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Research on Annual Paid Holidays

(Summary)

The Japan Institute of Labour

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I. Issues of concern in this research

In recent years, the labor market has undergone major changes. While long-term employment security is weakening, and performance-based wage systems are becoming more common, various forms of employment, including part-time work, casual work, temporary dispatch from employment services, contract work, and outsourcing, are steadily on the rise. According to the Survey on Diversification of Employment by the Ministry of Health, Labour and Welfare, the percentage of non-regular employees, which was 16 percent of all workers in 1987, had increased to 27.5 percent in 1999 – an increase of more than 10 percentage points in 12 years. Currently, more than one in four workers is a non-regular employee.

Nevertheless, considering future trends in the labor market, such diversification is likely to progress for some time. Under these circumstances, most female workers, who constitute the majority of non-regular employees, are caught in the double bind of employment and housework. Moreover, the minimum age of eligibility for a welfare pension (the fixed-amount for the basic part of the government-managed pension for corporate members to which most ordinary employees subscribe) has been gradually increased since 2001, resulting in demand in society for such options as extension of the retirement age limit and re-employment.

Such changes in environment also require diversity in systems of working time, in terms of number of work days and working hours. There is a need to shift from a uniform system of eight hours per day, five days per week, to diverse systems that can handle various formats for working and employment.

Since 1988, statutory working hours have gradually decreased, and at present, scheduled working hours (working hours stipulated in work regulations and the like), apart from special exceptions (for enterprises with 1-9 employees in the commerce, health and sanitation, and service/entertainment sectors), are in general 40 hours per week. Recently, two days off per week has become increasingly common, and at present, in enterprises that employ 30 or more people, 56.5 percent of employees are "completely entitled to two days off per week" (as of January 2002, Ministry of Health, Labour and Welfare's "General Survey of Working Conditions.") On the other hand, it cannot be said that there is a trend of improvement regarding the issues of work outside of scheduled hours, which is influenced by continual changes in the economy as a way of adjusting employment, and unpaid overtime, or the issue of employees taking only half their entitlement of annual paid holidays. Particularly with regard to annual paid holidays, which are granted to workers as a "right," for some reason, Japanese workers do not (cannot) take their full entitlement.

Despite the fact that only about 50 percent of annual paid holidays are taken, there have been virtually no surveys or studies concerning annual paid holidays. While

unemployment is tending to rise, and an increasing number of workers are being laid off, why has the level of unpaid overtime and unused holidays remained constant? Also, in terms of considering work-sharing and diverse ways of working, such distorted working hours constitute a major obstacle.

The way of working required in the 21st century in Japan can be described in brief as "diversity of options." However, that does not mean an increase in "part-timers" who, as at present, have virtually no employment security and whose hourly wage is down to about half that of regular employees. What is needed from now on, for both men and women, is a society in which workers can choose their working and employment formats in accordance with their individual circumstances, extend their working hours in some cases, and decrease them in other cases. This means breaking free of a corporate society where wage structure and status differ depending on whether a worker is a "regular employee" or a "non-regular employee." Given such a development, "harmony between work and family life" may then arise.

From the viewpoint of harmony between work and family life, issues include for such purposes as housework and childcare the length of daily working hours and commuting time, or the number of days off per week. Also, for such purposes as recovering from accumulated fatigue, refreshing mind and body, and spending summer vacations with family members, the ability to take annual paid holidays consecutively is an issue. In addition, for such purposes as taking care of children, sick relatives, or elderly relatives, and retraining to improve the occupational skills of workers themselves, a certain amount of long-term holidays or leave is necessary. Regarding the continued employment of elderly people, as a "soft landing" prior to complete retirement, more time off than was taken during full-time employment is needed.

In terms of arrangements, there are various systems of holidays and leave.¹ A particularly important system is that of annual paid holidays. Such holidays are granted to virtually all employees. In Japan, however, only about half the days granted are taken. Also, as can be seen from long-term statistics, there has been virtually no change in the percentage of annual paid holidays taken (see II).

As will be seen in II, although it can be said that, over the long term, there has been a slight increase in the number of days granted and the number taken, the percentage of days taken has hardly improved at all. Nevertheless, until now, there have been virtually no studies focusing on annual paid holidays. Even from a legal viewpoint, as pointed out by Susumu Noda [1999], there has been virtually no research on the subject of "holidays."² In the field of economics, too, although a small amount of research on "working hours" as such has been accumulated,³ there is virtually none to be found, apart from Ohtake [2001], regarding annual paid holidays, which constitute "time off."

The purpose of this investigative research report, by surveying the actual situation regarding the taking of annual paid holidays in Japan, which has so far barely been studied, and conducting an economic analysis, is to make even a small contribution to promoting the taking of annual paid holidays. Specifically, the main objectives were to elucidate basic questions regarding annual paid holidays as follows.

- 1) From a long-term perspective, what are the problems regarding annual paid holidays in Japan?
- 2) What factors affect the taking of annual paid holidays by Japanese workers, and why do workers not take (or why are they unable to take) such holidays?
- 3) What should be done, in what ways, to promote the taking of annual paid holidays?

Regarding 1), first, we briefly present the content of the Labour Standards Law, which stipulates arrangements for annual paid leave. In addition, we consider the outline situation regarding annual paid holidays in Japan, based on such references as surveys by the Ministry of Health, Labour, and Welfare.

Regarding 2), in order to consider a framework for economic analysis, we first summarize research in Europe and America, to determine implications for analysis of annual paid holidays in Japan. In addition, using micro-data obtained by JIL, we attempt to identify the factors that regulate the taking of annual paid holidays. At the same time, we analyze workers' attitudes to annual paid holidays.

Regarding 3), we consider measures necessary to promote the taking of annual paid holidays, at the government, individual company (labor and management), and personal (household) levels.

Notes

2. Susumu Noda [1999], p.iii

3. See Kazuya Ogura [1998a].

II. Systems and actual status of annual paid holidays

(1) Arrangements for annual paid holidays under the Labour Standards Law

Annual paid holidays are systematically stipulated in Article 39 of the Labour Standards Law. In this Report, we consider the stipulations in Article 39 with reliance on interpretations by legal specialists.¹

^{1.} Susumu Noda [1999] is an authority on the study of "time off," which, even in the field of labor law, has received little attention so far. According to Noda, surprisingly, the terms "holiday" and "leave," which mean some sort of time off, are not distinguished clearly even in actual legislation. Accordingly, Noda uses the term "holiday" to cover both, and suggests a classification using the legal concepts of 1) statutory and non-statutory, 2) paid or unpaid, 3) treated as attendance or absence, and 4) long-term or short-term.

a) Conditions for taking annual paid holidays

Paragraph 1 of Article 39 stipulates: "Employers must, for workers who have served continuously for six months, as calculated from the day of hiring, and whose attendance rate is at least 80 percent of total working days, grant 10 working days of paid holiday, consecutively or non-consecutively." This provision is a stipulation regarding the conditions for taking annual paid holidays, and entails three points. Namely: 1) The requirement for continuous service is at least six months, 2) attendance must be at least 80 percent, and 3) the minimum period granted is 10 days.

The condition 1) of six months' continuous service was reduced from the previous requirement of one year by amendment of the Labour Standards Law in 1987.

The attendance rate condition 2) represents a kind of compensation for full attendance. Also, according to official circulars, in calculating this attendance rate, leave due to occupational injury, maternity leave, childcare or nursing care leave, and annual paid holidays are treated as attendance. Conversely, days of no work due to strikes, leave for reasons attributable to the employer, national holidays on days other than weekly days off, days off for the year-end / New Year period, menstrual leave, celebratory or condolence leave, and so forth are exceptions from "total working days."²

The number of days granted 3) was increased through amendment of the Labour Standards Law in 1987. Additionally, the number of years required to reach the maximum period granted, 20 days, was reduced through amendment in 1998.

b) Deciding the timing of annual paid holidays

Regarding the structure of annual paid holidays, among legal specialists, many support the "two-fold explanation."³ This explanation is that, if Paragraphs 1-3 of Article 39 of the Labour Standards Law are fulfilled, workers have the "right to annual paid holidays" and, according to Paragraph 4, they also have the "right to specify the timing".⁴ According to Susumu Noda [1999], because the "right to annual paid holidays" and the "right to specify the timing" are separate, annual paid holidays have the characteristic that "if workers specify the timing, as long as there is no exercising of the employer's right to make reasonable changes in timing, annual paid holidays take effect and the obligation to work is annulled."⁵

c) System of planned annual paid holidays

The system of planned annual paid holidays was added through amendment of the Labour Standards Law in 1987. Paragraph 5 of Article 39 states that, if the timing of annual paid holidays has been decided through a labor-management agreement with an organization representing the majority of workers, then, out of the number of days granted, the timing of days in excess of five can be decided regardless of the right to specify the timing.

However, the issue that arises here is: Which has priority, workers' right to specify the timing, or the systems of planned annual paid holidays? Opinions among legal specialists are divided.⁶ Noda claims that, from the viewpoint of promoting the taking of annual paid holidays, and that of obstructions to long-term consecutive holidays, the system of planned holidays should be given priority, and the right to specify the timing should be made the exception. As grounds for this, Noda cites the claim that "workers' right to specify the timing" actually, under current circumstances, leads to holidays not being taken, and the fact that the "right to specify the timing" is a feature unique to Japan.⁷

d) Right to change the timing

According to Paragraph 4 of Article 39, it is recognized that employers have the "right to change the timing." In essence, this states that in "cases where normal operation of business is hindered," employers can demand changes, as opposed to workers' right to specify the timing. Precedents are changing, however, as to whether "normal operation of business is hindered."⁸

e) Prohibition of disadvantageous treatment

Through amendment of the Labour Standards Law in 1987, as a supplementary provision, Article 136 was added. This states that employers must not discriminate against workers who take annual paid holidays. However, there is no penalty for such treatment against employees' right by employers.

