# Long Working Time and Flexibility of Working Time Management and Workplace in Japan 

Kazuya Ogura ${ }^{1}$<br>The Japan Institute for Labour Policy and Training

## 1. Background

- Working time (hereafter called WT) in Japan is the longest in advanced countries.
- WT has not been shortened over a past decade.
- Overtime, unpaid overtime, and few paid annual leaves are main factors.
- Legal working hours per week is 40 hours.
- Overtime is determined by a collective agreement.
- Legal upper limit of the length of overtime is 360 hours per year, but this is just like a nonbinding guideline. Even when an overtime of more than 360 hours per year is agreed upon by a collective agreement, it is not illegal.
- One labor standard inspector is taking charge of about 1,500 enterprises.
- Among male workers in their late 20 s to early 40 s, the percentage of those who work over 60 hours a week exceeds 20\%. (Ministry of Internal Affairs and Communications, E mployment Status Survey, 2007).
- The number of claims for "Karoshi" or death by overwork from long working hours is increasing in recent years. It was 931 in 2007. This figure only shows the cases where the claims were filed, so it would be a considerable number if claims that were not filed were included.
- Mental disease like depression is also increasing.


## 2. Flexibility of WT management and workplace

### 2.1. Flexibility of WT management

- Managerial, specialist, and sales positions are partly exempt from legal WT management.


### 2.2. Flexibility of workplace

- Workers work in places other than their main workplace, for example, working overtime at home.

This survey shows a relation between working time and flexibility of WT management and workplace.

[^0]
## 3. Survey Outline

- JILPT conducted the survey in August and September of 2008.

Subject: 8,000 male and female workers nationwide 20 to 59 years of age, who are fulltime permanent employees ("Seishain").

- Number of responses: 6,430.


## 4. Fact findings

### 4.1. Monthly Average Amount of Actual Total WT (ATWT), Overtime (OT) and Unpaid Overtime (UOT)

Table 1. Monthly average amount of actual total working time (ATWT), overtime (OT) and unpaid overtime (UOT)

| $\mathrm{N}=6,054$ (ATWT, OT) $\quad \mathrm{N}=4,895$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ATWT | OT | UOT |
| Total |  | 206 | 28 | 16 |
| Gender | Male | 213 | 33 | 17 |
| Gender | Female | 189 | 17 | 14 |
| Age | 20s | 210 | 31 | 15 |
|  | 30s | 211 | 31 | 16 |
|  | 40s | 205 | 29 | 17 |
|  | 50s | 200 | 23 | 16 |

Table 2. Monthly average amount of actual total working time (ATWT), overtime (OT) and unpaid overtime (UOT)

| $\mathrm{N}=6,054$ (ATWT, OT) $\quad \mathrm{N}=4,895$ (UOT) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ATWT | OT | UOT |
| Total |  | 206 | 28 | 16 |
| Industry | Construction | 221 | 25 | 15 |
|  | Manufacturing | 203 | 26 | 17 |
|  | Utilities | 199 | 23 | 15 |
|  | ICT | 199 | 21 | 18 |
|  | Transportation | 225 | 24 | 17 |
|  | Wholesale, retail | 212 | 27 | 17 |
|  | Bank, insurance | 196 | 29 | 19 |
|  | Research | 207 | 26 | 13 |
|  | Hotel, restaurant | 230 | 32 | 14 |
|  | Education | 219 | 44 | 17 |
|  | Medical, welfare | 193 | 32 | 14 |
|  | Service | 209 | 28 | 17 |
|  | Public service | 189 | 40 | 15 |
|  | Other service | 211 | 28 | 15 |
|  | Miscellaneous | 199 | 27 | 13 |
| Company size (employees) | 1-29 | 210 | 22 | 14 |
|  | 30-99 | 212 | 30 | 17 |
|  | 100-299 | 208 | 29 | 16 |
|  | 300-999 | 206 | 31 | 16 |
|  | 1,000-2,999 | 204 | 31 | 15 |
|  | 3,000- | 199 | 30 | 18 |

Table 3. Monthly average amount of actual total working time (ATWT), overtime (OT) and unpaid overtime (UOT)

| $\mathrm{N}=6,054$ (ATWT, O |  | $\mathrm{N}=4,895$ (UOT) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ATWT | OT | UOT |
|  | Total | 206 | 28 | 16 |
| Occupation | General affairs, HRM | 193 | 22 | 16 |
|  | Clerical, secretarial | 187 | 16 | 15 |
|  | Sales | 216 | 35 | 16 |
|  | Customer service | 216 | 27 | 15 |
|  | Analysis, patent | 197 | 27 | 16 |
|  | R\&D | 206 | 36 | 15 |
|  | Medical, educational | 205 | 27 | 17 |
|  | Workplace supervisor | 218 | 34 | 16 |
|  | Manufacturing operation | 201 | 22 | 18 |
|  | Driver | 241 | 39 | 19 |
|  | Security, sanitation | 211 | 22 | 28 |
| Managerial position | Rank \& file employee | 204 | 25 | 15 |
|  | Senior staff, unit head | 206 | 32 | 19 |
|  | Section manager | 214 | 37 | 16 |
|  | Department Manager | 216 | 37 | 15 |

