003)	(0.688)
× Both partners work	0.0251	0.0504	-0.3025	-1.9976 **	0.0320 *	0.0413 *
	(0.156)	(0.219)	(0.574)	(0.537)	(0.013)	(0.020)
Education (university graduate = 1)	0.3282	0.2569	0.0745	1.5756 *	0.0656 +	-0.5307 +
	(0.470)	(0.437)	(0.198)	(0.758)	(0.037)	(0.275)
Children (with a child under 6 years old = 1)	0.0488	0.0637	0.3722	-0.0912	0.0003	0.0331
	(0.216)	(0.244)	(0.368)	(0.745)	(0.002)	(0.061)
Hospitalization (member of the household is hospitalized = 1)	0.1367	0.2040	0.5624	1.0899	-0.0506	-0.0783
	(0.344)	(0.403)	(0.543)	(0.928)	(0.037)	(0.160)
At home care (care provided at home = 1)	0.5230	0.5822	-0.3176 +	-1.0552	0.0568 +	0.3809
	(0.500)	(0.493)	(0.182)	(0.662)	(0.034)	(0.360)
Annual household income (value in real terms)	7.4638	7.1302	-0.0714 **	-0.1601 *	-0.0333	0.6769
	(3.552)	(3.653)	(0.026)	(0.072)	(0.023)	(0.589)
Assistance with providing care from someone outside of the household (assistance received = 1)	0.3045	0.3094	-2.3039 *	0.1564	0.0354	-0.6849
	(0.460)	(0.462)	(0.919)	(5.047)	(0.074)	(1.402)
× Frequency of assistance	1.6053	1.5699	0.5064 **	0.2264	-0.0643	0.4094
	(2.468)	(2.406)	(0.193)	(1.001)	(0.096)	(1.441)
Percentage of people certified as requiring long-term care among the 65−74 year old population in the region	4.2308	3.8939	-0.1264	3.7641 **	0.3029 +	-15.4122 **
	(0.599)	(0.524)	(0.351)	(1.429)	(0.173)	(5.751)
Percentage of people certified as requiring long-term care among the 75 years and over population in the region	30.5078	24.3883	0.0747	-0.7016 **	-0.4817	19.7225 **
	(2.604)	(3.119)	(0.078)	(0.208)	(0.552)	(5.539)
Percentage of people certified as requiring support among those aged 65−74 certified as requiring long-term care	28.4091	13.6700	0.0074	0.2925	2.4275 *	-6.1827
	(4.486)	(3.079)	(0.062)	(0.190)	(1.223)	(3.912)
Percentage of people certified as requiring support among those aged 75 and over certified as requiring long-term care	25.0691	13.3620	-0.0015	-0.2195	-2.4267 +	5.2316
	(3.935)	(3.399)	(0.084)	(0.163)	(1.470)	(3.956)
Work time	39.4356	34.8624	-0.0153 **	-0.0546 **	-0.1898 **	1.9614 **
	(35.124)	(33.106)	(0.004)	(0.015)	(0.062)	(0.756)
Household production	2.5180	2.8705	0.1001 *	0.0582	-0.0458	0.0738
	(6.932)	(8.126)	(0.048)	(0.049)	(0.030)	(0.115)
Travelling time	4.2029	5.2590	0.0141	-0.0360	0.0241	0.1613 +
	(8.847)	(10.311)	(0.015)	(0.024)	(0.021)	(0.094)
Shopping time	2.8532	2.1259	0.0594 +	-0.1644 **	-0.0051	0.3324 **
	(6.271)	(4.859)	(0.032)	(0.059)	(0.009)	(0.101)
Childcare time	0.7591	0.5072	-0.0167	-0.0498	-0.0010	0.0124
	(4.975)	(3.770)	(0.017)	(0.046)	(0.003)	(0.018)
Constant term	-	-	-0.2723	6.3017 *		-6.5739 *
	-	-	(1.022)	(2.546)		(2.729)
Sample size	2151	1946	2151	1946		
R2-adj.			0.071	0.090		

Note: Figures in parentheses are standard errors. +,* and ** indicate that the difference between the two given years has statistical significance at the 10, 5, and 1% levels respectively.

Table 4. Oaxaca-Blinder Decomposition (Average Caregiving Time per Week of Female Regular Employees [Age 30–59] Caring for Family Members)

	Average		Regression coefficient		OB decomposition	
	2011	2001	2011	2001	Explained	Unexplained
Caregiving time (Dependent variable)	2.2366	3.0260	-	-	-1.0501	0.2607
	(0.202)	(0.306)	-	-	(0.710)	(0.711)
Explanatory variables						
Age dummy Age 40−49	0.2637	0.3312	1.9123 **	1.6526 *	-0.0139	0.0688
	(0.441)	(0.471)	(0.475)	(0.826)	(0.054)	(0.251)
Age 50−59	0.5973	0.4945	2.0421 **	1.6799 **	0.0891	0.1910
	(0.491)	(0.500)	(0.450)	(0.646)	(0.068)	(0.415)
Marital status (has partner = 1)	0.6678	0.7116	-0.2799	1.0961 *	-0.0251	-0.8460 +
	(0.471)	(0.453)	(0.494)	(0.544)	(0.035)	(0.446)
× Both partners work	0.1110	0.1347	0.8512	0.6355	-0.0207	0.0212
	(0.314)	(0.342)	(0.679)	(1.226)	(0.026)	(0.157)
Education (university graduate = 1)	0.1534	0.1220	1.2319 *	1.9703 *	-0.0246	-0.1165
	(0.361)	(0.327)	(0.592)	(0.921)	(0.039)	(0.171)
Children (with a child under 6 years old = 1)	0.0288	0.0269	-1.1605	2.2536 +	0.0009	-0.0917 *
	(0.167)	(0.162)	(0.802)	(1.238)	(0.009)	(0.042)
Hospitalization (member of the household is hospitalized = 1)	0.1363	0.1632	-0.2935	2.2496 *	-0.0112	-0.3292 *
	(0.343)	(0.370)	(0.503)	(0.945)	(0.019)	(0.140)
At home care (care provided at home = 1)	0.5082	0.5103	-0.3710	1.1945	0.0055	-0.7965 +
	(0.500)	(0.500)	(0.410)	(0.727)	(0.014)	(0.422)
Annual household income (value in real terms)	8.0165	7.1004	-0.0475	-0.1269	-0.1047 +	0.6138
	(4.254)	(4.126)	(0.045)	(0.084)	(0.064)	(0.733)
Assistance with providing care from someone outside of the household (assistance received = 1)	0.3233	0.2773	-6.1259 *	-11.184 **	-0.6987 *	1.5515
	(0.468)	(0.448)	(2.616)	(1.777)	(0.307)	(0.949)
× Frequency of assistance	1.7014	1.4342	1.3492 **	2.2503 **	0.8277 *	-1.4403
	(2.499)	(2.371)	(0.488)	(0.397)	(0.328)	(0.979)
Percentage of people certified as requiring long-term care among the 65−74 year old population in the region	4.2614	3.9226	1.6064 *	-0.9509	0.6048 +	10.0523
	(0.563)	(0.496)	(0.778)	(1.909)	(0.324)	(8.091)
Percentage of people certified as requiring long-term care among the 75 years and over population in the region	30.7665	24.6151	-0.0797	0.2947	-0.6044	-9.0118
	(2.478)	(3.012)	(0.144)	(0.237)	(0.721)	(7.101)
Percentage of people certified as requiring support among those aged 65−74 certified as requiring long-term care	28.6434	13.6606	0.0691	-0.0004	0.3582	1.6647
	(4.385)	(3.145)	(0.105)	(0.189)	(1.251)	(3.895)
Percentage of people certified as requiring support among those aged 75 and over certified as requiring long-term care	25.0653	13.5672	-0.1509	-0.1791	-1.4715	-0.0618
	(3.880)	(3.496)	(0.128)	(0.122)	(1.090)	(3.511)
Work time	31.7481	32.5899	-0.0557 **	-0.0955 **	0.0266	1.7178 +
	(30.271)	(29.489)	(0.010)	(0.022)	(0.121)	(1.026)
Household production	17.7433	18.7452	-0.0097	-0.0581 +	0.0073	0.7089
	(15.788)	(16.220)	(0.016)	(0.031)	(0.020)	(0.502)
Travelling time	4.8580	4.8687	-0.0400 +	-0.0521	0.0238	0.0516
	(9.364)	(9.624)	(0.021)	(0.049)	(0.022)	(0.205)
Shopping time	4.4913	3.8661	-0.0700 *	-0.1257 *	-0.0264	0.1832
	(6.858)	(5.913)	(0.030)	(0.056)	(0.030)	(0.207)
Childcare time					0.0071	0.1107 *
					(0.015)	(0.050)
Constant term	-	-	1.0791	5.0601 *		-3.9811
	-	-	(2.224)	(2.278)		(3.159)
Sample size	1460	1262	1460	1262		
R2-adj.			0.125	0.123		

Note: Figures in parentheses are standard errors. +,* and ** indicate that the difference between the two given years has statistical significance at the 10, 5, and 1% levels respectively.

among those age 65–74 and 75 and above requiring long-term care, based on data from the Status Report on the Long-Term Care Insurance System (Ministry of Health, Labour and Welfare) for 2001 and 2011 by prefecture of residence. The former demonstrates the increase or decrease in the percentage accounted for among older people by those requiring long-term care, and the latter demonstrates the change in the level of the care required by those eligible for care. Looking at the national average, in the last ten years the percentage of people designated as requiring long-term care has increased in both the 65–74 age bracket and the 75 or above age bracket. However, of those people designated as requiring long-term care, the percentage of people designated as requiring support has also increased. Namely, the decade is characterized by the fact while the percentage of people requiring care is on the increase, there is also an increase in the number of people requiring a low level of care.

In order to look at to what extent caregiving time is affected by increase and decrease in other time, "work" time and "household production time"—"housework," "traveling (other than commuting)," "shopping," and "childcare" time—were added to the explanatory variables. The inclusion of "travel" as a variable takes into account the fact that there is an increase in the number of people providing care outside of the home, and therefore there is a possibility that such caregivers may require time to travel to and from the place of residence of the person requiring care, subsequently decreasing the time that can be spent on providing care. Moreover, "shopping" and "housework" time were adopted as explanatory valuables because, as mentioned above, caregivers may be using time to provide support with daily living such as housework and shopping where the person has a relatively less severe condition not designated as requiring long-term care. The inclusion of childcare time takes into account the increase in the number of people who care for elderly family members while also raising children.[5, 6]

Firstly, looking at the "explained" column for males in Table 3 (second column from the right), the decrease in the percentage of people providing care at home, the increase in the percentage of the 65–74 age bracket certified as requiring long-term care, and the increase in the percentage of people certified as "requiring support" among the people in the 65–74 age bracket certified as requiring care, each contribute to the increase in the caregiving time. On the other hand, the increase in the percentage certified as "requiring support" among the people aged 75 and over requiring long-term care is contributing to the decrease in the caregiving time. Namely, the increase in the number of older people in the age 75 and

[5] As time use is decided endogenously, it is necessary to take into consideration the fact that it is not demonstrating a causal link from one or the other, but when the variables regarding these times were excluded the results were hardly affected.

[6] The slight difference in the average values of caregiving time in Table 2 and the average values of caregiving time in Tables 3 and 4 is due to the difference in the number of samples. The number of samples used for the Oaxaca-Blinder decomposition was slightly smaller than those used in Table 2, due to the fact for some of the samples there were no responses for items adopted as explanatory variables, such as education and income.

above age bracket who require some form of care but at a relatively low level is contributing to the decrease in caregiving time. Another factor that is contributing to the decrease in caregiving time is the increase in "work" time over the last ten years. It is not possible to determine here whether this is because people are able to finish providing care in a short amount of time and increase their work hours as a result, or because they have increased their working hours and therefore have to decrease the time they spend providing care. However, at the very least it can be suggested that the relationship between work time and caregiving time is such that as one increases the other will decrease and vice versa.

Looking at the columns of regression coefficients in the center of Table 3, the "shopping time" in 2011 is estimated with a positive sign. This seems to indicate that there are people who provide support by buying and delivering necessary daily items, food, and other items when providing home-visit care to family members outside home. Moreover, the sample for 2011 shows that when there is assistance from someone other than a household member the caregiving time becomes significantly lower. As "someone other than a household member" may include family and relatives who live in another household it is necessary to leave latitude in interpreting the results, but it is possible to make the interpretation that since the introduction of Long-Term Care Insurance system for supporting older people has come to function within society. However, as the percentage of such people who receive assistance from someone other than a member of the household has changed very little in comparison with 2001, it is not possible to explain entirely the decrease in caregiving time over the last decade.

Looking at the data for females in Table 4, the percentage that receive assistance with providing nursing care from persons outside the household has increased over the last ten years, in turn contributing to the decrease in the caregiving time. There was formerly a strong tendency for women to be responsible for providing nursing care, regardless of whether or not they were in employment, but it can be suggested that with the introduction of Long-Term Care Insurance this trend has eased slightly. At the same time, even when there is assistance from someone outside the household, the caregiving time in fact increases along with increase in the frequency that support is provided. This seems to indicate that, as the higher the frequency that support is provided the higher the level of care needed by the person requiring care becomes, it is necessary for the caregiver to also increase the time they spend providing care, even when they receive assistance from others. The data for females also shows that an increase in actual yearly income of a household contributes to a decrease in caregiving time. As with an increase in income it is possible to outsource some of the care, it is possible that the increase in actual income is contributing to the overall decrease in caregiving time.

As described above, while there were certain factors that could be explained, it is not possible to sufficiently explain the substantial decrease in caregiving time overall over the last ten years. Further analysis is required in order to determine the reason for the decrease in caregiving time in recent years, as it will provide significant insights for reviewing the

Long-Term Care Insurance system in order to ensure that the system focusses on providing support to those who really need assistance.