(2) Current situation regarding annual paid holidays as seen from "General Survey on Working Conditions," etc.

We will consider the actual situation regarding annual paid holidays based on the Ministry of Health, Labour, and Welfare's "General Survey on Working Conditions" (formerly "Survey on Systems of Wages and Hours").

Table 1 shows the number of days of annual paid holiday granted, number of days taken, and percentage of days taken from 1980, when data was first compiled and published, to 2001, for companies of various sizes. In this survey, the number of days newly granted in the applicable fiscal year (excluding days carried over from the previous year), the number of days taken out of the days granted (including days carried over from the previous year), and the percentage of days taken (the latter divided by the former) are indicated.⁹

The number of days granted, on average for companies of all sizes, remained at around 15 days, ranging from 14.4 days in 1980 to 15.1 days in 1987. It then started to gradually increase, rising from 15.3 days in 1988 to 18.1 days in 2001. This is conjectured to reflect an increase in the number of days granted through amendment of the Labour Standards Law in 1987. Among companies with 1,000 or more employees,

the average was 16.6 days in 1980, and 19.5 days in 2001, increasing by 2.9 days in 22 years. For companies with 100-999 employees, it increased by 3.9 days, from 13.7 days in 1980 to 17.6 days in 2001. For companies with 30-99 employees, it increased by 4.3 days, from 12.1 days in 1980 to 16.4 days in 2001. The smaller the company, the larger the increase in the number of days granted. However, the number of days granted was always larger for larger companies, and it is evident that there is a difference depending on company size.

	Averag	e for compa	anies of all	1,000	or more er	nployees	100-999 employees		oyees	30-99 employees		
Year	The number of days granted	The number of days taken	The percentage of days taken	The number of days granted	The number of days taken	The percentage of days taken	The number of days granted	The number of days taken	The percentage of days taken	The number of days granted	The number of days taken	The percentage of days taken
1980	14.4	8.8	61.3	16.6	10.4	62.7	13.7	8.4	61.2	12.1	7.1	58.6
1981	15.0	8.3	55.3	17.1	9.9	57.9	14.3	7.8	54.5	12.6	6.6	52.4
1982	15.1	8.7	57.6	17.3	10.3	59.5	14.4	8.2	56.9	12.8	7.2	56.3
1983	14.8	8.8	59.5	17.0	10.3	60.6	14.1	8.2	58.2	12.3	6.9	56.1
1984	14.8	8.2	55.6	16.9	9.6	57.3	13.9	7.6	54.8	12.6	6.7	53.2
1985	15.2	7.8	51.6	17.2	9.4	54.5	14.5	7.2	49.2	12.7	6.3	49.3
1986	14.9	7.5	50.3	17.0	8.8	51.8	14.0	6.9	49.2	12.3	6.0	48.8
1987	15.1	7.6	50.2	17.1	8.8	51.6	14.2	7.0	49.1	12.6	6.1	48.1
1988	15.3	7.6	50.0	17.1	8.8	51.2	14.5	7.1	49.2	13.1	6.4	48.7
1989	15.4	7.9	51.5	17.4	9.3	53.7	14.7	7.3	49.7	12.9	6.4	49.4
1990	15.5	8.2	52.9	17.4	9.5	54.7	14.7	7.7	52.1	13.4	6.7	50.1
1991	15.7	8.6	54.6	17.6	10.3	58.3	14.9	7.8	52.2	13.6	6.9	50.3
1992	16.1	9.0	56.1	17.9	10.7	59.6	15.1	8.1	53.2	13.5	7.0	51.5
1993	16.3	9.1	56.1	18.1	10.8	59.8	15.5	8.1	52.4	13.7	7.3	52.8
1994	16.9	9.1	53.9	18.6	10.6	56.8	16.2	8.3	51.1	14.7	7.7	51.9
1995	17.2	9.5	55.2	18.7	11.0	58.7	16.6	8.7	52.2	15.2	7.9	51.9
1996	17.4	9.4	54.1	18.8	11.0	58.5	16.8	8.5	50.4	15.6	7.8	50.3
1997	17.4	9.4	53.8	18.8	11.3	60.0	16.8	8.3	49.5	15.6	7.5	48.0
1998	17.5	9.1	51.8	19.0	10.8	56.7	16.9	8.3	48.9	15.6	7.2	45.9
1999	17.8	9.0	50.5	19.2	10.9	56.5	17.3	8.2	47.3	16.0	7.0	43.7
2000	18.0	8.9	49.5	19.4	10.6	54.6	17.6	8.2	46.5	16.4	7.3	44.6
2001	18.1	8.8	48.4	19.5	10.1	51.7	-	-	-	16.4	7.5	45.6

Table 1Number of annual paid holiday granted, number of days taken, and percentage of days
taken, for companies of various sizes

Note 1: "Annual paid holiday" means holiday based on Article 39 of the Labour Standards Law.

Note 2: The number of days granted exclude days carried over from the previous year, and the number of days taken include days carried over from the previous year.

Note 3: The percentage of days taken is the average for each company, not the average calculated from the numbers of days in the Table.

Note 4: For 2001, figures are quoted from the quick report, and at the time of writing, data for companies with 100-999 employees was not available.

Source: Produced using *General Survey on Working Conditions*, Ministry of Health, Labour, and Welfare (until 1999, the annual *Report on Survey of Systems of Wages and Hours*)

The number of days taken, for large companies, was 8.8 in 1980, but decreased below 8 days in the mid-1980s, then gradually increased again in the 1990s. Recently, however, it has decreased slightly. This trend is the same for companies of all sizes, but like the number of days granted, the number of days taken always differs depending on company size.

The percentage of days taken, for large companies, peaked at 61.3 percent in 1980, decreased to around 55 percent in the early 1980s, and decreased to about 50 percent in the late 1980s, declining by as much as five percentage points. In the early 1990s, however, it reverted to about 55 percent. Recently, it has declined. Consequently, comparing 1980 and 2001, the percentage of days taken has decreased by 12.9 points. Also, for companies of all sizes, the overall trend, as for the average over all sizes, since the late 1990s has been a decline. Regarding size-dependent differences in the percentage of days taken, in 1980 the gap was 1.5 points between companies with 1,000 or more employees and those with 100-999 employees, and 2.6 points between companies with 100-999 employees and those with 30-99 employees. In 1990, the former gap was 2.6 points, and the latter was 2.0 points. In 2000, the former gap was 8.1 points and the latter was 1.9 points. Accordingly, there is a tendency for the gap between large companies and smaller companies to increase.

In such ways, there are size-dependent differences in number of days granted, number of days taken, and percentage of days taken. It is clear that all these figures are higher for larger companies.

However, for companies of all sizes, during the last 21 years there has been an increase in the number of days granted, but the number of days taken has increased only slightly. For this reason, the percentage of days taken, like the overall trend, was low in the late 1980s compared with the early 1980s, and rose again in the early 1990s, but recently has leveled off or declined.

	Avera	ige for	1,000 c	or more	100-999 e	employees	30-99 employees		
	companies	of all sizes	empl	oyees					
Year	Had	Number	Had	Number	Had	Number	Had	Number	
	system	of days	system	of days	system	of days	system	of days	
	(%)	involved	(%)	involved	(%)	involved	(%)	involved	
1998	14.2	4.2	26.5	3.3	14.8	3.8	13.5	4.4	
1989	12.8	4.2	29.6	3.2	17.2	3.8	10.4	4.6	
1990	13.3	4.4	35.7	3.7	18.3	3.6	10.6	5.0	
1991	14.8	4.3	37.5	3.5	21.7	3.9	11.3	4.8	
1992	-	-	-	-	-	-	-	-	
1993	-	-	-	-	-	-	-	-	
1994	16.3	4.2	38.7	4.3	19.6	3.9	14.2	4.3	
1995	17.5	4.0	41.4	4.1	19.4	3.6	15.8	4.3	
1996	-	-	-	-	-	-	-	-	
1997	18.5	4.5	42.9	4.2	23.7	3.9	15.7	4.8	
1998	19.5	4.1	45.2	4.5	23.7	3.9	14.7	4.2	
1999	17.6	4.1	41.8	4.3	23.0	3.9	14.7	4.2	
2000	16.0	3.9	37.6	3.9	21.5	3.7	13.2	4.0	

Table 2 Percentage of companies having a system of planned annual paid holidays and average number of days involved, for companies of all sizes

Note 1: Same as Table 1

Note 2:

"System of planned annual paid holidays" means a system based on the provisions of Paragraph 5, Article 39 of the Labour Standards Law, which have been in effect since 1988.

Data for 1992, 1993, and 1996 were not available. Note 3:

Source: Same as Table 1.

As mentioned above, through the 1987 amendment of the Labour Standards Law, from 1988, a system of granting planned annual paid holidays under labor-management agreements, for days in excess of six among the minimum number granted, 10, was established. Table 2 shows whether companies had such a system, and if so, the average number of days involved for companies of each size.

On average, in 1988, for companies of all sizes, 14.2 percent of companies had such a system. From the mid-1990s onward, the percentage increased. In 1998, it was 19.5 percent. Since 1999 onward, however, it has decreased. The average number of days involved per company has changed little from 4.2 days in 1988.

Looking at the figures for companies of each size, for large companies with 1,000 or more employees, there was a steady increase from 26.5 percent in 1988 until the mid-1990s. Recently, however, there has been a decrease. Similarly, for companies with 100-999 employees, there was an increase from 14.8 percent in 1988 23.0 percent in 1997, but recently, there has been a decrease. The number of days involved per company for companies with 1,000 or more employees increased from 3.3 days in 1988 to 4.5 days in 1998, but has recently decreased. For companies with 100-999 employees, however, there has been virtually no change in the number of days involved, and for those with 30-99 employees, there has been little change in the percentage of companies having such a system or in the number of days involved. In other words, it has mainly

been possible to introduce the system of planned annual paid holidays in large companies, while among smaller companies, it is not becoming widespread.