Table 4. Monthly average amount of actual total working time (ATWT), overtime (OT) and unpaid overtime (UOT)

| N=6,054 (ATWT, OT) $\quad \mathrm{N}=4,895$ (UOT) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ATWT | OT | UOT |
| Total |  | 206 | 28 | 16 |
| WT system | Normal (strict) | 204 | 26 | 16 |
|  | Flexitime (medium) | 203 | 33 | 16 |
|  | De facto system (loose) | 236 | 50 | 20 |
|  | Nothing special (loose) | 237 | 44 | 15 |
| Number of work place | 1 | 198 | 23 | 16 |
|  | 2 | 211 | 30 | 18 |
|  | 3 | 220 | 39 | 17 |
|  | 4 and more | 224 | 45 | 15 |
| Type of work place (as 2nd or $\mathrm{N}^{\text {th }}$ work place) | Affiliates, branch offices | 215 | 29 | 16 |
|  | Home | 223 | 29 | 15 |
|  | Customers' site | 218 | 27 | 17 |
|  | Trains, cars | 220 | 29 | 13 |
|  | Hotels | 220 | 27 | 15 |
|  | Cafe | 216 | 28 | 14 |
| Type of work at home | Company regulation | 203 | 34 | 21 |
|  | Supervisor's decision | 216 | 41 | 12 |
|  | My own decision | 224 | 44 | 17 |

### 4.2. Factors affecting the change in ATWT (multivariable analysis, OLS)

- Explained variable: ATWT(ln).
- Explaining variables: gender, age, annual income, industry, company size, work-leisure choice, occupation, managerial position, WT system, number of workplace, type of workplace (as $2^{\text {nd }}$ or $\mathrm{N}^{\text {th }}$ workplace).

Table 5. Factors affecting the change in ATWT (OLS)