V. Conclusion

In summary, the results of analysis of the STULA showed a sharp increase in the number of people providing care to family members among the total number of people in the intermediate age bracket who are in regular employment, but also a decrease over the last ten years in the time that caregivers spend providing care, regardless of where they give the care and whether or not they receive assistance from others. On the other hand, working hours on ordinary working days are on the increase for both males and females, and the scale of this increase over the last 15 years is particularly significant among those who are providing care to family members. In other words, although the importance of work-life balance and combining nursing care and childcare effectively with work has been emphasized for a number of years, the working hours of both males and females in the intermediate age bracket are in fact on the increase.

While in some cases it is possible to suggest that the decrease in caregiving time is a result of the fact that social support for caregiving has developed with the introduction of Long-Term Care Insurance, there is insufficient explanation for the significant decrease in caregiving time over the last ten years. It is necessary to conduct further analysis in order to ascertain the reason for the decrease in caregiving time in recent years, as it will be important for reviewing the Long-Term Care Insurance system in order to ensure that it focusses on providing support to those who really require assistance.

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Study on Legal Issues Involving Intermediate Age Brackets: Aiming to Facilitate Work-Life Balance

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This paper divides problems facing workers in intermediate age groups (mid-30s to 40s) into four types—problems related to leave and disadvantageous treatment, problems related to reassignment, problems related to promotions and upgrades, and problems of non-regular workers. Each of these is discussed from the perspective of labor law studies based on labor-related case law. Workers in intermediate age groups are susceptible to problems that occur when taking lengthy leave or after returning to work, because they need to continue their working lives at the same time as addressing the changing needs of family life. These problems include vast reductions in wages, disadvantageous treatment on grounds of pregnancy or childbirth, reassignments that disrupt family life, and discriminatory treatment in connection with upgrades and promotions. And because this generation is polarized between regular and non-regular employment, the problems of non-regular workers are also examined.

I. Introduction

Workers in their mid-30s to 40s are not only at the peak of their working lives, having become a core presence in the workplace, but are also experiencing upheaval in their private lives, with changes in family composition due to marriage and childbirth (or childbirth by their spouse). Then as they approach their late 40s, the need to care for their parents gradually comes into play. As long as they are both parents and children, the responsibilities of childcare and family care affect men and women equally. Moreover, the Child Care and Family Care Leave Act (formally known as “the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members,” and referred to below as “the Care Leave Act”) stipulates that leave is to be given to all male and female workers who meet certain conditions. As such, it is a widely shared fact that these responsibilities befall both men and women equally.

On the other hand, an increasing number of people in their 30s and 40s choose not to marry and to have no children. But this diversification of life courses is not something that has been voluntarily chosen by everyone; changes in the labor market provide a major reason why this situation has arisen. Since the enactment of the Worker Dispatching Act (formally known as “the Act for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers”) in 1986, a subsequent series of deregulatory measures has led to an increase in dispatch workers, and this trend has had the knock-on effect of increasing non-regular workers in general. This in turn has led to a decrease in posts for regular workers, who are relatively expensive to employ.

Workers falling in the intermediate age groups highlighted by this paper have a higher rate of non-regular employment than workers in these same age groups have done in the past. We also know that a rise in the lifelong unmarried rate in recent years is closely related to the problem of non-regular workers. And there is a significant number of people who have a partner but hesitate to have children because their incomes are too low. Thus, workers reaching intermediate age groups are divided and polarized into those with regular employment and those without. This is a problem that cannot be overlooked, as it has a tremendous impact on their future life course, including the existence of partners or children.

Given this polarization of employment and diversification of life courses, it is very difficult to decide what standards should be used and how the issue should be discussed. Of labor law issues affecting intermediate age groups, the discussion in this paper will focus on areas where there has been an accumulation of case law doctrine until now, on the premise that this is a family-forming generation.

In light of the above, the image of workers positioned in intermediate age groups will be explored, while legal problems corresponding to the situations they face will be examined and discussed with focus on case law.

II. Problems Faced by Intermediate Age Groups (Mid-30s to 40s)

In this section, problems faced by workers positioned in intermediate age groups will first be enumerated more specifically and previous trends analyzed, followed by an attempt to assess the ideal direction for systems and policies in future. The discussion will be broadly divided into four perspectives. The first will address problems related to leave and disadvantageous treatment, the second problems related to staff reassignment, the third problems related to upgrades and promotions, and the fourth problems of non-regular workers.

1. Problems Related to Leave and Disadvantageous Treatment

Because the ages of marriage and childbirth are broader than they used to be, the 30s are now a time when many people are busy raising their children. And from the 40s onward, the need to care for elderly parents gradually increases. On the other hand, this is also a time when those in regular employment come to occupy a core position in the workplace. Therefore, workers in intermediate age groups are at a time in their lives when they have responsibilities and continue to work, but also have to keep their jobs while dividing time between childrearing and family care.

For people to continue working without inconvenience at this time, leave-related systems need to be established with more flexible and more varied options. However, just being able to take leave when it suits the system requirements is no longer sufficient. “Flexible” should mean a situation that meets a variety of conditions, including being able to take leave when necessary, with smooth workplace reinstatement after taking leave, no harass-

ment related to taking leave, and no disadvantage in treatment after returning to work.

The reality is different, however. Workers who take long periods of leave sometimes suffer various disadvantages both before and after taking leave, including a reduction in wages.

A reference case is the Toho Gakuen Case (Sup. Ct., 1st Petty Bench, Dec. 4, 2003. *Rodo Hanrei* 862-14).[1] X (Plaintiff / Appellee / Appellee of Final Appeal) was employed by Y (Defendant / Appellant / Appellant of Final Appeal), and used her maternity leave and Y's own system of childcare time when giving birth to a child. The maternity leave fell within the period for assessment of the FY1994 year-end bonus, and the childcare time within that of the FY1995 summer bonus. Because of this, the two bonuses were not paid, in that the conditions for payment of bonuses in Y's salary provisions (namely that "attendance during the assessment period must be at least 90%") had not been met.

The summary of the judgment was that, although the 90% clause in this case had a degree of economic rationality, the rights and interests of prenatal and postnatal leave, among others, are guaranteed under the Labor Standards Act, etc., and stipulating bonus payment conditions that effectively extinguish the spirit of laws designed to guarantee those rights and interests is not permitted. In the formula for calculating bonuses, however, treating days of prenatal and postnatal leave and childcare time as absences justifying a reduction in the amount is not in itself invalid as a violation of public policy. In other words, although the basic rule is that wages are not paid as a consideration for labor during leave,[2] many workers feel unable to take leave if their wages would be reduced. Therefore, the application of this rule must be avoided if it encourages workers not to take their rightful leave. As such, provisions that reduce bonuses to zero, such as the calculation formula in this case, are violations of public policy, but a reduction within a range not reaching zero would be permitted. Nevertheless, since maternity leave is a mandatory right that must be observed regardless of the worker's wishes,[3] reducing wages because maternity leave was taken should be regarded as a violation of public policy.

Article 6, paragraph 8 of the ILO183 Convention (an amendment of the 103 Convention) states that cash benefits received by women on taking childbirth leave should be provided through compulsory social insurance or public funds, or in a manner determined by national law and practice. Besides exceptional cases, moreover, the employer should not be

[1] First instance, Tokyo Dist. Ct., Mar. 25, 1998 (*Rodo Hanrei* 735-5); second instance, Tokyo High Ct. Apr. 17, 2001 (*Rodo Hanrei* 803-11).

[2] For prenatal and postnatal leave, the Health Insurance Act specifies leave benefits (two-thirds of the standard monthly remuneration; Article 102). The Employment Insurance Act provides for allowances in the case of childcare leave (67% of the daily wage at the start of leave up to the 180th day after the start of leave, 50% from the 181st day; Supplementary Provisions Article 12) and family care leave (40%, 93 days; Article 61-6).

[3] Although prenatal leave is not compulsory unless a female worker requests it (Labor Standards Act, Article 65, paragraph 1), postnatal leave is mandatory for women within the first eight weeks after giving birth (Labor Standards Act, Article 65, paragraph 2, first sentence).

individually liable for the cost.[4] Not compelling employers to contribute cash benefits for childbirth leave means that employers will not have to exclude female workers who have no choice but to take leave for childbirth. This suggests that, under the ILO Convention, the right of female workers to take childbirth leave is regarded as worthy of more respect than any other. From this, one might assume that wages may not be reduced even slightly by reason of taking childbirth leave.[5]

The next case to be highlighted is one in which, on requesting a transfer to lighter work by reason of pregnancy, the employee was reassigned and at the same time demoted, was not reinstated to her former management position after returning from childcare leave, and also had her pay reduced. Although the Supreme Court ruling in the Hiroshima Chuo Hoken Seikatsu Kyodo Kumiai (C Seikyo Hospital) Case (Sup. Ct., 1st Petty Bench, Oct. 23, 2014. *Rodo Hanrei* 1100-5) was reported as maternity harassment, in legal terms it came under Article 9, paragraph 3 of the Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment (referred to below as "the Equal Opportunity Act"), which prohibits disadvantageous treatment. When X (Plaintiff / Appellant / Appellant of Final Appeal) became pregnant, she requested a transfer to lighter work under Article 65, paragraph 3 of the Labor Standards Act. Y (Defendant / Appellee / Appellee of Final Appeal) agreed to this, but at the same time as ordering reassignment to lighter work, demoted her from her position as Deputy Manager. On subsequently returning to work after her prenatal, postnatal and childcare leave, X was ordered to be reassigned to her original department, but another employee had already been appointed Deputy Manager, meaning that she could not resume her original post. Since Deputy Manager status had been worth an extra 9,500 yen per month as a Deputy Manager allowance, X sued for payment of the Deputy Manager allowance, among others, in that her demotion violated Article 9, paragraph 3 of the Equal Opportunity Act, while the failure to restore her original status after her return to work violated Article 10 of the Care Leave Act.

The Supreme Court recognized Article 9, paragraph 3 of the Equal Opportunity Act as a mandatory provision, and confirmed that demotion accompanying a transfer to lighter work during pregnancy under Article 65, paragraph 3 of the Labor Standards Act in principle violated that provision and was thus invalid.[6] The framework of judgment indicated by the Supreme Court ruling was that it would not constitute treatment prohibited under said

[4] ILO 183 Convention, Article 6, paragraph 8, "In order to protect the situation of women in the labour market, benefits in respect of the leave referred to in Articles 4 and 5 shall be provided through compulsory social insurance or public funds, or in a manner determined by national law and practice. (Remainder omitted)"

[5] Mutsuko Asakura discusses the strong rights nature of childbirth leave, with attention to ILO 183 Convention, in "Can laws end maternity harassment?—With reference to judicial precedents on maternity harassment," *POSSE*, no.23 (2014): 85.

[6] Article 2-2 (vi) of the Equal Opportunity Act Enforcement Regulations specifies requests for transfer to lighter work during pregnancy, and the granting of such transfers, among the "other reasons relating to pregnancy, childbirth" in Article 9, paragraph 3 of the Equal Opportunity Act.

provision in exceptional cases, namely (i) when there are objectively reasonable grounds to deem that the demotion has been consented based on the worker's free will, or (ii) when there are special circumstances in which there is deemed to be no substantial violation of the spirit and purpose of said provision, when transferring to lighter work without demotion would be counterproductive to business necessity. It also held that a reinstatement to the position of Deputy Manager was not planned in this demotion, which was thus contrary to X's wishes, and therefore that special circumstances that do not substantially violate the spirit and purpose of Article 9, paragraph 3 of the Equal Opportunity Act could not be deemed to exist.

On the "consent" referred to (i), it is questionable whether a demotion that could not be called entirely reasonable could then be made reasonable by virtue of consent based on free will.[7] That is, one feels that a measure that objectively violates Article 9, paragraph 3 of the Equal Opportunity Act is after all illegal and therefore invalid, and it should not be possible to sweep the said violation aside simply based on consent by the worker. Thus, although the Supreme Court's acknowledgement that demotion accompanying a transfer to lighter work by reason of pregnancy constitutes disadvantageous treatment under Article 9, paragraph 3 of the Equal Opportunity Act is highly influential,[8] questions remain over the framework of judgment thus indicated.

Although this was not a case of treatment (demotion) directly linked to taking leave, it was highlighted in this section as disadvantageous treatment linked to taking prenatal and postnatal leave, etc. There is considerable significance in the confirmation that disadvantage can arise if treatment such as demotion is implemented at a time close to taking this kind of leave. There seem to be not a few issues remaining for the future. For example, how to regulate "pure" harassment occurring at such times. And within the lengthy period of time needed for raising children, if we assume that the provision prohibiting disadvantageous treatment under Article 10 of the Care Leave Act can only be applied at times close to taking childcare leave, how can subsequent issues be raised as problems in terms of the law?

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[7] In a similar vein, Hiroyo Tokoro, "Demotion (Dismissal from Management Posts) Accompanying Transfers to Lighter Work Due to Pregnancy and Article 9, Paragraph 3 of the Equal Opportunity Act," TKC Law Library, LEX/DB Ref. no. 25446716; Satoshi Hasegawa, "Legal Validity of Demotion Triggered by a Request for Transfer to Lighter Work Due to Pregnancy," *Rodo Horitsu Junpo*, no. 1835 (March 2015): 6; Tamako Hasegaw, "Illegality of demotion triggered by a transfer to lighter work during pregnancy," *Hogaku Kyoshitsu*, no.413 (2015): 35.

[8] After this Supreme Court ruling, the Equal Opportunity Act and the Care Leave Act Interpretation Notice was partially amended on January 23, 2015 (Equal Employment, Children and Families Bureau Issue 0123 No.1). This states that "by reason of" in Article 9, paragraph 3 of the Equal Opportunity Act is construed as meaning that when disadvantageous treatment is "triggered" by pregnancy, childbirth or other circumstances, in principle the disadvantageous treatment occurs "by reason of" pregnancy, childbirth, etc. Subsequently, on March 30, 2015, the Ministry of Health, Labour and Welfare published a Q&A on the specific interpretation, including the statement that "In principle, when disadvantageous treatment occurs within one year after the end of pregnancy, childbirth, childcare or other circumstance, it is judged to be "triggered" by it."