 Table 3
 Main reasons for leaving annual paid holidays unused according to RENGO-RIALS

 [1993]

Want to use them in case of illness or other emergency	72.9			
Colleagues only take that many	8.8			
No need to take more than that number	7.1			
Want to carry them over to take a longer holiday in near future				
Want to use system of accumulated annual paid holidays				
Other	1.9			
Note 1: Survey of union members, single-response				

Note 1: Survey of union members, single-response Source: RENGO-RIALS [1993]

In addition, the main reasons for leaving annual paid holidays unused, based on a survey by RENGO-RIALS conducted in 1992-93, are shown in Table 3. By far the most common reason was "Want to use them in case of illness or other emergency."

Notes

- 1. Susumu Noda [1999], pp.223-250
- 2. Susumu Noda [1999], pp.225-256
- 3. Susumu Noda [1999], p.228
- 4. Susumu Noda [1999], p.229
- 5. Susumu Noda [1999], p.229
- 6. For details, see Susumu Noda [1999], pp.230-232
- 7. Susumu Noda [1999], p.232
- 8. Susumu Noda [1999], pp.235-239

9. Note that, because the percentage of days taken is calculated for each company, it differs from the value calculated using the figures in the Table.

III. Hints regarding analysis of annual paid holidays – research on absenteeism

(1) Possibility of applying research on absenteeism

Unfortunately, there are very few useful results of research on annual paid holidays in Japan, for which the number and percentage of days taken are small. For this reason, there is also little research that can serve as a reference in empirical analysis of workers' annual paid holidays. However, looking at research in Europe and America, there is a field of research that is useful in its own way; namely, the research on absenteeism selected for discussion in this chapter.

Whitehead [1971] considers absence to be loss of working hours, and classifies it into such categories as labor disputes, occupational injury, voluntary absenteeism, and lateness.¹ In addition, he uses the more restrictive category of sickness absence.

Hedges [1973] classifies absence as that due to labor disputes, that due to weather (or natural disasters), that due to institutionalized holidays, and unscheduled personal absence.² In addition, he classifies unscheduled personal absence as being due to 1) sickness and injury (whether personal or occupational) or 2) other personal reasons. In specific terms, 2) includes such reasons as legal procedures, funerals, family responsibilities, side jobs, and not wanting to work. Hedges points out that both 1) and 2) include unavoidable causes that are not due to workers' negligence, as well as irresponsible, habitual absence." Hedges points out that, even if absence is not only for reasons such as "not wanting to work" in 2) but also for other reasons in 2), or even if some absence is due, for example to reasons in 1), if the absence includes irresponsible, habitual absence, then it constitutes absenteeism. Hedges defines absenteeism in this way, but at the same time, he points out the difficulty of restricting the concept of absenteeism as a subject of research.

Winkler [1980] points out that, in addition to Hedges' definition, absenteeism includes the abuse of sick-leave privileges.³ In other words, he points out that "absence due to illness or injury" described by Hedges may be due to either occupational or personal illness/injury, and that as for personal illness/injury, it is possible that sick-leave (even if the worker is not sick) will be abused while continuation of employment and income are secured.

So how can this concept of absenteeism be applied to the issues concerning annual paid holidays in Japan?

The fact that inability to attend work (or worry that such will be the case) for such reasons as personal illness/injury has been involved in an issue regarding annual paid holidays in Japan may be considered analogous in terms of reason to "absence due to illness" mentioned by Whitehead [1971] and "unscheduled personal absence" mentioned by Hedges [1973]. In that sense, we consider that the perspective of research on absenteeism in Europe and America, in elucidating the causes and nature of taking paid holidays to cover absence, can provide many hints regarding the issue of taking, or not taking, annual paid holidays in Japan.

(2) Framework for economic analysis: Implications of income-leisure choice model

The traditional economic model considers the effect of wage (rate) on labor supply, and a so-called income-leisure choice model is used. In other words, absenteeism is considered to be the result of workers choosing leisure time rather than income.

Annual paid holidays, whether taken or not, do not change income in the short term. Normally, taking all such holidays to increase leisure time is the rational action by the labor force (Point A in Fig.1). In fact, however, the majority of workers in Japan do not take all their annual paid holidays. Figure 1 illustrates this. It is supposed that Japanese workers choose, not the combination of 170 days of work (with 10 days of annual paid holiday) and income of 3,000,000 yen (Point A), but that of 175 days of work (with 5 days of annual paid holiday) and an income considerably higher than 3,000,000 yen (Point B). Seen in terms of the relationship between income and working hours, the current lack of use of annual paid holidays will be reflected in future income. Winkler [1980] points out that "submission of documentary evidence" and "reporting to a supervisor" predict a decline in future income,⁴ and Naoki Mitani [1995], as one economically rational interpretation of unpaid overtime and failure to use annual paid holidays, points out that "future income will increase, and compensation will be paid later."⁵ In other words, it may be considered that Japanese workers do not take the prescribed amount of annual paid holiday because they take into consideration the increased probability of promotion, etc., and consequent increases in future income.



Figure 1. Conceptual diagram for situation when prescribed amount of annual paid holiday is not taken

(3) Implications of other economic research

a) Research by Drago and Wooden [1992]

Drago and Wooden [1992], in order to study absenteeism, utilized the efficiency wage hypothesis to analyze the causes of wage difference.⁶ In brief, this hypothesis is that, when there is a lot of absence by workers, managers indicate to those workers the possibility that they will be dismissed, and the workers compare the benefits of absence with the costs of dismissal and decide the extent to which they will be absent. In addition, Drago and Wooden proposed three theoretical hypotheses: 1) improvements in wages and working conditions reduce absence, 2) an increase in non-earned income increases absence, and 3) an increase in alternative employment opportunities increases

absence. The results of analysis clarified that 3) an increase in alternative employment opportunities was the relevant factor. That is, when there are good opportunities to change jobs, absenteeism increases. Accordingly, it is conceivable that, if the probability of dismissal is higher for workers who take relatively more annual paid holidays, when there are few opportunities to change jobs, the amount of annual paid holiday taken will become small.

b) Research by Leigh [1981]

Leigh [1981] verified the effect of trade unions on absence.⁷ He applied research (the exit-voice model) concerning the effect on union fringe benefits, which was pointed out by Freeman [1978],⁸ and analyzed the effect of union involvement on absence.

According to the analysis by Leigh [1981], when workers belong to a union, absence is high. This results from an increase in absence by union members due to the "adjustment function" of trade unions. It is conjectured that probably, in specific terms, this is due to the direct influence of union activities on such matters as wages and sick leave. In relation to annual paid holidays, too, it is conjectured that unions have considerable scope for involvement.

c) Research by Ohtake [2001]

Ohtake [2001], with reference to research results to date regarding the efficiency wage hypothesis and union influence, analyzed the effect of personnel systems in Japanese companies on absence and taking of annual paid holidays, and differences depending on the existence of unions.⁹ Using the Survey on Systems of Wages and Hours by the former Ministry of Labour (1985, 1993, for companies with 30 or more employees), with days of absence, absence rate, total days off (absences plus annual paid holidays), and total percentage of time off as the dependent variables, he calculated the effects of wage level at retirement age, amount of retirement money, vacancy-application ratio (a representative index of the labor market), company size, and percentage of university graduate employees as the independent variables. An important point is that he took a critical attitude toward union-based variables, and used the method of dividing the sample according to, not whether workers belonged to a union, but whether the company had a union or not.

The research by Ohtake [2001], from the uniquely Japanese viewpoint that absence and annual paid holidays used to make up absence, also included annual paid holidays, and its basic approach is consistent with that in this report. Because the data used were for companies, the study could not explain rates of absence and amounts of annual paid holiday for individual workers, but it verified that when the cost of unemployment is high, absence and holidays decrease, and that the effect is greater for companies without unions than for those unions.

Notes 1. Whitehead [1971] p. 13. 2. Hedges [1973] p. 24. 3. Winker [1980] p. 232 4. Winkler [1980] pp. 235-239. 5. Naoki Mitsuya [1995] pp. 116-119. 6. For details, see Drago and Wooden [1992] 7. For details, see Leigh [1986] 8. For details, see Freeman [1978]

9. For details, see Ohtake [2001]

IV. Outline of questionnaire survey and main results

(1) Outline of survey

The survey data analyzed are based on a survey conducted in fiscal 2002 by the Japan Institute of Labour. We present an outline of the survey ("JIL survey") as follows.

- a) Name of survey: Questionnaire Survey on Taking of Annual Paid Holidays
- **b)Main purpose of survey:** To ascertain the actual situation regarding the taking of annual paid holidays by employees
- c) Selection of survey subjects: Survey forms were delivered directly to individual workers, and to ensure that there was no major bias in distribution of employee gender or age, 3,000 people were selected from among survey monitors registered with a private-sector survey firm (parameter about 200,000 people). Their addresses ranged throughout Japan. In line with the attribute distributions of gender and age among the population according to the 2000 National Census (Ministry of Home Affairs) (Table 4), regular employees aged 20-59 were sampled. (Regarding age, we took account of the facts that there is no carrying over of annual paid holidays for newly graduated recruits, and place of work frequently changes after retirement. Also, there is the problem that proportional holidays are granted to part-time workers and the like, but from the viewpoint of response complexity and survey efficiency, the survey was restricted to regular employees.) The classification used by the survey firm for regular employees was "company employee," "public service employee," and "manager or proprietor." Therefore, initially, samples were extracted using the overall ratio of 8:1:1 in accordance with the distribution obtained from the National Census.