2. Problems Related to Reassignment

Workers with responsibility for childcare and family care are sometimes given reassignment orders requiring them to relocate. These workers are either forced to live away from their families, or even if they move with their families, are compelled to go through an unsettled time as their children and spouses adjust to the new environment, or to make alternative arrangements for care facilities, home visits, and so on. This is another problem that workers belonging to intermediate age groups tend to experience.

The Toa Paint Case (Sup. Ct., 2nd Petty Bench, July 14, 1986. *Saiko Saibansho Saibanshu Minji* 148-281; *Hanrei Jiho* 1198-149; *Hanrei Taimuzu* 606-30; *Rodo Hanrei* 477-6)[9] may be cited as a reference case. X (Plaintiff / Appellee / Appellee of Final Appeal) refused an order to transfer from the Kobe office to the Nagoya office for reasons of family circumstances, in that he would have had to live away from his mother (aged 71), his wife (28) and his child (2). His employer, Y (Defendant / Appellant / Appellant of Final Appeal), then dismissed him on disciplinary grounds, and the original ruling that invalidated this dismissal was overturned—in other words, the final conclusion was that the disciplinary dismissal was valid. The judgment by the Supreme Court is summarized as follows.

An employer may not exercise the right to order transfers without constraint, and abuse of that right is not permitted. Therefore, such a transfer order is invalid when there is no business necessity. Even when a business necessity does exist, however, a transfer order will constitute an abuse of rights if there are exceptional circumstances, such as when said transfer order is made for other unlawful motives or objectives, or when a worker is made to bear a disadvantage significantly exceeding the level that should normally be tolerated. Using this framework of judgment, there was deemed to be business necessity in this transfer order, and the disadvantage in terms of private life was deemed not to significantly exceed the level that should normally be tolerated in conjunction with a transfer.

This Supreme Court ruling has been followed by a series of court judgments reaching the conclusion that, even though a reassignment order was refused on grounds of family circumstances, the reassignment did not cause the worker "to bear a disadvantage significantly exceeding the level that should normally be tolerated."[10] But against this trend, there have been cases in which a reassignment order causing inconvenience to family life is deemed an abuse of rights. These include the Hokkaido Coca Cola Bottling Case (Sapporo Dist. Ct., July 23, 1997. *Rodo Hanrei* 723-62), the Meijitosho Shuppan Case (Tokyo Dist. Ct., Dec.27, 2002. *Rodo Hanrei* 861-69), the Nestlé Japan Holding (Reassignment Main

[9] First instance, Osaka Dist. Ct., Oct. 25, 1982 (*Rodo Hanrei* 399-43); second instance, Osaka High Ct., Aug. 21, 1984.

[10] For example, the Teikoku Hormone Mfg. Case (Sup. Ct., 2nd Petty Bench, Sep. 17, 1999. *Rodo Hanrei* 768-16) and the Kenwood Case (Sup. Ct., 3rd Petty Bench, Jan. 28, 2000. *Hanrei Taimuzu* 1026-91) produced similar judgments to that of the Supreme Court, and even in lower court rulings, the JR East Japan (Tohoku Region Vehicle Department) Case (Sendai Dist. Ct., Sep. 24, 1996. *Rodo Hanrei* 705-69) and the JR Hokkaido (Transfer Order) Case (Sapporo Dist. Ct. Nov. 30, 2005. *Rodo Hanrei* 909-14) may be cited.

Action) Case (Kobe Dist. Ct., Himeji Branch, May 9, 2005. *Rodo Hanrei* 895-5), and the Nestlé Japan (Reassignment Main Action) Case (Osaka High Ct., Apr. 14, 2006. *Rodo Hanrei* 915-60). All of these were lower court rulings, but they have tended to deem that "a disadvantage significantly exceeding the level that should normally be tolerated" has been suffered in cases where family members are ill or in need of care, where the current subsistence is premised on the family living together (including the worker in question), and where the balance of family life is likely to be significantly disturbed by the transfer order.[11] In the Teikoku Hormone Case,[12] conversely, the Supreme Court indicated a negative stance on the question of whether a transfer order in which one of the parents in the childrearing phase has no option but to live apart from the family constitutes a violation of public policy, though it was directly contested under the banner of "the right to lead a family life."

Currently, Article 26 of the Care Leave Act[13] obliges employers to give consideration when reassigning workers who have childcare and family care responsibilities. As a result, one would also expect to see changes in case law doctrine in future.

All of the above cases involve reassignment orders to remote locations, with the disadvantage that they disrupt the subsistence of the worker, including the worker's family. However, the next case to be highlighted—the Konami Digital Entertainment Case (Tokyo High Ct., Dec. 27, 2011. *Rodo Hanrei* 1042-15)—involves staff reassignment for the purpose of changing work duties but not requiring a house move. A particular characteristic of this case is that the reassignment caused a major disadvantage in terms of remuneration.

X (Plaintiff/Appellant) took prenatal and postnatal leave as well as six months' childcare leave. After returning to work, she was reassigned from her previous role of overseas licensing to domestic licensing (referred to below as "the change of work duties"), and her role grade was also reduced. Moreover, because remuneration grades are linked to role grades, X's remuneration grade was also reduced. Furthermore, because the performance bonus that forms a portion of the annual salary was assessed as zero, among other factors, X's annual salary for FY2009 was sharply reduced, with a very large wage decrease of 1.2 million yen (on a per annum basis) between before and after taking prenatal, postnatal and childcare leave. The court of appeal ruled that the change in assigned work duties after the leave was possible in view of the personnel rights of Y (Defendant/Appellee), but that the

[11] In the Hokkaido Coca Cola Bottling Case (Sapporo Dist. Ct. July 23, 1997. *Rodo Hanrei* 723-62), a transfer order from the Obihiro Factory to the Sapporo Factory under circumstances in which the claimant was effectively compelled to take over the family agricultural business because of the elder daughter's manic depression, the second daughter's retarded psychomotor development due to the after-effects of encephalitis, and the parents' ill health, was deemed to constitute an abuse of rights.

[12] *Supra* note 10.

[13] Article 26 of the Care Leave Act (effective from April 1, 2005) states that "An employer shall, in making a change to the assignment of an employed worker which results in a change in the said worker's workplace, give consideration for the worker's situation with regard to child care or family care, when such a change would make it difficult for the worker to take care of his/her children or other family members while continuing to work."

change in role grade was disadvantageous to the worker's career, and therefore deemed that the assigned work duties and role grade are not automatically linked. Moreover, it held that the role grade and remuneration grade are not linked unless stipulated in work rules, etc., or the worker's agreement has been obtained. The court of appeal mainly recognized the illegality of linking role grades to remuneration grades, and ruled that it would be reasonable for the role remuneration to be the same as in the previous year.

Normally, court cases challenging the legality of staff reassignment, like the Supreme Court ruling on the Toa Paint Case mentioned in the first paragraph of this section, first confirm whether the possibility of reassignment was specified in the labor contract, then if the labor contract permits reassignment orders, they apply the doctrine of abuse of rights. In this case, however, the order for the change of work duties after the return to work was deemed possible in view of Y's personnel rights, and the reassignment order (the change of work duties order) was not judged abusive. By ruling that assigned duties and role grades are not automatically linked, and limiting cases in which role grades and remuneration grades are linked, the court implied that a vast reduction in wages was unlawful.

The fact that vast reductions in wages were stopped as a result of this legal doctrine can be highly praised. But what X hoped for most of all in this case was to continue working in the same job as before she took leave.[14] The existing Care Leave Act has no provisions on reinstatement to the original post after returning from leave, as they only exist in the guidelines. Therefore, one would certainly hope that the notion of placing such provisions in the text of the law will be studied in future.

3. Problems Related to Discrimination in Upgrades and Promotions

Compared to male workers, who have been core components of the labor market for a long time, female workers have always tended to be slower in receiving upgrades and promotions.[15] Since upgrades and promotions are nearly always decided not only on seniority but also on ability and performance assessments, discriminatory treatment based on gender would be hard to prove. Even speaking generally, this is because ability is not always clearly quantifiable in numerical terms; depending on the workplace, there are cases where the standards governing upgrades and promotions are not made clear, cases where there are standards that rely on the subjective judgment of the employer, and so on. But even then, courts have been striving to clarify how discrimination in upgrades and promotions can be proved, how the disadvantage arising from discrimination can be identified, and how the upgraded status can be confirmed.

Cases contesting upgrade discrimination are broadly divided into two types. The first

[14] It can be confirmed from the factual relationships that the appellee (plaintiff in the first instance) had arranged babysitters and others in order to continue the overseas licensing work after returning to work. District court ruling in this case (*Rodo Hanrei* 1027-38 to 39).

[15] "Upgrade" refers to a horizontal elevation in job grade, "promotion" to a vertical promotion in rank.

is upgrade discrimination under a personnel management system with different courses for male and female employees, while the second comprises other forms of discrimination. Examples of the former, i.e. in which upgrade discrimination has been recognized in that the personnel management system was effectively divided into male and female courses, etc., are the Nomura Securities Case (Tokyo Dist. Ct., Feb. 20, 2002. *Rodo Hanrei* 822-13), the Okaya & Co., Ltd. Case (Nagoya Dist. Ct., Dec. 22, 2004. *Rodo Hanrei* 888-28), the Sumitomo Metal Industries Case (Osaka Dist. Ct., Mar. 28, 2005. *Rodo Hanrei* 898-40), and the Kanematsu Case (Tokyo High Ct., Jan. 31, 2008. *Rodo Hanrei* 959-85). As gender-specific personnel management systems were outlawed when the amended the Equal Opportunity Act took effect from April 1, 1999, all cases where male and female employees are overtly subjected to different personnel management are currently against the law.

The latter, i.e. cases in which there is no gender segregation in the personnel management system, are rather more difficult. But even when an objectively gender-equal personnel management system is adopted, there are many cases in which upgrade discrimination has been tolerated in the actual operation of the system. The Suzuka City Case (Tsu Dist. Ct., Feb. 21, 1980. *Hanrei Jiho* 961-41), the Health Insurance Claims Review & Reimbursement Services Case (Tokyo Dist. Ct., July 4, 1990. *Rodo Hanrei* 565-7), the Shiba Shinkin Bank Case (Tokyo High Ct., Dec. 22, 2000. *Rodo Hanrei* 783-71), the Sharp Electronic Marketing Case (Osaka Dist. Ct., Feb. 23, 2000. *Rodo Hanrei* 783-71), the Shoko Chukin Bank Case (Osaka Dist. Ct., Nov. 20, 2000. *Rodo Hanrei* 797-15), the Sumitomo Life Insurance Case (Osaka Dist. Ct., June 27, 2001. *Rodo Hanrei* 809-5), the Showa Shell Case (Tokyo Dist. Ct., Jan. 29, 2003. *Rodo Hanrei* 846-10), the Hankyu Express International Case (Tokyo Dist. Ct., Nov. 30, 2007. *Rodo Hanrei* 960-63), and the Showa Shell Sekiyu K.K. Case (Tokyo Dist. Ct., June 29, 2009. *Rodo Hanrei* 992-39) all come under this description.

Here, one should mention a case that belongs to the latter type, in that the personnel management system is objectively not gender-specific but runs counter to the trend of these cases. This is the Chugoku Electric Power Case (Hiroshima High Ct., July 18, 2013. *Rodo Keizai Hanrei Sokuho* 2188-3; *Rodo Horitsu Junpo* 1804-76).[16, 17] X (Plaintiff/Appellant) asserted that she had received unfair discriminatory treatment in upgrades of job grade and promotion in rank because she is a woman. X claimed compensation for not being upgraded and promoted as she should normally have been, as well as attorney's fees and confirmation of the upgraded job grade and promotion in rank, but all claims were rejected. When upgrading staff to management positions, Y (Defendant/Appellee) looked not only at the individual's own performance but also at the individual's ability and performance in promoting workplace unity and improving teamwork, and had assessed that X had problems in terms of "the ability to improve cooperative relationships" and "leadership skills." It was also a

[16] First instance, Hiroshima Dist. Ct., Mar. 17, 2011, unpublished in law reports.
[17] The Supreme Court rejected the appeal on March 11, 2015. Unpublished in law reports.

fact, however, that there was considerable gender disparity in upgrades made by Y.[18]

Certainly, since employers have discretion over the specific skills required for management posts, it would be difficult to invalidate the requirements for upgrading in themselves. Nevertheless, while recognizing as a fact that, seen collectively, a large gender disparity has clearly arisen in the speed of upgrading, the summary of the judgment does not see this disparity as a violation of public policy. There are three reasons for this. Firstly, that the appellee's personnel evaluation system has objectivity. Secondly, that there is a tendency for women to shy away from appointments to management posts, voluntary retirement is not uncommon among women, and the situation of the former Women's Protection Act, which was in effect until March 1999, were also taken into account. And thirdly, that the evaluation of the appellant's own "ability to improve cooperative relationships" and "leadership skills" was low. Each of these reasons will be refuted below.

On the first point, although the personnel evaluation system might be deemed to have objectivity, the fact that a very large gender disparity arises as a result shows that there was clearly a problem in the operation of that system. On the second point, even if women do not aspire to management posts, it is out of the question to explain that they are not upgraded because of the former Labor Standards Act, which limited night work and others for women. Female workers and others could not engage in as much night work or overtime work as male workers because it was restricted by law, but this should not be reflected disadvantageously in upgrades and promotions. On the third point, it certainly is not discriminatory based on this standard, but because the wording is too abstract, there is room to question whether truly fair personnel evaluation was really carried out, in connection with a breach of duty by the employer.[19]

Thus, compared to cases in which it has been proved that the personnel management system is effectively operated separately for men and women, it is very difficult to certify that disparity arising in upgrades in gender-equal personnel management system constitutes gender discrimination. In future amendments of the Equal Opportunity Act and the Care Leave Act, the definition of discrimination will need to be clarified so that they can deal effectively with this kind of discrimination in upgrades and promotions as well.

4. Problems Related to Non-Regular Workers

Awareness of labor problems affecting young people in Japan is thought to have aris-

[18] In the summary of the judgment, it was recognized that "It is also a fact that a disparity does exist, in that, as of 2008, the ratio of workers in job grades of *shunin* grade 1 or higher was 90.4% for male clerical workers with the same length of service and same educational background as the appellant (25.7% for female clerical workers). Moreover, the majority of male clerical workers had been upgraded to *shunin* grade 1 by the age of 40, while the first female clerical worker to rise to this grade was aged 41." *Rodo Horitsu Junpo,* no.1804 (2013): 83.

[19] There is a theory that employers bear an obligation to evaluate workers' vocational skills fairly in their personnel evaluation. Katsutoshi Kezuka, "Changes in Wage Compensation Systems and Issues in Labor Law Studies," *Journal of the Japan Labor Law Association,* no.89 (1997).

en in the period known as the "employment ice age," when young people had difficulty in finding work after the collapse of the bubble economy.[20] That this difficulty for young people in finding employment was not overlooked as a transitory social phenomenon can be gleaned from the fact that a "Young Persons' Career Support Research Group" was set up in the Ministry of Health, Labour and Welfare and published a report in 2003.[21]

On the other hand, we also know that, owing to the deterioration of the economy and the impact of employment deregulation, etc., it is now more difficult for people of any age to find posts in regular employment, and that the proportion of non-regular workers has increased among men as well as among women.[22] We know that, besides the generation of people now in their mid- to late 40s who were first employed during the bubble economy, young people who were in their 20s during the employment ice age are now in their 30s, and generations corresponding to intermediate age groups are indeed facing serious employment difficulty. Therefore, the current problems of non-regular employment are also problems for intermediate age groups.

Problems affecting non-regular workers take various forms. Since the employment format we call non-regular employment is unlikely to go away in future, we should consider eliminating disadvantageous parts of non-regular employment contracts and raising the base level of working conditions. From the perspective of whether the worker can choose a life course in which marriage and childbirth may be hoped for, the problem points of non-regular employment must be wage disparity compared to regular employment and the instability of labor contract continuity.

Firstly, let us examine wage disparity compared to regular workers. A reference case is the Maruko Keihoki Case (Nagano Dist. Ct., Ueda Branch, Mar. 15, 1996. *Rodo Hanrei* 690-32), in which two-monthly employment periods were formally repeated. X and other non-regular workers (28 in all) who had worked for between 4 and 25 years claimed discrimination, in that they were engaged in the same work as regular workers, worked more or less the same hours (15 minutes less, but because they made up for that in overtime, the hours were the same, as was the number of days worked), and their other employment obligations were identical (participation in QC circle activities). Yet in spite of all that, regular workers earned a far higher wage.

An important point of contention in this case was whether "the principle of equal pay

[20] Yuki Honda, "Reviewing the Special Nature of the Transition from University to Work in Japan," in *The Sociology of Transition from University to Work*, ed. Takehiko Kariya and Yuki Honda (University of Tokyo Press, 2010), analyzes changes in the transition from university to work by dividing the two decades up to 2010 into a "bubble phase," a "lost phase," a "post phase" and a "second lost phase." The "lost phase" is taken as between around 1993 and around 2004, thus coinciding with the "employment ice age."

[21] Young Persons' Career Support Research Group Report http://www.mhlw.go.jp/houdou/2003/09/h0919-5e.html (last confirmed date, September 9, 2015).

[22] "Analysis of the Labour Economy 2011." http://www.mhlw.go.jp/wp/hakusyo/roudou/11/ (page 105; last confirmed date, November 4, 2015).

for work of equal value" is confirmed in case law, in that there was wage disparity based on a difference in employment categories (regular employment or non-regular employment), even though they were engaged in the same work under effectively the same conditions. "The principle of equal pay for work of equal value" is set out in ILO Convention 100, which was ratified by Japan in 1967. In domestic legislation, Article 4 of the Labor Standards Act is generally construed as including the gist of this Convention.

However, the conclusion drawn in this ruling was that, since "no provision yet exists in positive law to espouse the principle of equal pay for work of equal value," it could not be recognized that the principle exists as a general legal norm governing labour relationships. Moreover, since many Japanese companies until now, using a wage structure based on seniority, have not simply paid an equal wage for work of equal value, the ruling also denied the existence of said principle as public policy, in that it is very difficult to objectively evaluate the equality of labor value.

Nevertheless, the ruling recognized the significance of the principle as a guiding concept, and just as the notion of equal treatment lies at the root of Articles 3 and 4 of the Labor Standards Act, it deemed the same principle to lie at the foundation of "the principle of equal pay for work of equal value." At the same time, this is also an important element for judging the illegality of wage disparity. The court judged that the disparity violated the aforementioned concept of equal treatment lying at the root of the principle of equal pay for work of equal value, and was illegal as a violation of public order and morality. This was because (i) the content of labor performed by X and the other temporary employees was exactly the same as that of Y's female regular employees, both in its external form and internally in terms of the awareness of belonging to Y; and (ii) Y continued to employ X and the others as temporary employees with formal repetition of renewal of employment terms every two months, and moreover continued long-term employment while maintaining or widening the pronounced wage disparity compared to female regular employees, even though Y, as the employer, should have prepared means for the temporary employees to become regular employees after working for a fixed period of time, or else should have established a wage structure based on seniority similar to that of regular employees in a case such as this. However, the judgment also ruled that the wage disparity between X and the other temporary employees compared to female regular employees was not entirely illegal in this case either, since a difference in remuneration must inevitably be left to the employer's discretion within a certain range. Nevertheless, considering that Y provided no assertion or proof of any sort that the principle of equal pay for work of equal value was not in line with public policy, or of circumstances justifying the wage disparity—in addition to the facts, as prerequisite elements, that the content of labor was the same, that the element of seniority should also be considered even for temporary employees who had served continuously for long periods, and all other circumstances of the case—the ruling was that, if the wages of X and the others were no more than 80% of those of female regular employees with the same length of service, this would clearly exceed the acceptable range of wage

disparity and would be illegal as a violation of public order and morality.

Although the "public order nature" of the principle of equal pay for work of equal value has not been recognized in law, its significance as a norm has been recognized, and this case was judged to violate the principle of equal treatment lying at the root of that. In the process, the similarities in work content, working hours, awareness of belonging, and others between regular employees and the plaintiff and other temporary employees were taken as a basis for judgment.

With non-regular workers now increasing in number, steps should be taken to facilitate objective comparisons and other analyses of labor volume compared to regular workers in Japan, and to substantially achieve the spirit and purpose of ILO Convention 100. If base levels of wages for non-regular workers could be raised, it should also to be possible for them to choose a life course involving marriage and children.

Next, a case concerning the continuity of employment of non-regular workers will be raised. Non-regular employment includes a diversity of employment formats. The "temporary employees" in the previous case were "contract employees" with fixed contract terms. Other types are "part-timers" and "*arubaito* workers" working short hours, and "dispatch workers." The latter have the special characteristic that, although the dispatch agency is the employer, this is a labor format in which labor is provided for client companies other than the employer. Also, there are similarities between dispatch and subcontracting as defined in the Civil Code, the difference being that, in dispatch, the dispatch client has the right to issue commands and orders to dispatch workers.

A reference case is the Toshiba Yanagi-cho Case (Sup. Ct., 1st Petty Bench, July 22, 1974. *Hanrei Jiho* 752-27; *Rodo Hanrei* 206-27).[23] This was the first Supreme Court ruling on the termination of employment of fixed-term workers (employees). "Termination of employment" means requiring a worker on a fixed-term contract to quit when the contract term comes to an end.

X and others (Plaintiffs / Appellees / Appellees of Final Appeal) were core temporary workers who had entered the company on two-month labor contracts, and strongly wished to be upgraded to full employee status. Subsequently, company Y (Defendant / Appellant / Appellant of Final Appeal) renewed contracts with X and the others between 5 and 23 times, but when each of the final contract terms ended, the employment was terminated. Company Y did not always necessarily follow the procedure for drawing up new contracts immediately every time the previous term expired. The summary of the judgment held that "It must be said that these labor contracts existed in a state not substantially differing from contracts with no fixed term, as they were renewed as a matter of course every time the term came to an end," and that the termination of employment effectively constituted a declaration of intent to dismiss. The doctrine on dismissal was therefore applied by analogy. The judgment

[23] First instance, Yokomaya Dist. Ct., Aug. 19, 1968 (19 *Rodo Kankei Minji Saibanreishu* 4-1033); second instance, Tokyo High Ct., Sep. 30, 1970 (*Rodo Keizai Hanrei Sokuho* 724).

held that the employment could not be terminated merely for the reason that the term of the labor contracts had ended, and that, because X and the others expected and relied upon this, and the contracts had been maintained on the basis of this kind of reciprocal relationship, terminating employment because the contract term had ended would have to be deemed unacceptable in terms of the principle of good faith—that is, provided there were no exceptional circumstances in a case like this, such as a staff surplus caused by fluctuation in the economic situation, whereby it would be deemed unavoidable for company Y to change its previous treatment and to terminate the employment because the contract term had ended. In other words, the Supreme Court ruled from a position of protecting workers, in that the renewal procedure was ambiguous even with fixed-term contracts, and there seems to have been a mutual expectation of long-term employment by both worker and employer. Thus, the termination was not seen merely as the end of the contract term but as virtually indistinguishable from dismissal, and so the doctrine related to dismissal was applied by analogy.

However, the Supreme Court made a different judgment on a similar case in 1986—the Hitachi Medico Case (Sup. Ct., 1st Petty Bench, Dec. 4, 1986. *Rodo Hanrei* 486-6). This case also involved termination of the employment of temporary workers, but unlike the ruling in the Toshiba Yanagi-cho Case, the judgment in this case reached the conclusion that the termination of employment was lawful. The ruling held that "It cannot be deemed that these labor contracts were transformed into contracts without fixed term through the five contract renewals, or that a relationship not substantially differing from cases in which labor contracts without a fixed term exists arose between the Appellant and the Appellee." It thus ruled that there was a need to reduce personnel for unavoidable business reasons in the factory of Y (Defendant / Appellee of Final Appeal), and when doing so, the action was unavoidable even if it was because workers on open-ended contracts were not offered voluntary redundancies before terminating the employment of the temporary workers.

Thus, the Supreme Court's judgment was changed, and it was made clear that, just because fixed-term employment is renewed several times repeatedly, that does not automatically lead to a judgment that the doctrine on dismissal should be applied by analogy. This judgment has had a huge impact on similar cases since then.[24]

The final case to be raised is one in which a worker who provided labor to a company other than the employer by means of subcontracting offered to be directly employed by that company. This is the Panasonic Plasma Display Case (Sup. Ct., 2nd Petty Bench, Dec. 18,

[24] Since the Hitachi Medico Supreme Court judgment, there have not been many cases in which termination of fixed-term employment has been deemed to constitute a case for applying the doctrine on dismissal by analogy. They include the Panasonic Case (Part-Time Employment Termination No. 1) Case (Osaka Dist. Ct., Oct. 22, 1991. *Rodo Hanrei* 595-9), the Honan Gakuen Case (Tokyo Dist. Ct., Mar. 31, 1992. *Rodo Hanrei* 605-27), and the Shinshindo Case (Osaka Dist. Ct., May 20, 1996. *Rodo Hanrei* 697-42).

2009. *Rodo Hanrei* 993-5).[25]

Subcontracting and worker dispatch are working styles in which, instead of providing labor under the employer with whom the labor contract is concluded, the worker is engaged in work for another company in that company's premises. However, the difference between the two styles is that, in subcontracting, the worker only follows commands and orders from the employer, while the labor receiving client cannot issue commands or orders, while conversely with worker dispatch, the worker follows commands and orders from another company, i.e. the labor receiving client (dispatch client).

X (Plaintiff / Appellant / Appellee of Final Appeal) was employed by company A, which had concluded a subcontracting contract with company Y (Defendant / Appellee / Appellant of Final Appeal). From there, X provided labor in Y's premises, but offered to be directly employed by Y on grounds that this labor situation violated the Worker Dispatching Act, etc. Because no reply was received, the worker subsequently notified the Osaka Labour Bureau, as a result of which a corrective recommendation was made to the effect that the previous contract should be canceled and switched to a worker dispatch contract, as X's labor format was not subcontracting but worker dispatch. X then quit company A, and Y employed X directly on condition of a fixed-term employment contract with no renewal. Subsequently, however, the aforementioned employment contract ended on January 31, 2006, and from the next day onwards, Y refused to employ X. The Supreme Court ruled as follows, and denied that the labor contract between Y and X was ongoing.

Even if worker dispatch were carried out in violation of the Worker Dispatching Act, that alone would not invalidate the employment contract between a dispatch worker and a dispatch undertaking. Therefore, the employment contract between company A and X was valid. On the relationship between X and Y, meanwhile, it cannot be acknowledged that an employment contract relationship was implicitly established in the period up to July 20, 2005. It can only be recognized that an employment contract relationship was established from August 19, 2005, when this contract was exchanged between Y and X. And since this labor contract was not renewed once and there were no plans to renew it, the contract cannot be said to have existed in a state that was virtually indistinguishable from a contract without a fixed term. Moreover, it should be said that this does not correspond to a case in which it could be deemed reasonable for X to expect that the employment relationship would continue after the end of the contract term. Therefore, the termination of employment was valid.

It should be noted here that worker X, not an employee of Y but under a subcontracting contract, asserted that a separate labor contract had been validly established with company Y because the subcontracting contract was in violation of the Worker Dispatching Act. Because the original ruling (High Court) accepted this, there was considerable interest in

[25] First instance, Osaka Dist. Ct., Apr. 26, 2007 (*Rodo Hanrei* 941-5); second instance, Osaka High Ct., Apr. 25, 2008 (*Rodo Hanrei* 960-5).

what judgment the Supreme Court would make, but as stated above, the Supreme Court did not acknowledge the existence of an implicit labor contract.