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Age (years)	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Total
Share of age group (%)	11.0	15.9	12.6	11.5	11.3	12.7	14.3	10.7	100.0
Share of males (%)	50.2	60.4	68.9	71.3	68.7	67.0	67.7	69.9	
Share of females (%)	49.8	39.6	31.1	28.7	31.3	330	32.3	30.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

 Table 4
 Age and gender distribution in the population according to the National Census (2000)

Note 1: These are the distributions of "employed workers" among "people in work" for people aged 20-59 who are engaged "mainly in work."

Source: Produced using *Extracted Results of National Census 2000*, Statistics Bureau, the Ministry of Home Affairs

d)**Survey time, method, etc:** Survey forms were mailed to individual subjects, and returned by mail. They were distributed on June 1, 2002, and returned between mid and late June. They were distributed to 3,000 people, and ultimately, 2,579 forms were returned (response rate: 86%). However, 459 invalid forms were excluded, leaving 2,120 forms for analysis (effective response rate: 70.7%).

e) Main questions (for details, see survey form appended to this report):

- 1) Basic attributes (gender, age, educational history, with or without a spouse (whether working or not), whether head of household, family size and composition, number of job changes, health status, frequency of alcohol consumption, level of job satisfaction, attitude to work and leisure, type of business where employed, number of employees, workplace location and commuting time, type of work, rank, years of service, existence of trade union, membership of trade union, annual salary, scheduled working hours per week, actual hours worked per week, days off per week, daily working hours
- 2) Existence of special leave systems (leave for own sickness, leave to care for sick family members, celebratory and condolence leave, summer special holidays, yearend / New Year holidays, refreshment leave, training leave, leave for volunteer activities)
- 3) Items related to annual paid holidays (number of days granted, number taken, number taken for each purpose, reasons for not taking)
- 4) Desires regarding annual paid holidays (length, frequency, timing, purpose of taking)

Because the subjects of analysis in the JIL survey were survey monitors, they do not necessarily constitute a representative sample of employed people throughout Japan. Nevertheless, considering the low return rates in general for surveys in recent years, the fact that individual workers were surveyed, plus the focus on annual paid holidays, and the facts that attention was paid to the distribution of attributes at the sampling stage and the return rate was high, it can be said that the survey sample was meaningful.

(2) Simple statistical results

In the survey form appended to this report, details of questions and simple statistics are shown. Here, we present the main statistical results.

Regarding gender (F1), 68.7% of respondents were male, and 31.3% female.

Regarding age (F2), the average was 40.10 years, and the standard deviation was 11.08 years.

Table 5 shows a cross-tabulation for gender and age. It indicates that there was little bias in respondent distribution results compared with the time of sampling.

 Table 5
 Results of cross-tabulation by age and gender in JIL survey

Age (years)	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Total
Share of age group (%)	9.1	14.9	12.2	11.4	13.0	13.1	15.6	10.7	100.0
Share of males (%)	47.9	61.0	70.3	74.3	72.0	72.3	73.6	73.1	
Share of females (%)	52.1	39.0	29.7	25.7	28.0	27.7	26.4	26.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Regarding highest level of education completed (F3), "four-year university" and "high school" together accounted for 72.4% of respondents.

Regarding marital status, 70.5% of respondents were married (F4). Also, 57.8% were the head of a household (F5).

On average, the number of family members living in the household of a respondent (F6) was 2.64.

The average number of job changes (F8) was 1.12, and the standard deviation was 1.59.

Regarding current health status (F9), 89.5% of respondents were "generally healthy," 2.3% "caught colds easily and tended to get sick," and 8.2% "regularly visited a clinic."

Regarding frequency of alcohol consumption (F10), 39.5% of respondents "never or seldom drank," 27.7% "drank 2-3 times a week," and 32.9% "drank virtually every day."

Regarding level of job satisfaction (F11a: salary or wages), 22.0% were "dissatisfied," 33.5% were "slightly dissatisfied," 18.1% were "not able to say either way," 21.9% were "reasonably satisfied," and 4.5% were "satisfied."

Regarding level of satisfaction (F11b: length of working hours), 17.3% were "dissatisfied," 21.5% "slightly dissatisfied," 24.8% were "not able to say either way," 26.8% were "reasonably satisfied," and 9.5% were "satisfied."

Regarding level of satisfaction (F11c: number of days off and holidays), 12.8% were "dissatisfied," 20.0% "slightly dissatisfied," 20.4% were "not able to say either way," 34.6% were "reasonably satisfied," and 12.2% were "satisfied."

Regarding level of satisfaction (F11d: nature and content of work), 9.0% were "dissatisfied," 18.3% "slightly dissatisfied," 26.7% were "not able to say either way," 37.2% were "reasonably satisfied," and 8.8% were "satisfied."

Regarding level of satisfaction (F11e: human relations in the workplace), 6.6% were "dissatisfied," 15.5% "slightly dissatisfied," 25.9% were "not able to say either way," 41.4% were "reasonably satisfied," and 10.6% were "satisfied."

Regarding attitude to work and leisure (F12), 2.7% responded "I seek meaning in life from work, and give work my full effort," 27.7% "I make an effort at work, but sometimes I also enjoy leisure," 47.4% "I consider work and leisure equally important," 17.3% "I get my work done as quickly as possible, and enjoy leisure as much as possible," and 4.8% "I seek meaning in life more from leisure than from work."

Regarding type of business where employed (F13), "manufacturing industry" was most common at 25.2%, "service industry" 17.1%, "public service" 11.2%, and "wholesale, retail, or restaurants" 10.9%.

Regarding number of employees (F14), "3,000 or more" was most common at 25.3%, and among smaller company sizes, responses were almost equally distributed.

Regarding workplace location (F15), Tokyo was most common at 19.3%, followed by Osaka at 9.6%, Aichi Prefecture at 6.0%, Fukuoka Prefecture at 4.9%, and Kanagawa Prefecture at 4.5%.

Regarding commuting time (F16), "15-29 minutes" was most common at 26.9%, followed by "less than 14 minutes" at 20.3% and "30-44 minutes" at 18.3%.

Regarding type of work (F17), the most common were "marketing and sales" at 14.7%, "management" at 14.0%, "general clerical, reception, and secretarial work" at 13.7%.

Regarding rank (F18), "ordinary employee" was most common at 57.6%. "Supervisor," "section chief class," and "department chief class" were less common, in decreasing order.

Regarding length of service (F19), the average was 13.29 years, and the standard deviation was 10.71 years.

It was reported by 53.6% of respondents that there was currently a union at their workplace (F20), and 38.2% of respondents belonged to a union (F21).

The average income after taxes for the previous year (2001) was 5,329,700 yen, and the standard deviation was 2,700,000 yen.

Scheduled working hours (F23) on average were 40 hours and 6 minutes, but actual working hours on average were 48.73 hours.

Regarding the existence of full arrangements for two days off per week (F25), 71.4% of respondents had "full arrangements for two days off per week or a system of two days off four times each month," and 28.6% of respondents had other systems.

Regarding daily working hours (F26), most common was "normal working hours," at 72.4%. However, about 28% of respondents overall were subject to some sort of variable system such as "flex-time" at 9.7% and "alternating shifts" at 9.3%.

Regarding the existence of special leave systems (Q1), the most commonly reported among such systems was "celebratory or condolence leave" at 90.1%, followed by year-end / New Year holidays, summer special holidays, special leave for one's own sickness, and refreshment leave, in decreasing order.

The average number of days of annual paid holiday granted in fiscal 2001 (Q2) was 28.43, and the standard deviation was 13.36 days.

The average number of days of annual paid holiday taken in fiscal 2001 (Q3) was 7.84, and the standard deviation was 6.83 days. The average percentage of annual paid holiday taken, calculated as $Q3/Q2 \times 100$ for individual respondents, was 31.23%, and the standard deviation was 27.95%.

Regarding the purpose for which annual paid holidays were used, the largest number of days on average, 3.48, was used for "travel, leisure, and returning to hometown." This was followed by "family recreation" at 1.77 days and "recovery from own sickness or injury" at 1.68 days.

Regarding reasons for leaving annual paid holidays untaken (Q5), the total number of people responding "If I had to pick a reason, that's what I think" and "that's what I think" was 59.0% for "It's necessary to hold holidays back for sickness or emergencies." This was followed by "Taking time off inconveniences others in the workplace" at 55.8%, "There's too much work for me to be able to take time off" at 55%, and "There's no-one to take over my work while I'm away" at 47.4%. Conversely, the percentage of respondents citing that "The timing of holidays doesn't match my children's school and club activities", "I have nothing to do even if I take holidays", "The timing of holidays doesn't match my spouse's and friend's holidays", or "I feel that if I take time off, I'll get left behind at work" was low.

Regarding the desired length of paid annual holidays (Q6), the most common was "Two continuous periods of one week, and the remainder decided on a case-by-case

basis" at 33.6%, followed by "Periods of 3-4 days a few times per year, and the remainder decided on a case-by-case basis" at 20.4%.

Regarding the desired timing for annual paid holidays of one week or longer (Q7, but only for the respondents to 1-4 in Q6), the most common was "summer (July-September, but not during the o-bon period)" at 38.7% followed by "fall (October-Christmas)" at 18.6%.

Regarding the activities people wanted to do during holidays of one week or longer (Q8, multiple-response, up to 3 responses), the most common was "travel within Japan, spending up to two nights away" at 62.7%, followed by "overseas travel for one week or longer" at 34.0%, "overseas travel for less than one week" at 31.8%, and "hobbies and sports at home" at 22.0%.