Thus, there is always some sense of employment uncertainty in subcontracting and worker dispatch contracts, whereby labor is provided to persons other than the employer who is the other party to the labor contract. At present, however, it would be difficult to acknowledge the existence of implicit labor contracts with dispatch clients who receive the provision of labor. In fact, there have been no cases in which the application of Article 40-4 of the Worker Dispatching Act has been recognized.[26]

III. Conclusion

In the above, four categories of problems facing workers in intermediate age groups have been raised, and the case law trends in each to date have been overviewed. The four categories are problems related to leave and disadvantageous treatment, problems related to staff reassignment, problems related to promotions and upgrading, and problems of non-regular workers.

Beside these, intermediate age groups are sometimes pressurized by stress arising from management posts and family life, and one feels that the associated problems of mental health cannot be overlooked either. However, lack of space has prevented these issues from being discussed in this paper.

The problems faced by intermediate age groups cannot be considered separately from labor. This is a generation that seeks a working life in balance with private life, including family issues, and the concept of work-life balance is thus even more essential for them. For this very reason, problems faced by intermediate age groups are problems related to workers in general. This is because we will all tread the same path within the long working life that occupies such a major part of our lives, and a revision of working styles seen as problematic by intermediate age groups is actually required for all generations. In future, this author plans to continue tracking moves toward legislation in the fields raised in this paper.

[26] Worker Dispatching Act Article 40-4 provides that a dispatch client may not in principle employ a dispatch worker beyond the period in which dispatch is possible, and when intending to employ the same worker beyond that period, must offer direct employment if the dispatched worker wishes it.

Analysis of the Support System for Job Seekers: Relation of Training Implementation Agencies' Activities and Trainees' Job Seeking Success

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The Support System for Job Seekers, launched in fiscal 2011, differs from previous public vocational training programs in that it offers occupational training and job-seeking support to job seekers with minimal work experience. This article analyzes the relationship between the activities of institutions that provide vocational training and support for job seekers, and success rate of trainees seeking employment.

In the System's basic course, in which trainees acquire the basic skills common to many jobs, recruiting and leading participants in joint briefing sessions held outside of training implementation agencies appears to be correlated with higher rates of success in securing employment. However, in practical training courses where trainees acquire practical skills required in specific jobs, factors correlated with job seeking success include mechanisms for trainees to seek job opportunities, such as establishment of personnel who develop potential job offers for trainees, as well as mechanisms to provide explanations and information about the labor market in the region or industry, and partnerships with other institutions.

I. Introduction

The Support System for Job Seekers, officially established in 2011 as a follow-up to emergency employment measures implemented after the global financial crisis of 2008, differs from vocational training programs for unemployed persons carried out in Japan thus far, in that it is geared toward job seekers who have no work experience and are not covered by employment insurance.

This article will first of all give an outline of the Support System for Job Seekers. Next, it will examine training implementation agencies, which provide vocational training and support for job seekers, based on the results of a questionnaire administered by the Japan Institute for Labour Policy and Training (JILPT) in 2012. Finally, it will analyze and discuss the impact on job seekers' success rates of training implementation agencies' activities and their relationships with other institutions.

II. Outline of the Support System for Job Seekers

The global financial crisis of 2008 (known in Japan as "Lehman Shock" after the collapse of the investment bank Lehman Brothers) had a significant and wide-ranging impact on employment in Japan, particularly in the manufacturing sector. With regard to non-regular employees, who already faced challenges in terms of job security, there were

rising concerns over increasing long-term unemployment. To address these concerns, the government of Japan in the first supplementary budget of fiscal 2009 established the Emergency Human Resources Development and Employment Support Fund, used to fund the Emergency Human Resources Development Program launched in July 2009. This program provided enhanced vocational training and subsidies under the Training and Livelihood Support Benefit Plan to people unable to collect unemployment insurance, specifically because they have been repeatedly engaged in short-term, non-regular employment and are unqualified to collect job-seekers' allowance benefits, or the term of these benefits has already expired, or they were self-employed and have gone out of business. The Training and Livelihood Support Benefit Plan provides a monthly allowance (¥100,000 per month for single persons, ¥120,000 per month for those with dependent family) while they are undergoing vocational training, if they are unable to collect employment insurance and meet certain conditions.[1]

This Emergency Human Resources Development Program was intended from the start to be a temporary program lasting through fiscal 2011, after which its role would be inherited by the permanent Support System for Job Seekers going into effect on October 1, 2011, which provides vocational training, financial assistance, and job-seeking support to "specific job seekers" such as "the long-term unemployed, new graduates seeking employment, young people in the NEET (Not in Employment, Education, or Training) category, and heads of single-parent households."

The Support System for Job Seekers offers two types of training courses, a basic course in which trainees acquire the basic skills common to many jobs (business etiquette, business communication, business document preparation, Information Technology (IT) skills, etc.), and practical courses in which trainees acquire practical skills required in specific jobs. Both courses can be completed in a period of three to six months.

There are four conditions for eligibility that "specific job seekers" must meet to receive job-seeker support and training: they must (i) have applied for employment at the Public Employment Security Office, (ii) not be covered by or qualified to receive employment insurance, (iii) be willing and able to work, and (iv) be judged by the Public Employment Security Office as needing vocational training or other support. While these "specific job seekers" are undergoing job-seeker support and training, they are provided with a ¥100,000 monthly "educational training fee" plus an allowance for transportation from their place of residence to the training site.[2]

[1] Conditions include: (i) Must be the primary earner in the household (based on previous year at time of application), (ii) At time of application, projected individual income for that year must be ¥2 million or less, and projected household income must be ¥3 million or less, (iii) Total household assets must equal ¥8 million or less, (iv) Must not own any land or buildings other than current residence, (v) Must not have received allowances from the central government, etc. through dishonest means over the last three years.

[2] However, to receive this stipend, beneficiaries must meet certain conditions such as: (i) Beneficiary's individual monthly income must not exceed ¥80,000, (ii) Total household income must not

Between October 2011, when the Support System for Job Seekers was launched, and June 2015, a total of 82,953 people completed the basic course and 207,927 completed one of the practical courses, for a total of 290,880 people.

III. Status and Activities of Training Implementation Agencies

1. Training Implementation Agencies and Accredited Vocational Training Incentives

The parties engaged in providing training and support to beneficiaries of the Support System for Job Seekers include corporations, independent business owners, various types of vocational schools, vocational training agencies, social welfare agencies, and non-profit organizations. Here, these are referred to collectively as "training implementation agencies." These agencies and the individual training courses they conduct must meet certain "certification criteria"[3] related to curriculum content, trainees' performance, and trainees' employment status, among others. The independent administrative institution Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers (JEED) evaluates whether these criteria are being met and gives certification, after which trainees for each course are recruited through the Public Employment Security Office.

Training implementation agencies are provided with "certified vocational training incentives" paid for by employment insurance to encourage smooth and effective implementation of training. The incentive program consists of "basic incentives" and "additional incentives," with the former being ¥60,000 per trainee per month in the basic course and ¥50,000 per trainee per month in the practical courses. For training implementation agencies that offer practical courses, additional incentives are calculated based on the employment status of trainees, with ¥20,000 per trainee per month paid when 60% or more of trainees have found employment[4] three months after the course ends, and ¥10,000 per trainee per month when between 35% and 60% of trainees have found employment three months after the course ends.

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exceed ¥250,000 per month (¥3 million per year), (iii) Must attend all days of training, or even if there is an unavoidable reason for absence must attend at least 80% of days.

[3] Certification criteria are stipulated in the Ministry of Health, Labour and Welfare's Directive of July 25, 2011 entitled "Regulations for Enforcement of the Vocational Training, etc. under the Support System for Job Seekers."

[4] Criteria for designation as "employed," used for determining additional incentive payouts, are (i) beneficiary has become a general insuree under the employment insurance system or (ii) beneficiary is running a business covered by employment insurance.

2. Current Status and Activities of Training Implementation Agencies as Seen in The Results of a Questionnaire Survey

In November and December 2012, the Japan Institute for Labour Policy and Training administered a questionnaire survey to training implementation agencies that play a central role in the Support System for Job Seekers. The survey target consisted of implementation agencies that conducted all the training courses completed between April and September 2012, and responses were received from 1,376 agencies (valid response rate: 53.7%). Here, let us examine the status and activities of these agencies based on the questionnaire results[5] shown below.

Of organizations that operate training implementation agencies, corporations account for 66.6%, businesses other than corporations (limited corporations and individual business operators) for 18.9%, and vocational or other schools for 6.5%. In terms of area, the education-related projects implemented by organizations have been focused on "office equipment (computer and word processor operation)" (28.8%), followed by "medicine, nursing, long-term care and welfare" (14.3%) and "IT-related" (7.6%). With regard to whether the organization had experience carrying out public vocational training for national or prefectural governments, 33.6% are currently performing it, 50.4% have no experience doing so, and 12.4% have performed such training in the past but are not currently doing so. Number of employees at training implementation agencies were: 5–9 employees (32.9%), 10–19 employees (25.1%), and 1–4 employees (19.1%), indicating that the majority of agencies are small-scale. At approximately 60% of the agencies, a majority of employees are non-regular employees (part-time, entrusted or contract employees, workers dispatched from other organizations, individual contractors, etc.)

With regard to the content of advance preparations for implementation of training, common responses were: "preparation or modification of the training location or equipment used" (62.4%), "improvement of framework for counseling of trainees" (62.3%), "training, for instructors already employed at the site, in performing job-seeker support and training" (59.9%), and "having employees already working at the training site obtain career consultant certification" (55.5%).

As for the content of support for job seekers, the most common response was "guidance in having the correct mentality toward finding a job and working" at 90.8%, closely followed by "collecting and offering specific information about potential employers" (86.5%), and then "providing explanations and information about the labor market in that region or industry" (64.5%) and "observation of actual workplaces" (64.5%). With regard to the career counseling agencies are supposed to offer trainees during job-seeker support and training, a majority (73.8%) carried it out three times for each trainee.

The frequency with which workers from each agency were dispatched to the Public

[5] For detailed information about the questionnaire survey, see pages 13–70 of "Results of Survey on the Support System for Job Seekers" compliled by JILPT in 2015.

Employment Security Office was, in order of most common response: “approximately once a month” (26.5%), “once every two or three months” (23.8%), and “two or three times a month” (21.3%).

Asked about institutions other than the Public Employment Security Office with which agencies exchange information or form partnerships aimed at securing employment for trainees, temporary employment agencies (47.3%) and private-sector companies (other than placement agencies and temporary employment agencies (47.1%) were both cited by nearly half of respondents, followed by placement agencies (19.8%), industry associations in specific fields (13.4%), and regional employers’ associations such as chambers of commerce or commercial and industrial organizations (11.6%). On the question of whether they assigned staff specifically to the development of job offers for trainees. 43.1% of agencies responded that they did, and 49.2% that they did not.

IV. Activities of Training Implementation Facilities and Employment Status of Trainees

This section contains an analysis of the relationship between trainees’ employment status and the circumstances of training courses, the actions of training implementation agencies in running and managing courses, and the support training implementation agencies provide to job seekers.

Information on trainees’ employment status is derived from the Ministry of Health, Labour and Welfare’s Implementation Status Report and Data Tabulation on Job-Seeker Support and Training (referred to below as the “Implementation Status Report”). This report monitors the circumstances of each individual training course and matches results with the questionnaire survey data outlined in the preceding section, enabling analysis of correlations between agencies’ implementation and management of courses and support for job seekers, and the employment outcomes after training has been completed. Of the 2,026 training courses completed between April and September 2012 and covered by the questionnaire, the analysis in this section incorporates data on 1,673 courses for which responses can be matched to data in the Implementation Status Report.

With regard to the circumstances of trainees after implementation of training, this section focuses specifically on their employment status. The Implementation Status Report records the employment status of trainees three months after completion, and this status can be analyzed from a variety of angles. This section applies two benchmarks to trainees’ employment: the first is the percentage of trainees who are employed three months after training ends, which will be referred to below as the “employment rate.” Here the term “employment” is used without distinguishing between fixed-term and indefinite, or between regular and non-regular employment. The second is the percentage of trainees who have secured employment contracts with no fixed term, and will be referred to as the “non-fixed-term employment rate.” Securing such employment can be seen as a more stable

Table 1. Trainees' Employment Rate, by Course Field

	n	Under 50%	Between 50% and 75%	75% and above
Basic Course	556	21.6	47.8	30.6
Practical Courses				
Information Technology (IT)	138	28.3	50.7	21.0
Sales, retail and office work	272	36.0	46.7	17.3
Medical administration	131	19.1	59.5	21.4
Long-term care and welfare	261	3.1	34.9	62.1
Design	116	16.4	56.9	26.7
Construction	35	22.9	51.4	25.7
Hairdressing and beauty	73	15.1	34.2	50.7
Other	91	29.7	47.3	23.1

Notes: 1. Data on courses for which there was no response are omitted from the tabulation. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$). This table is intended to examine the discrepancies between fields of practical courses.

2. "Other fields" encompasses both practical courses classified as being in "other fields," and 12 fields that are specified but not listed on this table. The same goes for Table 2.

employment situation than being employed with a fixed-term contract, and by using the non-fixed-term employment rate as a benchmark, it is possible to analyze and consider the degree to which the Support System for Job Seekers is assisting trainees in obtaining steady jobs.

1. Training Course Field and Trainees' Employment Status

Firstly, let us examine the correlations between the contents of each training course and the employment status of trainees. Table 1 shows a cross-tabulation of employment rate by training course field. Here we have calculated the employment rate and divided training courses into three categories: "Under 50%," "Between 50% and 75%," and "75% and above."