(3) Main cross-tabulations regarding annual paid holidays

Table 6 shows results broken down by age group for each gender. The number of days granted was higher for males, being 30.1 on average for males and 24.6 for females. Looking at each age group, the number of days granted to males increased with age, but for females, it was slightly higher for the 30s age group than for the 40s. The number of days taken was higher for females, being 7.4 on average for males and 8.7 for females. The percentage of days taken (maximum 100) was considerably higher for females, being 27.2 percent for males and 40.6 percent for females. Looking at each age group, for both males and females, the percentage was highest for the 20s age group and lowest in the 50s.

				Ma	les				Fema	ales		
		20s	30s	40s	50s	Average	20s	30s	40s	50s	Average	
						over all					over all	
						age					age	
						groups					groups	
Number of	Average	21.8	31.1	32.1	33.1	30.1	19.5	26.6	25.7	29.5	24.6	
days of annual paid	Frequency	261	337	374	386	1358	206	133	136	126	601	
granted	Standard deviation	11.4	12.5	13.2	12.7	13.2	10.5	12.2	14.2	13.2	12.9	
Number of	Average	6.4	7.8	7.3	7.9	7.4	7.4	10.3	8.6	9.5	8.7	
days of annual paid	Frequency	276	357	391	402	1426	218	138	147	136	639	
holiday taken	Standard deviation	6.2	6.8	6.9	7.2	6.8	6.0	7.3	6.7	7.1	6.8	
Percentage	Average	30.8	27.6	24.8	26.7	27.2	42.6	40.9	40.8	36.7	40.6	
taken	Frequency	270	347	387	394	1398	209	134	139	130	612	
	Standard deviation	27.7	25.0	24.9	25.6	25.7	32.2	28.1	30.6	29.9	30.5	

 Table 6
 Average values in each age group for males and females

Table 7 shows results broken down by type of work. The number of days granted was highest for "management" at 34.5, followed by "general affairs, planning, and accounts" at 30.1. The number of days taken was highest for "specialist work" at 8.9. The percentage of days taken was highest for "general clerical work, etc." at 37.2 percent, followed by "specialist work" at 35.1 percent and "manufacturing and production" at 34.9 percent.

		Management	General affairs, planning, and accounts	general clerical work, etc.	Sales/ marketing	specialist work	manufac- turing and production	Others
Number of annual paid holidays granted	Average	34.5	30.1	26.2	26.5	28.5	26.0	27.2
	Frequency	289	206	266	350	400	310	134
	Standard deviation	12.4	12.9	13.0	13.7	13.1	13.1	13.6
Number of	Average	6.7	8.5	8.5	6.0	8.9	8.3	8.7
holidays	Frequency	295	216	282	384	410	333	141
taken	Standard deviation	6.1	7.2	6.5	6.4	6.7	7.4	7.0
Percentage	Average	21.1	30.2	37.2	26.9	35.1	34.9	33.7
taken	Frequency	292	212	272	367	405	320	138
	Standard deviation	21.5	25.2	29.8	29.6	27.2	30.1	26.3

Table 7 Average values for each type of work

V. Identification of factors affecting the taking of annual paid holidays and reasons why holidays are not taken

In this section, we analyze "Why holidays are not (or cannot be) taken" by "What types of workers," based on the JIL survey forms.

(1) Framework for analysis

In economic analysis, the most important task is to verify how the effects of economic variables such as wages (salary) are expressed. From this viewpoint, the analysis framework of the income-leisure choice model is clear, and is also rich in hints from the results of previous empirical analysis. With the efficiency wage hypothesis, specific hints regarding the effects of trends in the labor market have been obtained. Moreover, in Japan, in order to consider the organizational situation of trade unions, the framework of the exit-voice model also serves as a reference.



Figure 2. Conceptual diagram of the income-leisure choice model regarding taking annual paid holidays

In the income-leisure choice model, the effect of wages on annual paid holidays is not an a priori assumption, but a demonstrable consequence. As mentioned in III, from the fact that annual paid holidays themselves are paid, it is posited that, in the short term, income does not change whether the holidays are taken or not. Figure 2 illustrates the income / leisure time choice model in relation to the taking of annual paid holidays. In this figure, the income restricting curve is A-B-Hm, and the maximum utility is obtained at its intersection B with the utility curve U1. In other words, the rational choice is that of obtaining income of 0-A and taking 0-H0 days of annual paid holiday. However, in reality, Japanese workers, for some reason, take only a certain number of days. In other words, they do not make the most rational choice, point B, but choose a certain number of days within the range 0>X>H0, and allocate the rest as work days.

In the JIL survey, the number of days taken (average) was 7.85 averaged over males and females, 7.44 for males, and 8.74 for females. The percentage of days taken was 31.25 percent averaged over males and females, 27.15 percent for males, and 40.56 percent for females. In other words, looking at average values, neither males nor females selected point B, and there was a difference between males and females. Moreover, average annual salary was 5,326,200 yen (median value 4,800,000 yen) averaged over males and females, 6,168,100 yen (median value 5,950,000 yen) for males, and 3,427,400 yen (median value 3,000,000 yen) for females, showing that there is a considerable difference in salary, too, between males and females. There is therefore a need for an analysis framework that takes into account such gender differences in the ways annual paid holidays are taken in Japan.



Figure 3 illustrates the ways in which males and females take annual paid holidays, using the income-leisure choice model. Taking into account gender differences in annual income and number of days taken, the upper figure is for males and the lower is for females. Because Japanese workers, both male and female, allocate a certain number of days for work, they do not select point B or B'. Explaining this using the income-leisure choice model, it is conceivably because, viewed over the long term, taking holidays has negative effects that may cause loss of income. Among these negative factors may be considered adverse effects on personnel evaluation and reduction in possibilities for promotion. The idea is that, by not taking annual paid holidays, income, viewed over the long term, will be increased. However, it is extremely difficult to verify whether taking holidays affects the future income. The JIL survey provided a cross-section of data for fiscal 2001, and it is difficult to obtain information regarding future income. For this reason, in analysis of wages (salary) in this report, only effects as observed for a cross section are considered.

Figure 3 takes into account loss of future income for males and females. Because it shows that the effect is greater for males, CB has a steeper slope than C'B'. At this time, males take 0-H1 days of annual paid holiday, but females take 0-H2 days. Therefore, H2-H1 corresponds to the gender gap in number of days of annual paid holiday taken.

Regarding the exit-voice model, looking at the effect of trade unions is most important. However, according to Ohtake [2001], in Japan, whether the workplace has a union or not is more important.

Additionally, as in Drago and Wooden [1992] and Ohtake [2001], it is possible that trends in the labor market have an important influence. When conditions in the labor market are adverse (high unemployment rate, low vacancy/application ratio), fewer annual paid holidays are taken.

As theoretical hypotheses obtainable from the implications of research to date, we propose the following: 1) Verification of effect of wages (salary) (however, because both an income effect and a substitution effect are present, the effects are unclear); 2) workers in workplaces that have unions take more annual paid holidays; and 3) workers in regional labor markets where conditions are more adverse take fewer annual paid holidays.

The dependent variable is considered to be the number of days of annual paid holiday taken by individual workers. This is "the number of days actually taken during fiscal 2001," but in the JIL survey, there were 349 cases where its value was zero (16.5% of the effective sample of 2,120). For this reason, in selecting the analysis method, we used the Tobit model, which is applicable to cases where the dependent variable has a discontinuous distribution.

Also, regarding independent variables, several implications were obtained from the research results obtained so far. With reference to important factors that had an influence in the income-leisure choice model and exit-voice model, these were used for comparison with the questions in the JIL survey. However, labor market factors indicated by the efficiency wage hypothesis, and important variables obtained from the survey items were also added.

(2) Results of analysis regarding number of days of annual paid holiday taken, and their agreement

Tables 8 to 10 show the results of analysis with number of days of annual paid holiday taken as the dependent variable.

Table 8 Results of analysis for sample of males and females (both genders; basic + additional variables)

Dependent variable: Number of days of annual paid holiday taken (log) Effective sample size: 1252