It is clear from this table that there are significant disparities in employment rates depending on the course field. Particularly high employment rates are seen in the fields of "Long-term care and welfare" and "Hairdressing and beauty," with employment rates of 75% or above for approximately 60% of courses in the former, and over 50% in the latter. Conversely, relatively low employment rates are seen in the IT field and "Sales, retail and office work." For both of these the percentage of courses with employment rates of 75% or above is only around 20%, and approximately 30% of IT courses and nearly 40% of sales, retail and office work courses have less than half their trainees placed in jobs three months after training ends. For the basic course, approximately 20% of courses have employment

Table 2. Trainees' Non-Fixed-Term Employment Rate, by Course Field

	n	Under 25%	Between 25% and 50%	Between 50% and 75%	75% and above
Basic Course	556	22.5	47.8	25.4	4.3
Practical Courses					
Information Technology (IT)	138	30.4	45.7	22.5	1.4
Sales, retail and office work	272	36.4	41.5	17.6	4.4
Medical administration	131	16.8	54.2	23.7	5.3
Long-term care and welfare	261	5.7	31.4	47.1	15.7
Design	116	20.7	55.2	20.7	3.4
Construction	35	25.7	40.0	25.7	8.6
Hairdressing and beauty	73	5.5	34.2	37.0	23.3
Other	91	28.6	46.2	23.1	2.2

Note: Data on courses for which there was no response are omitted from the tabulation. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$). This table is intended to examine the discrepancies between fields of practical courses.

rates under 50% and around 30% have rates of 75% or above, meaning the basic course tends to have higher rates of employment than the latter two practical courses.

Table 2 shows a cross-tabulation of non-fixed-term employment rate by training course field. Here the highest percentage of courses achieving rates of 75% or above is "Hairdressing and beauty." A relatively high non-fixed-term employment rate is seen in "Long-term care and welfare," as well, with nearly half of courses having non-fixed-term employment rates between 50% and 75%. By contrast, here as well the practical courses in sales, retail and office work and the IT field have a high percentage (30–40%) of courses with non-fixed-term employment rate of under 25%.

For the basic course, around 70% of courses have less than half their trainees placed in non-fixed-term jobs three months after completion, and the remaining 30% or so have more than half of trainees placed.

2. Correlations between Specific Aspects of Course Management and Employment Status

In the questionnaire survey of training implementation agencies, agencies' management of courses is assessed in terms of (1) method of selecting trainees, (2) selection of course instructors, (3) frequency of implementation of tests to verify level of understanding, (4) frequency of administration of questionnaires to monitor trainees' needs, etc., and (5) revision of courses based on trainees' circumstances and needs. Let us examine whether these aspects have an impact on trainees' employment status in way comparable with those of course field and trainee attributes.

Firstly, we will look at the correlation between employment rate and the various

Table 3. Correlations between Aspects of Course Management and Employment Status (Basic Course)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
(1) Method of selecting trainees					
Review of resumes	121	16.5	83.5	66.9	33.1
Written tests	308	20.8	79.2	67.5	32.5
Interview tests	548	21.5	78.5	70.3	29.7
(2) Points emphasized when selecting instructors					
Specialized knowledge and skills	537	22.0	78.0	70.4	29.6
General knowledge and skills	479	21.5	78.5	69.9	30.1
Strong academic background	23	17.4	82.6	69.6	30.4
Youth	6	0.0	100.0	66.7	33.3
Qualifications and/or academic degrees	409	20.3	79.7	69.2	30.8
Extensive work experience in the field	382	21.7	78.3	70.2	29.8
Extensive teaching experience	466	22.5	77.5	70.2	29.8
Communication skills	435	19.5	80.5	69.2	30.8
(3) Frequency of tests					
At the end of every class	40	15.0	85.0	67.5	32.5
At the end of every week of classes	15	20.0	80.0	60.0	40.0
Approximately twice a month	140	16.4	83.6	65.0	35.0
At the end of every month of classes	352	24.7	75.3	73.6	26.4
(4) Frequency of administration of questionnaires					
At the end of every class	50	24.0	76.0	74.0	26.0
Several times (3 times or more) during the course	118	22.0	78.0	64.4	35.6
Once or twice during the course	283	17.7	82.3	71.0	29.0
Never	105	30.5	69.5	73.3	26.7
(5) Revision of courses					
Change in overall approach	332	23.5	76.5	72.0	28.0
Change in amount of time allotted to questions	190	18.9	81.1	72.1	27.9
Implementation of supplementary courses	294	21.1	78.9	68.7	31.3

Note: Data on courses for which there was no response are omitted from the tabulation. For items (1), (2), and (5), course data for agencies not implementing/not emphasizing these aspects is omitted due to space constraints. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$).

aspects as applied in the basic course (Table 3). With regard to (1) method of selecting trainees, the table shows the status of employment rate and non-fixed-term employment rate (percentage of courses with employment rate of 50% or above and with less than 50%, and the corresponding percentages for non-fixed-term employment rate) for courses applying specific methods. For example, for courses selecting trainees by “reviewing resumes,” the percentage of courses with employment rate below 50% was 16.5%, and that of courses

with employment rate of 50% and above was 83.5%, while non-fixed-term employment rate below 50% was 66.9%, with 50% and above non-fixed-term employment rate achieved by 33.1% of courses. Because of space constraints on the table, the corresponding rates for agencies *not* applying each method are not shown, but in cases where there is a statistically significant disparity in the employment rate and/or non-fixed-term employment rate between courses applying a method and those not applying it, the cells containing the figures are marked in gray. None of the cells for "(1) method of selecting trainees" are gray, indicating that there is no statistically significant disparity between courses applying and not applying a given method.

As for (2) Points emphasized when selecting instructors, the employment rate and non-fixed-term employment rate for courses emphasizing each criterion for selection are shown on the table (data for courses *not* emphasizing criteria is omitted.) As with (1) method of selecting trainees, there is no statistically significant disparity in employment rate or non-fixed-term employment rate depending on whether a particular criterion is emphasized, with the single exception of "Communication skills." Courses emphasizing this as a criterion for selecting instructors have a statistically significant disparity with courses that do not. Although it is not shown on the table, the former has a higher percentage of courses achieving an employment rate of 50% and above than the latter.

For (3) frequency of implementation of tests to verify level of understanding, and (4) frequency of administration of questionnaires to monitor trainees' needs, etc., the table shows the employment rate and non-fixed-term employment rate for each level of frequency, but there are no statistically significant disparities for these aspects of agencies' course management.

The same is true of (5) revision of courses based on trainees' circumstances and needs. Although the table shows the employment rate and non-fixed-term employment rate for each level of frequency (data for courses *not* implementing revisions is omitted), there are no statistically significant disparities for this aspect of agencies' course management.

The correlations between aspects of practical course management and the employment rate and non-fixed-term employment rate are shown in Table 4, as with the basic course in the above table. There is a statistically significant disparity with regard to selection of trainees, in terms of whether or not resumes were reviewed. However, this disparity, unlike that seen with other aspects of course management, stands out in that the employment rate and non-fixed-term employment rate are lower for courses where resumes are reviewed than for those where they are not.

There is also a statistically significant disparity in the employment rate and non-fixed-term employment rate depending on whether a written test is administered when selecting trainees, with courses that administer a written test having a higher percentage of both employment rate and non-fixed-term employment rate of 50% and above than courses that do not administer one. The other aspect of practical course management for which there is a statistically significant disparity in employment status involves the selection of

Table 4. Correlations between Aspects of Course Management and Employment Status (Practical Courses)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
(1) Method of selecting trainees					
Review of resumes	292	*26.0*	*74.0*	*71.6*	*28.4*
Written tests	589	18.5	81.5	63.3	36.7
Interview tests	1099	21.2	78.8	64.1	35.9
(2) Points emphasized when selecting instructors					
Specialized knowledge and skills	1063	20.7	79.3	63.8	36.2
General knowledge and skills	899	20.0	80.0	64.0	36.0
Strong academic background	56	23.2	76.8	73.2	26.8
Youth	9	44.4	55.6	88.9	11.1
Qualifications and/or academic degrees	809	18.5	81.5	60.2	39.8
Extensive work experience in the field	939	20.1	79.9	63.5	36.5
Extensive teaching experience	840	20.5	79.5	63.9	36.1
Communication skills	926	20.0	80.0	35.5	64.5
(3) Frequency of tests					
At the end of every class	97	21.6	78.4	54.6	45.4
At the end of every week of classes	63	19.0	81.0	60.3	39.7
Approximately twice a month	337	21.4	78.6	65.9	34.1
At the end of every month of classes	578	21.1	78.9	64.5	35.5
(4) Frequency of administration of questionnaires					
At the end of every class	110	20.9	79.1	56.4	43.6
Several times (3 times or more) during the course	242	21.1	78.9	67.4	32.6
Once or twice during the course	639	21.1	78.9	62.8	37.2
Never	115	21.7	78.3	69.6	30.4
(5) Revision of courses					
Change in overall approach	663	21.4	78.6	64.0	36.0
Change in amount of time allotted to questions	436	22.9	77.1	66.1	33.9
Implementation of supplementary courses	501	19.8	80.2	64.1	35.9

Note: Data on courses for which there was no response are omitted from the tabulation. For items (1), (2), and (5), course data for agencies not implementing/not emphasizing these aspects is omitted due to space constraints. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$). Of these, the figures in italics indicate courses where the implementation of a given aspect of course management leads to poorer employment results than non-implementation.

instructors, with a higher employment rate and non-fixed-term employment rate for those that emphasize “qualifications and/or academic degrees” than those that do not.

The fact that in selecting trainees, practical courses that implement written tests result in higher employment rates than those that do not can be interpreted as indicating that the former more effectively select employable trainees than the latter. However, at many train-

ing implementation agencies the total number of applicants is less than course capacity, and it is difficult to select trainees.[6] Thus the correlation between implementation of written tests to select trainees, and good or poor employment results, may reflect the fact that these tests are often conducted in practical course fields such as medicine, long-term care and welfare that generally have high employment rates, and where acquisition of much specialized knowledge is required. Tests are implemented in these fields partially to assess whether there is a possibility of the trainee dropping out during the course.

The fact that in terms of selection of instructors, courses that emphasize possession of qualifications or academic degrees have higher employment rates than those that do not, may also reflect disparities in employment status between practical course fields, as may be the case with written test implementation. Among courses that place weight on instructors' "possession of qualifications or academic degrees" are those that can only be implemented by instructors holding a variety of qualifications, and in particular long-term care and welfare courses, which have dramatically higher employment rates than other practical courses, are strongly represented among courses that prioritize possession of qualifications or academic degrees.

3. Correlations between Training Implementation Agencies' Support for Job Seekers and Employment Status

Training implementation agencies' activities that tend to have an impact on trainees' employment status include, in addition to aspects of course management, the various ways in which agencies provide support for job seekers.

Table 5 shows a cross-tabulation of the employment status of trainees taking the basic course and various types of support for job seekers that agencies provide. Among the aspects of "Guidance and encouragement for trainees" on the table, employment rate and non-fixed-term employment rate are shown for courses giving various responses with regard to (1) Number of times career counseling is offered during the training course, (2) When career counseling is offered, (3) Number of times guidance on preparation of resumes and application forms is offered, and (4) Number of times job interview practice is offered. Note that here "number of times" indicates the number of times such support is generally given to each individual trainee during the training course period. With regard to (5) Measures implemented to support job seekers, on the table, the employment rate and non-fixed-term employment rate are shown for various aspects of support for job seekers that agencies offer in conjunction with courses. Because of space constraints on the table, the corresponding rates for agencies *not* applying each method are not shown, but in cases where there is a statistically significant disparity in the employment rate and/or non-fixed-term employment rate between courses applying a method and those not applying

[6] Refer to the questionnaire tabulation results on pages 29–30 and the record of interviews with training implementation agencies on pages 173–258, "Results of Survey on the Support System for Job Seekers" compliled by JILPT in 2015.

it, the cells containing the figures are marked in gray.

According to Table 5, in terms of items for which there is a statistically significant disparity in employment status, the number of times career counseling is offered (which can be considered a form of guidance and encouragement of trainees) stands out as significant. Omitting "Less than three times" and "10 or more times" responses given by few courses, when "Three times" and "Four to nine times" are compared, a higher percentage of courses giving the latter response have employment rates and non-fixed-term employment rates of 50% or above.

In terms of support for job seekers that falls into the category of "guidance and encouragement for trainees," there is a statistically significant disparity in the employment rate for courses implemented by agencies that "provide explanations and information about the labor market in that region or industry," conduct "observation of actual workplaces" or "recruit and lead participants in joint briefing sessions held outside of training implementation agencies," compared to courses run by agencies that do not. The percentage of courses with employment rates of 50% and above is higher for the former than for the latter. However, the opposite is true for agencies that conduct "industry or corporate briefing sessions with representatives of corporations, etc. invited": the percentage of courses implemented by these agencies having an employment rate of 50% and above is lower among these agencies than among those that do not conduct such sessions, to a statistically significant degree.

Table 5 shows the employment rate and non-fixed-term employment rate for courses correlated to each category of response for the following "Aspects of efforts to secure employment for trainees": (1) Presence/absence of personnel in charge of developing potential job offers, (2) Frequency with which agency staff visit the Public Employment Security Office, (3) Number of job offers received from the Public Employment Security Office (per month). For (4) Partnerships with agencies other than the Public Employment Security Office to secure employment for trainees, the employment rate and non-fixed-term employment rate are shown for courses run by training implementation agencies that partner with various types of agencies (data on employment and non-fixed-term employment rates for courses run by agencies that do *not* partner with other agencies is omitted). In cases where there is a statistically significant difference between courses run by training implementation agencies that do have partnerships with other (non- Public Employment Security Office) agencies and those that do not, cells are marked in gray.