Log likelihood = -1362.12

Symbol for	Name of variable	Coefficient	T value	Significance	Limit effect
variable		value		level	
Constant		0.990	1.810	0.070	0.038517
F1-2	Female	0.171	2.731**	0.006	0.006640
F2	Age	-0.001	-0.349	0.727	-0.000042
CF3-2	High school graduate	-0.086	-0.521	0.562	-0.003348
CF3-3	Two-year college or vocational school graduate	-0.133	-0.858	0.391	-0.005171
CF3-4	Four-year college or graduate school graduate	-0.269	-1.752	0.080	-0.010473
F4-1	Married	-0.040	-0.635	0.526	-0.001561
F8	Number of job changes	-0.006	-0.382	0.702	-0.000246
F9-2	Tended to get sick	-0.062	-0.427	0.669	-0.002401
F9-3	Visited clinic regularly	0.220	3.062**	0.002	0.008561
F-11-D-1	Dissatisfied with job	-0.165	-2.095*	0.036	-0.006431
F11-D-2	Slightly dissatisfied with job	-0.146	-2.292*	0.022	-0.005675
F11-D-4	Reasonably satisfied with job	0.020	0.377	0.706	0.000781
D11-D-5	Satisfied with job	-0.059	-0.725	0.469	-0.002277
CF13-1	Construction industry	-0.006	-0.054	0.957	-0.000219
CF13-2	Manufacturing industry	0.000	0.007	0.995	0.000019
CF13-3	Transport or telecom industry	0.145	1.461	0.144	0.005648
CF13-4	Wholesale, retail, or restaurant	-0.177	-1.972*	0.049	-0.006901
CF13-5	Financial, insurance, or real estate	-0.073	-0.758	0.448	-0.002847
CF13-6	Service industry	0.119	1.571	0.116	0.004638
CF13-7	Public service	0.119	1 403	0.161	0.004640
F14D-1	At least 1 000 employees	0.174	3 503***	0.000	0.006783
CITY-1	Large city	0.086	1 538	0.124	0.003345
RF15	Prefectural unemployment rate	-0.064	-2 691**	0.007	-0.002489
F16D-1	At least 60 minutes	-0.014	-0.245	0.807	-0.000549
CF17-1	Management	-0.262	-2 597**	0.009	-0.010214
CF17-2	General affairs, planning, accounts	-0.053	-0.528	0.597	-0.002064
CF17-3	General clerical work etc	-0.074	-0.724	0.469	-0.002887
CF17-4	Marketing sales etc	-0.196	-1.985*	0.407	-0.002687
CF17-5	Specialist work	-0.020	-0.214	0.830	-0.00781
CF17-5	Manufacturing, and production-related	-0.020	-0.214	0.830	0.000831
E20 1	Company had union	0.021	1.806	0.058	0.003749
1 20-1 I N E22	A pruel income (log)	0.090	2.001**	0.003	0.003749
EN-F22	Scheduled working hours (minutes)	0.223	0.042	0.002	0.008081
F23IVIIVI F24MM	A stud working hours (minutes)	0.000	-0.045	0.900	0.00000
F24MM	Actual working nours (minutes)	0.000	-8.290***	0.000	-0.000015
CF20-1		0.054	0.828	0.408	0.002090
LN-Q2	Days of annual paid holiday granted (log)	0.324	6.928***	0.000	0.012609
C-CHILD-I	With a child aged 12 or younger	0.084	1.651	0.099	0.003255
C-ULD-I	With a family member aged 65 or older	0.062	1.083	0.279	0.002426
C-HEAL-I	with a family member in poor health	0.186	2.089*	0.03/	0.007245
F10-2	Drank 2-3 times per week	-0.029	-0.560	0.575	-0.001147
F10-3	Drank every day	-0.143	-2.714**	0.007	-0.005559
F12-2	Sometimes enjoys leisure	0.047	0.323	0.746	0.001831
F12-3	Neutral	0.126	0.871	0.384	0.004888
F12-4	As much leisure as possible	0.255	1.690	0.091	0.009929
F12-5	Leisure gives meaning to life	0.468	2.727**	0.006	0.001143

Q1-A1-1	Employer had sick leave system	0.029	0.574	0.566	0.001143
Q1-B1-1	Family member care	-0.009	-0.168	0.866	-0.000351
Q1-D1-1	Employer had summer holiday	-0.053	-0.980	0.327	-0.002071
Q1-E1-1	Employer had year end / New Year holiday	-0.042	-0.733	0.463	-0.001622
SIGMA		0.709	48.594	0.000	

Note 1: Author's estimate

Note 2: Values marked * were significant at 5% level, those marked ** at the 1% level, and those marked *** at the 0.1% level.

Table 9 Results of analysis for sample of males (males; basic + additional variables)

Dependent variable: Number of days of annual paid holiday taken (log)

Effective sample size: 907Log likelihood = -981.036

Symbol for	Name of variable	Coefficient	T value	Significance	Limit effect
variable		value		level	
Constant		1.682	2.367	0.018	0.076636
F2	Age	-0.001	-0.244	0.807	-0.000046
CF3-2	High school graduate	-0.100	-0.542	0.588	-0.004547
CF3-3	Two-year college or vocational school graduate	-0.131	-0.667	0.505	-0.005986
CF3-4	Four-year college or graduate school graduate	-0.290	-1.530	0.126	-0.013226
F4-1	Married	-0.049	-0.582	0.561	-0.002241
F8	Number of job changes	-0.008	-0.372	0.710	-0.000366
F9-2	Tended to get sick	-0.045	-0.247	0.805	-0.002045
F9-3	Visited clinic regularly	0.227	2.671**	0.008	0.010354
F-11-D-1	Dissatisfied with job	-0.199	-2.137*	0.033	-0.009076
F11-D-2	Slightly dissatisfied with job	-0.155	-2.045*	0.041	-0.007064
F11-D-4	Reasonably satisfied with job	0.007	0.113	0.910	0.000316
D11-D-5	Satisfied with job	-0.085	-0.896	0.370	-0.003876
CF13-1	Construction industry	-0.034	-0.281	0.779	-0.001563
CF13-2	Manufacturing industry	-0.043	-0.475	0.635	-0.001939
CF13-3	Transport or telecom industry	0.112	0.980	0.327	0.005115
CF13-4	Wholesale, retail, or restaurant	-0.214	-1.897	0.058	-0.009773
CF13-5	Financial, insurance, or real estate	-0.181	-1.461	0.144	-0.008226
CF13-6	Service industry	0.142	1.493	0.136	0.006455
CF13-7	Public service	0.126	1.216	0.224	0.005757
F14D-1	At least 1,000 employees	0.153	2.654**	0.008	0.006988
CITY-1	Large city	0.064	0.961	0.337	0.002899
RF15	Prefectural unemployment rate	-0.067	-2.365*	0.018	-0.003055
F16D-1	At least 60 minutes	-0.021	-0.322	0.747	-0.000950
CF17-1	Management	-0.249	-2.200*	0.028	-0.011365
CF17-2	General affairs, planning, accounts	-0.136	-1.142	0.253	-0.006218
CF17-3	General clerical work, etc.	-0.092	-0.661	0.509	-0.004193
CF17-4	Marketing, sales, etc.	-0.249	-2.166*	0.030	-0.011369
CF17-5	Specialist work	-0.021	-0.187	0.852	-0.000938
CF17-6	Manufacturing- and production-related	-0.074	-0.645	0.519	-0.003360
F20-1	Company had union	0.177	2.937**	0.003	0.008053
LN-F22	Annual income (log)	0.163	1.642	0.101	0.007426
F23MM	Scheduled working hours (minutes)	0.000	0.321	0.748	0.000002
F24MM	Actual working hours (minutes)	0.000	-8.669***	0.000	-0.000021
CF26-1	Flextime	0.034	0.464	0.643	0.001557
LN-Q2	Days of annual paid holiday granted (log)	0.277	4.954***	0.000	0.012637
C-CHILD-1	With a child aged 12 or younger	0.106	1.807	0.071	0.004829
C-OLD-1	With a family member aged 65 or older	0.062	0.864	0.388	0.002810

C-HEAL-1	With a family member in poor health	0.108	0.958	0.338	0.004933
F10-2	Drank 2-3 times per week	0.011	0.175	0.861	0.000519
F10-3	Drank every day	-0.132	-2.231*	0.026	-0.006032
F12-2	Sometimes enjoys leisure	0.054	0.313	0.754	0.002459
F12-3	Neutral	0.117	0.684	0.494	0.005335
F12-4	As much leisure as possible	0.267	1.483	0.138	0.012175
F12-5	Leisure gives meaning to life	0.473	2.346*	0.019	0.021549
Q1-A1-1	Employer had sick leave system	0.041	0.697	0.486	0.001879
Q1-B1-1	Family member care	-0.022	-0.362	0.717	-0.001023
Q1-D1-1	Employer had summer holiday	-0.093	-1.466	0.143	-0.004242
Q1-E1-1	No family member care	-0.055	-0.826	0.409	-0.002494
SIGMA		0.705	41.283	0.000	

Note 1: Author's estimate

Note 2: Values marked * were significant at 5% level, those marked ** at the 1% level, and those marked *** at the 0.1% level.

Symbol for	Name of variable	Coefficient	T value	Significance	Limit effect
variable		value		level	
Constant		-0.404	-0.454	0.650	-0.008549
F2	Age	0.001	0.299	0.765	0.000031
CF3-2	High school graduate	-0.089	-0.360	0.719	-0.001893
CF3-3	Two-year college or vocational school graduate	-0.125	-0.494	0.621	-0.002640
CF3-4	Four-year college or graduate school graduate	-0.245	-0.928	0.354	-0.005187
F4-1	Married	0.023	0.232	0.817	0.000479
F8	Number of job changes	-0.001	-0.036	0.971	-0.000020
F9-2	Tended to get sick	0.166	0.684	0.494	0.003510
F9-3	Visited clinic regularly	0.260	1.938	0.053	0.005499
F-11-D-1	Dissatisfied with job	-0.122	-0.814	0.416	-0.002591
F11-D-2	Slightly dissatisfied with job	-0.127	-1.045	0.296	-0.002686
F11-D-4	Reasonably satisfied with job	0.063	0.591	0.554	0.001337
D11-D-5	Satisfied with job	-0.003	-0.017	0.986	0.000057
CF13-1	Construction industry	0.095	0.457	0.647	0.002022
CF13-2	Manufacturing industry	0.035	0.223	0.824	0.000733
CF13-3	Transport or telecom industry	0.098	0.431	0.666	0.002068
CF13-4	Wholesale, retail, or restaurant	-0.178	-1.188	0.235	-0.003760
CF13-5	Financial, insurance, or real estate	0.013	0.079	0.937	0.000272
CF13-6	Service industry	0.046	0.353	0.724	0.000976
CF13-7	Public service	-0.011	-0.068	0.946	-0.000229
F14D-1	At least 1,000 employees	0.239	2.419*	0.016	0.005055
CITY-1	Large city	0.143	1.354	0.176	0.003026
RF15	Prefectural unemployment rate	-0.058	-1.344	0.179	-0.001238
F16D-1	At least 60 minutes	0.005	0.034	0.973	0.000097
CF17-1	Management	-0.392	-1.208	0.227	-0.008308
CF17-2	General affairs, planning, accounts	0.091	0.483	0.629	0.001917
CF17-3	General clerical work, etc.	0.050	0.285	0.776	0.001062
CF17-4	Marketing, sales, etc.	0.024	0.124	0.902	0.000501
CF17-5	Specialist work	0.042	0.236	0.814	0.000883
CF17-6	Manufacturing- and production-related	0.386	1.558	0.119	0.008170
F20-1	Company had union	-0.059	-0.588	0.557	-0.001248
LN-F22	Annual income (log)	0.353	3.047**	0.002	0.007473
F23MM	Scheduled working hours (minutes)	0.000	-1.527	0.127	-0.000007
F24MM	Actual working hours (minutes)	0.000	-0.799	0.424	-0.000002