Among items for which there is a statistically significant disparity depending on aspects of efforts to secure employment for trainees are partnerships with the non-Public Employment Security Office agencies belonging to the categories "Industry associations for specific industries" and "Temporary employment agencies." However, the disparities do not follow a single pattern, and for courses run by agencies that partner with temporary employment agencies, while there are a relatively high percentage of courses with a non-fixed-term employment rate of 50% and above, the percentage of courses with an

Table 5. Correlations between Aspects of Agencies' Support for Job Seekers and Employment Status (Basic Course)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
Guidance and Encouragement for Trainees					
(1) Number of times career counseling is offered					
Less than 3 times	9	0.0	100.0	55.6	44.4
Three times	432	24.1	75.9	72.9	27.1
4–9 times	105	14.3	85.7	63.8	36.2
10 or more times	9	11.1	88.9	33.3	66.7
(2) When career counseling is offered					
At regular intervals at the beginning, middle, and end of the course	526	22.4	77.6	70.9	29.1
Concentrated in the beginning and middle of the course	2	0.0	100.0	0.0	100.0
Concentrated in the middle and at the end of the course	22	9.1	90.9	63.6	36.4
Other	6	0.0	100.0	66.7	33.3
(3) Number of times guidance on preparation of resumes and application forms is offered					
1–2 times	130	23.1	76.9	70.8	29.2
3–5 times	372	21.5	78.5	70.7	29.3
6–9 times	42	21.4	78.6	64.3	35.7
10 or more times	5	0.0	100.0	60.0	40.0
(4) Number of times job interview practice is offered					
1–2 times	210	19.0	81.0	68.1	31.9
3–5 times	306	24.2	75.8	72.2	27.8
6–9 times	26	15.4	84.6	61.5	38.5
10 or more times	7	14.3	85.7	71.4	28.6
(5) Measures implemented to support job seekers					
Collecting and supplying information on specific employers	495	22.0	78.0	70.5	29.5
Providing guidance in having the correct mentality toward finding a job and working	528	22.2	77.8	70.3	29.7
Providing explanations and information about the labor market in that region or industry	340	17.9	82.1	70.3	29.7
Observations of actual workplaces	258	17.4	82.6	70.5	29.5
Industry or corporate briefing sessions to which corporate representatives, etc. are invited	198	*26.8*	*73.2*	71.7	28.3
Group job interviews to which corporate representatives, etc. are invited	29	27.6	72.4	69.0	31.0
Recruiting and leading participants in joint briefing sessions held outside of training implementation agencies	137	12.4	87.6	68.6	31.4
Recruiting and leading participants in job interviews held outside of training implementation agencies	50	16.0	84.0	72.0	28.0
Aspects of Efforts to Secure Employment for Trainees					
(1) Designation of personnel in charge of developing potential job offers					
Personnel designated	230	19.6	80.4	70.9	29.1
Personnel not designated	298	24.8	75.2	70.1	29.9
(2) Frequency with which agency staff visit the Public Employment Security Office					
Never	68	32.4	67.6	73.5	26.5
About once a year	7	0.0	100.0	57.1	42.9
About once every 6 months	20	10.0	90.0	65.0	35.0
Once every 2 or 3 months	101	20.8	79.2	68.3	31.7
About once a month	124	22.6	77.4	66.9	33.1
2 or 3 times a month	138	25.4	74.6	73.2	26.8
4 or 5 times a month	64	14.1	85.9	76.6	23.4
6–10 times a month	21	4.8	95.2	66.7	33.3
More than 10 times a month	9	22.2	77.8	55.6	44.4

Table 5. (*Continued*)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
(3) Number of job offers received from the Public Employment Security Office (per month)					
0 offers	176	23.9	76.1	69.9	30.1
1−10 offers	59	13.6	86.4	72.9	27.1
11−100 offers	72	22.2	77.8	68.1	31.9
101−300 offers	39	7.7	92.3	71.8	28.2
301 or more offers	39	20.5	79.5	69.2	30.8
(4) Partnerships with agencies other than the Public Employment Security Office to secure employment for trainees					
Private-sector companies (other than placement agencies and temporary employment agencies)	278	22.7	77.3	72.7	27.3
Regional employers' associations such as chambers of commerce or commercial and industrial organizations	83	16.9	83.1	63.9	36.1
Industry associations in specific fields	104	26.0	74.0	70.2	29.8
Placement agencies	98	24.5	75.5	71.4	28.6
Temporary employment agencies	313	*26.2*	*73.8*	74.8	25.2
Private-sector organizations (NPOs, etc.) providing support for job seekers	42	16.7	83.3	76.2	23.8
Do not engage in information exchange or partnership with any other specific agency	88	15.9	84.1	65.9	34.1

Note: Data on courses for which there was no response are omitted from the tabulation. Course data for agencies not implementing aspects of support / not partnering with other agencies is omitted due to space constraints. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$). Of these, the figures in italics indicate courses where the implementation of a given aspect of course management is correlated with *lower* employment rates than non-implementation.

overall employment rate of 50% and above is relatively low.

In terms of reasons why employment results are actually worse when agencies undertake a particular initiative to support job seekers than when they that do not, it may be that the initiative in question is being carried out to shore up already low employment rates. The data on Table 5 may reflect the fact that agencies implementing courses where trainees have difficulty securing employment afterward are more proactive about efforts such as inviting corporate representatives, etc. to conduct industry or corporate briefing sessions, or forging partnerships with temporary employment agencies, in an attempt to improve their employment rates.

How do the figures for trainees' employment status correlate with various initiatives undertaken by training implementation agencies in support of job seekers in the case of practical courses? The results are summarized on Table 6.

Examination of the cross-tabulation of the employment rate shows a significantly higher percentage of courses with employment rates of 50% and above when the agencies conducting the courses carryout the following initiatives, compared to agencies that do not: Providing guidance in having the correct mentality toward finding a job and working,

Table 6. Correlations between Aspects of Agencies' Support for Job Seekers and Employment Status (Practical Courses)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
Guidance and Encouragement for Trainees					
(1) Number of times career counseling is offered					
Less than 3 times	21	33.3	66.7	61.9	38.1
Three times	829	21.1	78.9	66.0	34.0
4–9 times	237	21.5	78.5	61.2	38.8
10 or more times	17	5.9	94.1	35.3	64.7
(2) When career counseling is offered					
At regular intervals at the beginning, middle, and end of the course	1056	20.7	79.3	64.4	35.6
Concentrated in the beginning and middle of the course	6	0.0	100.0	50.0	50.0
Concentrated in the middle and at the end of the course	41	34.1	65.9	63.4	36.6
Other	8	12.5	87.5	50.0	50.0
(3) Number of times guidance on preparation of resumes and application forms is offered					
1–2 times	424	19.8	80.2	62.3	37.7
3–5 times	584	22.3	77.7	67.3	32.7
6–9 times	70	20.0	80.0	54.3	45.7
10 or more times	10	10.0	90.0	30.0	70.0
(4) Number of times job interview practice is offered					
1–2 times	549	21.7	78.3	65.4	34.6
3–5 times	488	21.1	78.9	64.1	35.9
6–9 times	45	13.3	86.7	48.9	51.1
10 or more times	13	15.4	84.6	38.5	61.5
(5) Measures implemented to support job seekers					
Collecting and supplying information on specific employers	973	20.2	79.8	63.0	37.0
Providing guidance in having the correct mentality toward finding a job and working	1015	20.2	79.8	63.1	36.9
Providing explanations and information about the labor market in that region or industry	779	18.4	81.6	62.1	37.9
Observations of actual workplaces	790	21.3	78.7	64.8	35.2
Industry or corporate briefing sessions to which corporate representatives, etc. are invited	412	20.1	79.9	61.9	38.1
Group job interviews to which corporate representatives, etc. are invited	119	20.2	79.8	58.0	42.0
Recruiting and leading participants in joint briefing sessions held outside of training implementation agencies	297	15.8	84.2	55.6	44.4
Recruiting and leading participants in job interviews held outside of training implementation agencies	150	10.7	89.3	52.0	48.0
Aspects of Efforts to Secure Employment for Trainees					
(1) Designation of personnel in charge of developing potential job offers					
Personnel designated	509	17.5	82.5	60.9	39.1
Personnel not designated	519	24.7	75.3	68.2	31.8
(2) Frequency with which agency staff visit the Public Employment Security Office					
Never	48	29.2	70.8	66.7	33.3
About once a year	13	23.1	76.9	38.5	61.5
About once every 6 months	38	26.3	73.7	63.2	36.8
Once every 2 or 3 months	272	21.3	78.7	66.5	33.5
About once a month	330	21.8	78.2	63.3	36.7
2 or 3 times a month	235	20.0	80.0	64.7	35.3
4 or 5 times a month	111	17.1	82.9	60.4	39.6
6–10 times a month	27	14.8	85.2	63.0	37.0
More than 10 times a month	27	11.1	88.9	59.3	40.7

Table 6. (*Continued*)

	n	Employment rate		Non-fixed-term employment rate	
		Under 50%	50% and above	Under 50%	50% and above
(3) Number of job offers received from the Public Employment Security Office (per month)					
0 offers	364	20.9	79.1	60.7	39.3
1−10 offers	198	19.2	80.8	56.6	43.4
11−100 offers	168	23.2	76.8	66.1	33.9
101−300 offers	57	15.8	84.2	68.4	31.6
301 or more offers	95	23.2	76.8	71.6	28.4
(4) Partnerships with agencies other than the Public Employment Security Office to secure employment for trainees					
Private-sector companies (other than placement agencies and temporary employment agencies)	522	19.7	80.3	62.1	37.9
Regional employers' associations such as chambers of commerce or commercial and industrial organizations	97	16.5	83.5	61.9	38.1
Industry associations in specific fields	119	10.1	89.9	40.3	59.7
Placement agencies	226	19.0	81.0	65.5	34.5
Temporary employment agencies	503	18.7	81.3	64.2	35.8
Private-sector organizations (NPOs, etc.) providing support for job seekers	80	15.0	85.0	62.5	37.5
Do not engage in information exchange or partnership with any other specific agency	187	*31.0*	*69.0*	*72.7*	*27.3*

Note: Data on courses for which there was no response are omitted from the tabulation. Course data for agencies not implementing aspects of support / not partnering with other agencies is omitted due to space constraints. The gray cells contain statistically significant figures (Chi-squared test: $p < .05$). Of these, the figures in italics indicate courses where the implementation of a given aspect of course management is correlated with *lower* employment rates than non-implementation.

providing explanations and information about the labor market in that region or industry, recruiting and leading participants in joint briefing sessions held outside of training implementation agencies, recruiting and leading participants in job interviews held outside of training implementation agencies. In terms of aspects of efforts to secure employment for trainees, there are significantly higher percentages of employment rates of 50% and above when agencies designate personnel in charge of developing potential job offers, and partner with industry associations in a specific field, than when they do not. Also, there is a significantly lower percentage of courses with 50% or higher employment rates when agencies "do not engage in information exchange or partnership with any other specific agency" with regard to securing trainees' employment, compared to agencies that do engage in information exchange or partnership.

According to Table 6, in terms of initiatives carried out by training implementation agencies, there is a statistically significant disparity in the non-fixed-term employment rate depending on the number of times career counseling, guidance on preparation of resumes and application forms, and job interview practice are generally offered to each trainee during the training period. For all of these, a greater number of times is correlated with a higher

percentage of courses with non-fixed-term employment rates of 50% and above. With regard to (5) Implementation of measures to support job seekers, an aspect of "guidance and encouragement of trainees," as well, there is a statistically significant disparity in the employment rate depending on whether the following are carried out: Providing guidance in having the correct mentality toward finding a job and working, providing explanations and information about the labor market in that region or industry, recruiting and leading participants in joint briefing sessions held outside of training implementation agencies, and recruiting and leading participants in job interviews held outside of training implementation agencies. For all of these, agencies that implement the measures have a significantly higher percentage of courses with employment rates of 50% and above than those that do not.

Also, under "Aspects of efforts to secure employment for trainees," with regard to "(4) Partnerships with agencies other than the Public Employment Security Office to secure employment for trainees," agencies that partner with "industry associations in a specific field" have a significantly higher percentage of courses with non-fixed-term employment rate 50% and above than those that do not, and as with the overall employment rate tabulation, there is a significantly lower percentage of courses with 50% or higher non-fixed-term employment rates when agencies "do not engage in information exchange or partnership with any other specific agency" with regard to securing trainees' employment, compared to agencies that do engage in information exchange or partnership.

4. Factors Influencing Employment Status

Thus far we have explored, through cross-tabulation analysis, factors that impact the employment status of trainees after job-seeker support and training courses have finished. It is likely that among the factors most strongly influencing this employment status—in addition to the course fields and the trainees' own attributes, training implementation agencies' course management, and their various initiatives to support job seekers—are the region where a given agency is located and the circumstances of the labor market. Also, it should be noted that among factors and measures that could potentially influence employment status are those that appear, because of their close relation to other factors, to have a strong impact, but actually do not, such as "points emphasized when selecting instructors," which by itself is not correlated with significant disparities, but which is related to the training course field, etc.

With this in mind, in this section we will carry out a multivariate analysis, subdivided into "basic course" and "practical courses," with trainees' employment rates as the explained variables and the training course circumstances, measures adopted by training implementation agencies, labor market environment and so forth as explanatory variables, and examine various factors' influence on employment status in each type of course. Whether analyzing the basic course or practical courses, the explained variables are the employment rate and non-fixed-term employment rate, and the variables shown are percentages indicating these rates for each course. Correlations between these explained variables and the var-

ious explanatory variables will be clarified through multiple regression analysis.

Of measures adopted by training implementation agencies, those employed as explanatory variables in the analysis of post-completion employment rates for the basic course (Table 7) are: (i) Number of times career counseling is offered, (ii) Whether the agency carries out support measures for job seekers such as providing explanations and information about the labor market in that region or industry; observation of actual workplaces; group job interviews to which corporate representatives, etc. are invited; recruiting and leading participants in joint briefing sessions held outside of training implementation agencies; and recruiting and leading participants in job interviews held outside of training implementation agencies, (iii) Whether the agency engages in information exchange or partnership with industry associations in specific fields, and (iv) Whether the agency prioritizes qualifications and/or academic degrees, extensive professional experience, and high degree of communicative ability in appointing instructors. Added to the explanatory variables as course-related circumstances are the number of trainees in the course and the percentage of trainees aged 50 and older, and as training implementation agencies-related circumstances, the total number of persons (staff members) in the entire agency. Also used as explanatory variables are the average effective job opening-to-application ratios (2012) for the prefectures where agencies are located, which were selected as indicators of the labor market environment in regions where agencies conduct courses.