 Table 10
 Results of analysis for sample of females (females; basic + additional variables)

CF26-1	Flextime	0.104	0.750	0.453	0.002193
LN-Q2	Days of annual paid holiday granted (log)	0.412	4.744***	0.000	0.008726
C-CHILD-1	With a child aged 12 or younger	0.087	0.832	0.405	0.001836
C-OLD-1	With a family member aged 65 or older	0.044	0.451	0.652	0.000937
C-HEAL-1	With a family member in poor health	0.257	1.740	0.082	0.005451
F10-2	Drank 2-3 times per week	-0.064	-0.713	0.476	-0.001354
F10-3	Drank every day	-0.032	-0.231	0.818	-0.000678
F12-2	Sometimes enjoys leisure	0.191	0.704	0.481	0.004045
F12-3	Neutral	0.336	1.259	0.208	0.007123
F12-4	As much leisure as possible	0.417	1.520	0.129	0.008838
F12-5	Leisure gives meaning to life	0.754	2.264*	0.024	0.015972
Q1-A1-1	Employer had sick leave system	-0.013	-0.130	0.897	-0.000282
Q1-B1-1	Family member care	0.034	0.315	0.752	0.000724
Q1-D1-1	Employer had summer holiday	-0.075	-0.710	0.478	-0.001589
Q1-E1-1	No family member care	0.045	0.410	0.682	0.000958
SIGMA		0.677	25.634	0.000	

Note 1: Author's estimate

Note 2: Values marked * were significant at 5% level, those marked ** at the 1% level, and those marked *** at the 0.1% level.

In the statistics for both genders, and for females only, annual income had a significant positive value. In other words, an increase in annual salary (income) increases the number of days of annual paid holiday taken. Accordingly, from the individual data in the JIL survey, regarding the effect of wages (annual salary) on the taking of annual paid holiday by Japanese workers, it is found that the income effect is large.

When the statistics for both males and females were considered, there was a positive value for females. While controlling the various attributes, the number of days taken by females was large.

Regarding the effect of unions, for the female-only sample, significant values were not obtained, while for the male-only sample, there was a significant positive effect. Workers in workplaces that have a union take more days of annual paid holiday than workers in other workplaces. Also, this shows that although among females, the presence of a union has no effect, the effect of having a union is quite large for males. Because Japanese trade unions also possess a "voice effect" as in the exit-voice model, and have a positive effect on the taking of annual paid holiday, to this extent, we have verified theoretical hypothesis 2.

Trends in local labor markets also have a significant effect, and "prefectural unemployment rate" had a significant negative value for the both-genders sample and the male-only sample. In other words, the higher the unemployment rate in a region, the fewer annual paid holidays are taken in that region. In this regard, too, no clear effect was detected for females. The effect for males, however, was particularly strongly expressed, and it appears that theoretical hypothesis 3 has been verified. The finding that, when the labor market in the region where people work undergoes relative deterioration, the taking of annual paid holidays by those people is constrained is also consistent with the results of Drago and Wooden [1992] and Ohtake [2001].

Regarding attributes of the workplace, significant effects were detected for certain industries and company sizes. Regarding industry type, when both males and females were considered, "wholesale, retail, and restaurant" had a significant negative value. In other words, due to such factors as business days, business hours, and relationships with customers, it is probably more difficult to take annual paid holidays in these industries than in others. Regarding company size, there was a significant positive effect for companies with "at least 1,000 employees." In other words, it is easier for people to take annual paid holidays in large companies than in smaller ones.

Regarding the effect of "type of work," in the both-genders and male-only samples, "management" and "marketing, sales, etc." had significant negative values. This indicates that managers take relatively few annual paid holidays in the course of their work, and workers employed in marketing, sales, and customer service experience conditions that make it difficult to take annual paid holidays due to such requirements as those involving business days, hours, and customer services. Moreover, the fact that the effect of type of work was unclear for the female-only sample indicates that such characteristics of type of work are particularly strongly expressed for males.

Deteriorating health condition had a significant positive value. In this regard, the effect was slightly more strongly expressed for males than for females, and it was found that workers who "regularly visit a clinic at present" take many days of annual paid holiday. This reflects the reality that annual paid holiday among Japanese workers is also used for personal illness and injury.

Regarding the effect of actual working hours, a negative result, "working hours are too long to enable holidays to be taken," was obtained for both genders.

Regarding attitude to work and leisure, for both genders, a positive effect was detected among workers who responded that "leisure provides a meaning in life." Among those who "seek meaning in life from leisure, rather than work," the number of days taken was large.

Regarding family composition and situation, a positive effect was detected for "Family member in poor health." From this, it was clear that the composition and situation of a worker's family influenced the number of days taken.

(3) Workers' attitudes toward the taking of annual paid holiday

In the JIL survey, people who left even a single day of annual paid holiday untaken were asked: "Why do you think you leave such holidays untaken?" When a factorial analysis was conducted for the 14 question items, in terms of characteristic values and ease of interpretation, for 11 items, it was clear that there were three groups in terms of attitude. Group 1 had a negative attitude toward taking holidays, responding "m. Because leisure costs money for transport, accommodation, etc." and "k. Because leisure facilities such as transport and accommodation are crowded." The factor in this group may be considered "negativity to leisure." For Group 2, responses indicated that concern about personnel records and treatment at work made it difficult to take holidays: "m. Because my boss doesn't look pleased about me taking holidays" "n. Because I'm worried about the effect on my work evaluation etc." "e. It's hard to take them, because co-workers don't take them." Accordingly, the factor in this group may be considered "concern about personnel records and treatment." In Group 3, responses indicated many problems regarding management of the workforce and amount of work, and too few employees to enable holidays: "c. Because there's no-one to take over my work while I'm away" "b. There's no room to spare for holidays, because there are many problems regarding management of the workforce and amount of work, and too few employees to enable holidays" "d. Because it'll inconvenience co-workers if I take holidays." Accordingly, the factor in this group may be considered "problems regarding management of the workforce and amount of work." Among responses that did not belong to any of the attitude groups - "a. Because it's necessary to keep holidays back in case of illness or emergencies" "f. Because I currently have enough days off" "l. Because I feel I'll get left behind at work if I take holidays" - it was "a. Because it's necessary to keep holidays back in case of illness or emergencies" that was clearly a characteristically different reason from the above three factors. Therefore, it may be considered the fourth reason why annual paid holidays are left untaken.

Table 11 shows correlation coefficients between the percentage of days taken and the four attitude groups, and correlation coefficients among the four attitudes. The correlation coefficient with percentage of days taken for "Because it's necessary to keep holidays back in case of illness or emergencies" is relatively high and positive. In other words, when this attitude is strong, the percentage of days taken is high. To rephrase this, a possible interpretation is that people with a strong inclination to "keep holidays back in case of illness or emergencies" already take a relatively high percentage of annual paid holidays. For "negativity toward leisure," there was a positive value, but virtually no correlation. Also, both "concern about personnel records and treatment" and "problems regarding management of the workforce and amount of work" had negative values. This indicates a tendency that the stronger these attitudes are, the lower the percentage of days taken is.

Moreover, regarding correlations among the attitudes, the value for "concern about personnel records and treatment" and "problems regarding management of the workforce and amount of work" was relatively high and positive. This indicates that these two types of attitude constitute an attitude group of relatively similar nature.

Variable	Ratio of	Attitude	Attitude	Attitude	Attitude
	days taken	1	2	3	4
Ratio of days taken	1.000				
Negativity toward leisure (Attitude 1)	.055	1.000			
Concern about personnel records and	181	.103	1.000		
treatment (Attitude 2)					
Problems regarding management of the	275	028	.370	1.000	
workforce and amount of work (Attitude 3)					
Keep holidays back in case of illness or	.305	.156	030	105	1.000
emergencies (Attitude 4)					

 Table 11
 Ratio of annual paid holiday taken and correlation coefficients for the four attitudes

(4) Profiles of workers in relation to taking annual paid holiday

The factorial analysis and profiles of workers in relation to taking annual paid holiday may be summarized as follows.

a) Workers who take annual paid holidays

Although few workers take 100 percent of their entitlement, the profile of those who find it easy, relatively speaking (among Japanese workers), to take annual paid holidays or actually take their annual paid holidays may be considered to have the following characteristics.

Considered for both genders: Female, in poor health, working in an industry other than wholesale, retail, or restaurants, in a large company, in a region where labor market trends are relatively good. Type of work is not management, marketing, sales, etc., workplace has a union, income is relatively high, actual working hours are relatively short, has a family member in poor health, and feels meaning in life is to be found in leisure rather than work. Has strong attitude that annual paid holidays are "to be kept back in case of illness or emergency."

b) Workers who do not take annual paid holidays

Conversely, the situation regarding taking of annual paid holiday by workers to whom the following conditions apply must be described as relatively poor.

Considered for both genders: Male, good health, works in wholesale, retail, or restaurant industry, in a small or medium-sized company, in a region where labor market trends are deteriorating. Type of work is management, marketing, sales, etc., workplace does not have a union, income is relatively low, actual working hours are relatively long, has no family member in poor health, and has a relatively strong tendency to consider that annual paid holidays cannot be taken due to "concern about personnel records and treatment" or "problems regarding management of the workforce and amount of work."