The analysis with employment rate as the explained variable shows a significant positive correlation between recruiting and leading participants in joint briefing sessions held outside of training implementation agencies, as a measure to support job seekers, and the employment rate. It can be inferred that agencies' actively seeking to create employment opportunities for trainees, rather than merely collecting information on job openings, contributes to a higher employment rate. On the other hand, there was a statistically significant negative correlation between the employment rate and information exchange or partnership with temporary employment agencies. As outlined in the discussion of the cross-tabulation analysis earlier, this outcome hints at the possibility that training implementation agencies with low employment rates tend to engage in such information exchange or partnership with temporary employment agencies so as to prevent employment figures from declining further.

As for the non-fixed-term employment rate, there is a statistically significant positive correlation with the number of times career counseling is offered. It seems likely that through repeated career counseling, trainees are better able to identify their own strengths, or they become more serious in their endeavors to find work, leading to a higher rate of non-fixed-term employment. Meanwhile, there was a negative correlation with prefectures' effective job opening-to-application ratios. One might think that the higher the effective job opening-to-application ratio is, the higher the non-fixed-term employment rate will be, but in reality regions with higher effective job opening-to-application ratio tend to have higher rates of fixed-term employment, and both trainees and training implementation agencies

Table 7. Multiple Regression Analysis of Employment Rates for Individual Courses (Basic Course)

	Employment rate		Non-fixed-term employment rate	
	β		β	
(Constant)		***		***
Prefectures' effective job opening-to-application ratios (2012)	-0.066		-0.107	*
Total number of persons (staff members) in agency	-0.004		0.011	
Number of trainees in course	-0.076		-0.009	
Percentage of trainees aged 50 and older	-0.054		-0.059	
Number of times career counseling is offered (standard = 3 or fewer)				
4 or more times	0.072		0.094	*
Training implementation agencies' support measures for job seekers				
Providing explanations and information about the labor market in that region or industry	0.057		-0.005	
Observations of actual workplaces	0.024		-0.031	
Group job interviews to which corporate representatives, etc. are invited	0.020		-0.011	
Recruiting and leading participants in joint briefing sessions held outside of training implementation agencies	0.119	*	0.068	
Recruiting and leading participants in job interviews held outside of training implementation agencies	-0.064		-0.062	
Information exchange and/or partnership with agencies other than the Public Employment Security Office				
Industry associations in specific fields	0.015		0.052	
Temporary employment agencies	-0.097	*	-0.075	
Points prioritized when selecting instructors				
Qualifications and/or academic degrees	0.030		0.011	
Extensive work experience in the field	-0.004		-0.056	
Communication skills	0.078		0.072	
N	543		543	
Adjusted R-square	0.038		0.016	

Notes: 1. For "Number of times career counseling is offered," three or fewer times per trainee during a training course is considered standard, and when it is offered four or more times, a dummy variable with the value of "1" is shown.

2. Among "measures adopted by training implementation agencies to support job seekers," for "information exchange and/or partnership with agencies other than the Public Employment Security Office" and for each of the "points prioritized when selecting instructors," when the item in question is implemented, a dummy variable with the value of "1" is shown.

***p < .001, **p < .01, *p < . 05, +p < .10.

placing a priority on finding work as soon as possible tend to be drawn into fixed-term contracts.

However, for both the overall employment rate and the non-fixed-term employment rate, the adjusted R-square (coefficient of determination) value is extremely low, particularly that of the non-fixed-term employment rate. This indicates that in the case of the basic course, trainees' ability to secure employment is significantly affected by factors other than training implementation agencies' course management and measures in support of job seekers. These factors may include trainees' own attitudes or behavior, which were not assessed by this survey, or the manner in which the Public Employment Security Office approaches trainees, and in similar future surveys and analyses of employment outcomes, these factors ought to be taken into consideration.

Of support measures adopted by training implementation agencies, those employed as explanatory variables in the analysis of post-completion employment rates for the practical courses (Table 8) are: (i) Number of times career counseling is offered, (ii) Number of times guidance on preparation of resumes and application forms is offered, (iii) Number of times job interview practice is offered, (iv) Presence or absence of staff specifically in charge of developing potential job offers, (v) Adoption of measures to support job seekers such as providing guidance in having the correct mentality toward finding a job and working, providing explanations and information about the labor market in that region or industry, observation of actual workplaces, group job interviews to which corporate representatives, etc. are invited, recruiting and leading participants in joint briefing sessions held outside of training implementation agencies, recruiting and leading participants in job interviews held outside of training implementation agencies, and (vi) Whether the agency engages in information exchange or partnership with industry associations in specific fields in relation to trainees' employment. Also, among agencies' measures related to course management, those selected as additional explanatory variables were (i) Whether review of documents such as resumes and/or written tests were conducted during the process of selecting prospective trainees and (ii) Whether the agency prioritizes qualifications and/or academic degrees, in appointing instructors. Added to the explanatory variables are total number of persons at business location (reflecting the circumstances of the agency), the number of trainees in the course and the percentage of trainees aged 50 and older (reflecting the character of the course), and the effective job opening-to-application ratio for the prefecture where the agency is located, as a benchmark of the labor market environment in the region. These are the same explanatory variables applied to the basic course, but in analyzing the practical courses, the course field and the percentage of female trainees in the course were added as well.

Examination of the analysis results reveals that in the case of practical courses, the content of training courses has a statistically significant correlation with employment status. The long-term care and welfare field has a statistically significant positive correlation with both overall employment rate and non-fixed-term employment rate, and the medical admin-

Table 8. Multivariate Analysis (Multiple Regression Analysis) of Courses and Employment Status (Practical Courses)

	Employment rate		Non-fixed-term employment rate	
	β		β	
(Constant)		***		***
Prefectures' effective job opening-to-application ratios (2012)	0.028		0.006	
Total number of persons at business location	0.000		0.019	
Number of trainees in course	-0.022		0.026	
Course field (standard = Other)				
Information Technology (IT)	-0.026		-0.041	
Sales, retail and office work	-0.125	*	-0.047	
Medical administration	0.066		0.139	**
Long-term care and welfare	0.360	***	0.357	***
Design	0.095		0.02	
Construction	0.044		0.096	**
Hairdressing and beauty	0.143	**	0.241	***
Percentage of trainees aged 50 and older	-0.053		-0.036	
Percentage of female trainees in the course	0.022		-0.047	
Number of times career counseling is offered (standard = 3 or fewer)				
4 or more times	0.041		0.036	
Number of times guidance on preparation of resumes and application forms is offered (Standard = 1−2)				
3−5 times	0.040		0.023	
6 or more times	0.024		0.073	+
Number of times job interview practice is offered (Standard = 1−2)				
3−5 times	-0.009		0.017	
6 or more times	0.062		0.082	*
Designation of personnel in charge of developing potential job offers	0.054	+	0.047	
Training implementation agencies' support measures for job seekers				
Providing guidance in having the correct mentality toward finding a job and working	0.055	+	0.025	
Providing explanations and information about the labor market in that region or industry	0.014		0.059	+
Group job interviews to which corporate representatives, etc. are invited	0.036		0.042	
Recruiting and leading participants in joint briefing sessions held outside of training implementation agencies	0.080	*	-0.014	
Recruiting and leading participants in job interviews held outside of training implementation agencies	0.025		0.037	

Table 8. (*Continued*)

	Employment rate	Non-fixed-term employment rate
Information exchange and/or partnership with agencies other than the Public Employment Security Office		
Industry associations in specific fields	0.009	0.057 +
Do not engage in information exchange or partnership with any other specific agency	-0.083 **	-0.078 *
Method of selecting trainees		
Review of documents such as resumes when selecting trainees	-0.029	-0.047
Written tests administered when selecting trainees	0.035	-0.012
Agency prioritizes qualifications and/or academic degrees in appointing instructors	0.042	0.036
N	915	915
Adjusted R-square	0.220	0.221

Notes: 1. For "Guidance on preparation of resumes and application forms is offered," and "Guidance on job interviews," one or two times per trainee during a training course is considered standard, and when it is offered 3–5 or six or more times, a dummy variable with the value of "1" is shown.

2. As for the variables corresponding to "Designation of personnel in charge of developing potential job offers," "measures adopted by training implementation agencies to support job seekers," and "information exchange and/or partnership with agencies other than the Public Employment Security Office," and "Whether the agency prioritizes qualifications and/or academic degrees, in appointing instructors," when the item in question is implemented, a dummy variable with the value of "1" is shown.

***p < .001, **p < .01, *p < . 05, + p < .10.

istration and construction fields have significant positive correlations with non-fixed-term employment rate. The hairdressing and beauty course is also positively correlated with higher overall and non-fixed-term employment rates. These findings underscore the fact that it is relatively easy to secure work in these fields (long-term care and welfare, medical administration, construction, hairdressing and beauty). Meanwhile, courses in sales, retail and office work are negatively correlated to employment rate, and appear to be the practical courses least likely to lead to employment.

Of support measures adopted by training implementation agencies, those with a statistically significant positive correlation to the employment rate are: Designation of personnel in charge of developing potential job offers, providing guidance in having the correct mentality toward finding a job and working, and recruiting and leading participants in joint briefing sessions held outside of training implementation agencies. Conversely, there is a statistically significant negative correlation between the employment rate and having no other agency with which to exchange information or form partnerships in relation to train-

ees' employment. Designation of personnel in charge of developing potential job offers, utilizing joint briefing sessions held off agency premises, and exchanging information or forming partnerships with some other agency to secure employment for trainees are all measures that facilitate the matching of trainees and job offers, and the outcomes of these measures can be seen in the actual employment results. Meanwhile, providing guidance in having the correct mentality toward finding a job and working can cause trainees to adopt a positive stance and assuage their anxieties, encouraging them to find employment.

As for the non-fixed-term employment rate, there are statistically significant correlations with both guidance on preparation of resumes and application forms and job interview practice being offered six or more times to each trainee during the course, as well as with information and explanations about the labor market in the community or industry; partnership and exchange of information relating to trainees' employment with industry associations in specific fields; and having no other agency with which to exchange information or form partnerships in relation to trainees' employment. This last is negatively correlated with the non-fixed-term employment rate, and all of the others are positively correlated.

The above findings of the analysis of the non-fixed-term employment rate appear to reflect the following: (i) It is easier for training implementation agencies to obtain information on job opportunities leading to non-fixed-term employment when they exchange information and form partnerships with industry associations in specific fields, (ii) It is easier for trainees to locate job opportunities leading to non-fixed-term employment when training implementation agencies offer explanations and information about the labor market in the community or industry, and (iii) Having many sessions of guidance on preparing resumes and application forms and undergoing job interviews enables trainees to gain more opportunities for non-fixed-term employment.

V. Conclusion

With regard to the Support System for Job Seekers, which has a different target group than conventional training for people lacking employment, this article has focused on the training implementation agencies that play a central role in the system's implementation, and has sought to gain a picture of these organizations and their activities, and to analyze how individual agencies achieve the system's goal of securing employment for trainees.

For the basic course, which aims to impart fundamental skills applicable to a wide range of fields, the analysis revealed that recruiting and leading participants in joint briefing sessions held outside of training implementation agencies is correlated with higher rates of success in securing employment. However, in a model where employment rates after completion of the basic course are the explained variables and measures adopted by training implementation agencies, course circumstances, etc. are the explanatory variables, the coefficient of determination is extremely low, and to effectively analyze and consider factors impacting employment status as pertains to the basic course, it is necessary to pay adequate

attention to factors outside the scope of agencies' activities, such as trainees' attitudes and behavior and the manner in which the Public Employment Security Office approaches trainees.

Meanwhile, regarding the practical courses, which encompass both basic skills and hands-on skills applicable to specific fields, there is considerable diversity depending on the course field. Employment rates were relatively high in the fields of long-term care and welfare, medical administration, construction, and hairdressing and beauty. However, even when controlling for the influence of the course's field, there are other factors that contribute to improved employment rates, including measures to secure job opportunities for trainees such as designation of personnel in charge of developing potential job offers and recruiting and leading participants in joint briefing sessions held outside of training implementation agencies, as well as providing information and explanations about the labor market in the community or industry and giving a generous amount of guidance on preparation of resumes and application forms and practice with job interviews.

Also, when we examine exchange of information and formation of partnerships related to trainees' employment, it is apparent that training implementation agencies having no other agency with which to exchange information or form partnerships have lower employment rates, whereas practical courses run by agencies that exchange information and partner with industry associations in a specific field have higher rates of non-fixed-term employment. Practical courses are aimed at imparting specialized knowledge and skills in specific fields, and employers in these fields have a strong need to hire and utilize personnel over the long term. For this reason, training implementation agencies can more effectively match employers' needs with trainees when they actively engage in information exchange and form partnerships with industry associations in these fields.

JILPT Research Activities

International Workshop

The Japan Institute for Labour Policy and Training (JILPT), the Chinese Academy of Labour and Social Security (CALSS) and the Korea Labor Institute (KLI) held a research forum on the theme "Employment Problems and Policy Countermeasures in Industrial Restructuring and Upgrading" on November 19, 2015 in Beijing, China. The three institutes hold a forum with a common theme once every year. In the forum, they present their research results with the aim of promoting mutual understanding among the three countries and raising the standards of research. This was the thirteenth forum held with the collaboration of the three research institutes. The Japanese text of research papers presented at the forum will be uploaded on the JILPT website (http://www.jil.go.jp/institute/kokusai/index.htm).

Research Reports

The findings of research activities undertaken by JILPT are compiled into Research Reports in Japanese. Below is a list of the reports published since September 2015. The complete Japanese text of these reports can be accessed via the JILPT website (http://www.jil.go.jp/institute/pamphlet/). English summaries of selected reports are also available on the JILPT website (http://www.jil.go.jp/english/reports/jilpt_01.html).

Research Reports

No.180 Research on the Work and Lives of Non-Regular Workers in Mid-Prime Age: With Focus on Career Analysis (September 2015)

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