However, in both (a) and (b) above, there are fairly marked differences between males and females. The main difference is that for males, there are clear differences depending on workplace attributes (type of industry, company size), the existence of a union, trends in the local labor market, and type of work, while for females, these attributes have virtually no observable effect.

VI. Policies to promote the taking of annual paid holidays

(1) Policy level

a) Promoting the spread of long continuous holiday periods

Major problems with annual paid holiday in Japan are the small number of days taken and the low percentage of holiday taken. Considering the current situation in Japan, as a first step, promoting the widespread adoption of continuous holidays about one week long is an important policy issue. The system of planned annual paid holidays, under the Labour Standards Law, enables decisions to be freely made through labormanagement agreements for days in excess of five among the total granted. This system, however, is not very widespread, and its rate of spread is even lower for small companies than large ones. Therefore, there is a need for reforms that increase the statutory effectiveness of the system of planned annual paid holidays.

It is also necessary to consider how workers are to take continuous holidays of about one week, and how to distribute the times when they are taken. In the JIL survey, although many people desired holidays in "summer (July-September, except during the o-bon holiday period)," a fairly large number of people desired holidays in "fall (October-Christmas)" and "after Golden Week (late April / early May) but before the end of June." Accordingly, if people take an additional week or so outside the three occasions of year-end / New Year, Golden Week, and summer holiday (especially August), that alone will increase the percentage of annual holiday taken.

b) Development of family-friendly policies

As was also clear from the factorial analysis in V, in many cases, the need to take annual paid holidays varies with workers' family composition and situation. In the background, not only childcare as such, but looking after sick children, looking after elderly family members, and the like, may be considered relevant. Accordingly, it is possible that the strengthening of policies that support compatibility between work and family life will serve as an opportunity for enabling people to take annual paid holidays for more positive purposes.

In specific terms, policies that may be considered include the following: Increase entitlements to leave under systems of care leave, extend the leave period, make the leave period more flexible, increase male participation in care leave, and increase facilities for children's daycare.

(2) Matters to be considered at the company level

a) Establishment of system of short sick leave, for personal illness and injury

According to the JIL survey, in fiscal 2001, on average 1.68 days of annual paid holiday were used for "recovery from own illness or injury." Although 1.68 days seems a small amount, because the average number of days taken was 7.84, it accounts for 21 percent of annual paid holiday taken. Moreover, 59.0 percent of survey respondents affirmed that holidays were left untaken "because it's necessary to keep holidays back in case of illness or emergency" (total for "this is what I think" and "if I had to give a reason, this is what I think"). In addition, from the results of analysis in V, the worse people's health, the more annual paid holiday they took. In other words, the taking of annual paid holiday is considerably influenced by health status. Therefore, to promote the taking of such holiday, eliminating the use of annual paid holidays instead of absence due to personal illness or injury, and unease about such absence, is a major issue.

Even now, quite a large number of companies have systems for responding to inability to work due to sickness. However, the fact that annual paid holidays are used for sickness implies that current sick-leave systems are difficult for workers to use. In the background lies the fact that the sick-leave systems used by many companies, in relation to regulations for sick-leave allowance under the Health Insurance Law (for absences of four days or longer, up to a maximum of one year and six months, 60 percent of standard salary), are designed with comparatively long absences, such as a week or more, in mind. In fact, however, the majority of "absence due to personal illness or injury" for which workers use paid annual holidays lasts only about 1-3 days. Therefore, it is not covered by current sick-leave systems.

If a system of leave for sickness that lasts a few days is established, it is conceivable that absence due to sickness and concern about such absence will cease to be purposes for which annual paid holidays are used. Consequently, such holidays may become used for more positive purposes.

b) Reconsideration of workforce management

In the background to the non-use of annual paid holiday, for which 100 percent of a worker's entitlement should be usable, lie many problems regarding workforce. The results of analysis in V, too, showed that the longer actual working hours are, the fewer days of holiday are taken, and that "problems regarding management of the workforce and amount of work" are a major factor in terms of attitudes that lower the percentage of annual paid holiday taken. A major reason for this is that company planning of staff deployment is not based on the assumption that all employees will take all of their annual paid holidays.

In Germany and France, the right to decide the timing of annual paid holidays, in principle, belongs to the employer. However, it is necessary to respect workers' wishes, and at the start of the fiscal year, the timing of annual holidays for virtually all employees is specified. Company managers responsible for personnel and labor management consider staff deployment and substitutes based on a knowledge of who will take their holidays when. This is true not only for manufacturing operations such as factories, but also in workplaces such as department stores with many white-collar workers.¹ Therefore, if Japanese companies managed their workforce on the assumption that all workers will take all their holidays, it would be possible to increase the percentage of annual paid holiday taken in both direct and indirect business units. The analysis in V showed that managers, and workers in marketing and sales, take especially few days of annual paid holiday. For this reason, if workforce management is conducted with the taking of all annual paid holidays by such white-collar workers particularly in mind, it may be expected that the percentage of annual paid holiday taken will increase considerably.

c) Establishment of systems for accumulating annual paid holiday

Annual paid holidays not taken during the applicable fiscal year, according to interpretations of Article 115 (Valid Timing) of the Labour Standards Law, are carried over to the following year. Therefore, days newly granted in the current year have a statutory validity of two years. At present, however, for the many workers who do not take all their holidays each year, once their period of continuous service exceeds three years, a certain number of days become invalid. But if this lost annual paid holiday could be effectively utilized, then - even if not all days are taken in the applicable fiscal year - it is possible that, from the perspective of a few years' duration, the percentage of annual paid holiday taken would increase. Annual paid holiday that becomes invalid in this way is actually utilized in a relatively large number of companies, and in most such cases is called "accumulated holiday" (or occasionally "stored-up holiday"). Of course, it is important to create an environment where all annual paid holiday can be taken. Nevertheless, considering the current situation, a policy of utilizing accumulated holidays that would otherwise become invalid is likely to be effective.

(3) Matters to be considered by individuals and households

In the JIL survey, respondents who considered it unnecessary to take annual paid holidays actually constituted a minority. In other words, there is a correspondingly high potential desire for annual paid holidays.

Meanwhile, from the viewpoint of how Japanese people spend their leisure time, when the results of international comparative surveys² are briefly examined, the current

situation in Japan becomes clear. Looking at the overall rate of participation in 43 types of activities, the countries with the most flourishing leisure habits are Canada, Australia, the US, West Germany, France, and the UK, in decreasing order, with Japan in bottom place. Apparently, activities with low participation rates in Japan are "recreational sports" and "cultural pursuits."

Compared with advanced Western nations, it seems that ways of spending leisure time in Japan, rather than "refreshing mind and body through physical activity," strongly tend toward "recovery from fatigue due to work, etc." Of course, ways of spending leisure time are influenced considerably by each country's history, culture, customs, socio-economic factors, and sense of values. It can probably be said, however, that Japanese do not spend their leisure time in such positive ways as Westerners. If we consider this issue without taking account of other conditions, and consider ways of spending leisure time only, then we may say that Japanese workers, while wanting to take more annual paid holidays, are not used to spending their leisure time in positive ways. If unfamiliarity with positive ways of spending leisure time is ultimately a reason why annual paid holidays are not taken, then at least in relation to this point, autonomous participation in leisure activities by workers themselves or by individual households becomes an issue.

There are probably not that many workers who are able to take time off if they want to, but do not know how to use that time off positively. However, there may be some people who should reconsider the effectiveness of the leisure activities for which they use their annual paid holidays. "Taking time off" not only refreshes workers themselves physically and mentally, but also offers possibilities for various advantages that cannot be gained in a corporate setting, such as helping households run smoothly, broadening perspectives, and enabling connections to be made with the local community.

(4) Other matters

If annual plans for annual paid holidays are well planned in workforce management, in some cases, substitutes for workers on holiday will become necessary. If supplementary workers are required continuously for a certain period, by selecting them from among the unemployed, a kind of job-creation effect will be achieved. Measures of this type, using not only annual paid holidays, but other kinds of long-term holiday and leave as well, are relatively common in Europe.³

Estimates have been made of the effect on employment and the leisure industry of the increase in days off and holidays if all these are taken, assuming that the amount of annual paid holiday currently left unused by workers is 9.1 days per person per year.⁴ According to these estimates, by using up all annual paid holiday, jobs for 920,000 people as substitutes would be created. Meanwhile, due to the increase in leisure time,

consumption for leisure activities would increase, resulting in the creation of an additional 560,000 jobs. Consequently, a total of 1.48 million jobs would be created. Of course, because these are estimates, it is difficult to assess their correctness. In particular, the extent of the labor cost entailed in hiring substitutes (which probably varies depending on the form of employment), and the extent to which leisure-related consumption in leisure-related industries will increase, depend on the assumptions made by the estimator. Nevertheless, if replacement cover becomes necessary, employment is likely to increase, even if it is non-regular employment. Also, if leisure activities become more flourishing, naturally, consumption in related industries is likely to increase).

In addition to these policies, there may be matters that contribute directly and indirectly to the taking of annual paid holidays. At the very least, however, regarding the above policies, rather than considering one of them as an absolute priority, we consider them all important. Nevertheless, even if only one or two of these aspects can be improved little by little, the percentage of holidays taken by Japanese workers is likely to increase.

Notes

- 1. See Susumu Noda and Hajime Wada [1991].
- 2. These results are presented on p.17 of Leisure Development Center [currently: Institute for Free Time Design] [1989].
- 3. For details of such work-sharing policies in Europe, see Kazuya Ogura [2001].
- 4. Estimates are presented in Institute for Free Time Design [2002a] and [2002b].

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