| Number of obs $=5,717$ <br> R-squared $=0.18$ |  | $\begin{aligned} & F=25.26(\text { Prob }>F=0.00) \\ & \text { Adj R-squared }=0.17 \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coef. | Std. Err. | t | P>t | Beta |
| Male (B.M. = Female) |  | 0.08 | 0.01 | 10.91 | 0.00 | 0.17 |
|  | Age | 0.00 | 0.00 | -11.89 | 0.00 | -0.17 |
| Income (In) |  | 0.02 | 0.01 | 3.46 | 0.00 | 0.06 |
| Industry (B.M. = Manufacturing) | Construction | 0.04 | 0.01 | 3.35 | 0.00 | 0.05 |
|  | Utilities | -0.02 | 0.02 | -1.25 | 0.21 | -0.02 |
|  | ICT | -0.05 | 0.01 | -4.08 | 0.00 | -0.06 |
|  | Transportation | 0.00 | 0.02 | 0.16 | 0.87 | 0.00 |
|  | Wholesale, retail | 0.02 | 0.01 | 2.11 | 0.04 | 0.03 |
|  | Bank, insurance | -0.01 | 0.01 | -1.08 | 0.28 | -0.02 |
|  | Research | -0.01 | 0.01 | -0.68 | 0.50 | -0.01 |
|  | Hotel, restaurant | 0.09 | 0.02 | 5.18 | 0.00 | 0.07 |
|  | Education | 0.03 | 0.02 | 1.87 | 0.06 | 0.03 |
|  | Medical, welfare | -0.04 | 0.01 | -2.81 | 0.01 | -0.05 |
|  | Service | 0.01 | 0.01 | 1.09 | 0.28 | 0.02 |
|  | Public service | -0.06 | 0.01 | -4.51 | 0.00 | -0.07 |
|  | Other service | 0.01 | 0.02 | 0.53 | 0.60 | 0.01 |
|  | Miscellaneous | -0.03 | 0.02 | -1.57 | 0.12 | -0.02 |
| $\begin{gathered} \text { Company size } \\ \text { (employees, B.M. } \\ 3,000-\text { ) } \end{gathered}$ | 1-29 | 0.07 | 0.01 | 7.12 | 0.00 | 0.12 |
|  | 30-99 | 0.06 | 0.01 | 6.95 | 0.00 | 0.11 |
|  | 100-299 | 0.05 | 0.01 | 5.11 | 0.00 | 0.08 |
|  | 300-999 | 0.04 | 0.01 | 4.27 | 0.00 | 0.06 |
|  | 1,000-2,999 | 0.03 | 0.01 | 2.75 | 0.01 | 0.04 |
| Work-leisure choice <br> (B.M. = Equally important) | Work-oriented | 0.01 | 0.02 | 0.68 | 0.50 | 0.01 |
|  | More or less work-oriented | -0.01 | 0.01 | -0.86 | 0.39 | -0.01 |
|  | More or less leisureoriented | 0.00 | 0.01 | 0.70 | 0.48 | 0.01 |
|  | Leisure-oriented | -0.01 | 0.01 | -0.96 | 0.34 | -0.01 |
| Occupation (B.M. = Clerical, secretarial) | General affairs, HRM | -0.01 | 0.01 | -0.73 | 0.47 | -0.01 |
|  | Sales | 0.04 | 0.01 | 3.37 | 0.00 | 0.07 |
|  | Customer service | 0.06 | 0.02 | 3.75 | 0.00 | 0.06 |
|  | Analysis, patent | -0.02 | 0.02 | -1.09 | 0.27 | -0.01 |
|  | R\&D | 0.01 | 0.01 | 1.11 | 0.27 | 0.02 |
|  | Medical, educational | 0.06 | 0.02 | 4.14 | 0.00 | 0.09 |
|  | Workplace supervisor | 0.06 | 0.01 | 4.16 | 0.00 | 0.07 |
|  | Manufacturing operation | 0.01 | 0.01 | 0.49 | 0.62 | 0.01 |
|  | Driver | 0.17 | 0.02 | 8.88 | 0.00 | 0.15 |
|  | Security, sanitation | 0.06 | 0.03 | 1.96 | 0.05 | 0.03 |
| Managerial position <br> (B.M. = Rank \& file) | Senior staff, unit head | 0.01 | 0.01 | 0.99 | 0.32 | 0.01 |
|  | Section manager | 0.03 | 0.01 | 3.13 | 0.00 | 0.04 |
|  | Department Manager | 0.02 | 0.01 | 1.30 | 0.19 | 0.02 |
| WT system (B.M. = Normal) | Flexitime (medium) | 0.00 | 0.01 | -0.21 | 0.83 | 0.00 |
|  | Defacto system (loose) | 0.09 | 0.01 | 6.35 | 0.00 | 0.08 |
|  | Nothing special (loose) | 0.09 | 0.02 | 5.65 | 0.00 | 0.07 |
| $\begin{aligned} & \text { Number of work place } \\ & (\text { B.M. }=\text { Single) } \end{aligned}$ | 2 | 0.03 | 0.01 | 3.88 | 0.00 | 0.05 |
|  | 3 | 0.06 | 0.01 | 6.88 | 0.00 | 0.09 |
|  | 4 and more | 0.06 | 0.01 | 6.19 | 0.00 | 0.08 |
| Constant |  | 5.14 | 0.04 | 126.32 | 0.00 |  |

- Occupation: sales, customer service, medical \& educational, workplace supervisor, driver, security \& sanitation.
- Managerial position: section manager
- WT system: de facto system, nothing special
- Number of workplace: 2,3,4 places

Table 6. Factors affecting the change in ATWT (OLS)

| Number of obs $=2,499$ <br> R-squared $=0.15$ |  | $\begin{aligned} & \text { F }=8.57(\text { Prob }>F=0.00) \\ & \text { Adj R-squared }=0.14 \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coef. | Std. Err. | t | $\mathrm{P}>\mathrm{t}$ | Beta |
| Male (B.M. = Female) |  | 0.07 | 0.01 | 5.10 | 0.00 | 0.12 |
|  | Age | 0.00 | 0.00 | -7.53 | 0.00 | -0.17 |
| Income (In) |  | 0.03 | 0.01 | 3.06 | 0.00 | 0.08 |
| Industry (B.M. = Manufacturing) | Construction | 0.06 | 0.02 | 3.44 | 0.00 | 0.08 |
|  | Utilities | -0.02 | 0.03 | -0.80 | 0.42 | -0.02 |
|  | ICT | -0.05 | 0.02 | -3.01 | 0.00 | -0.06 |
|  | Transportation | -0.03 | 0.03 | -1.13 | 0.26 | -0.03 |
|  | Wholesale, retail | 0.01 | 0.02 | 0.44 | 0.66 | 0.01 |
|  | Bank, insurance | -0.02 | 0.02 | -0.84 | 0.40 | -0.02 |
|  | Research | -0.02 | 0.02 | -0.80 | 0.43 | -0.02 |
|  | Hotel, restaurant | 0.05 | 0.03 | 1.60 | 0.11 | 0.03 |
|  | Education | 0.03 | 0.03 | 1.01 | 0.31 | 0.03 |
|  | Medical, welfare | -0.07 | 0.03 | -2.68 | 0.01 | -0.07 |
|  | Service | 0.02 | 0.02 | 1.02 | 0.31 | 0.02 |
|  | Public service | -0.02 | 0.02 | -1.01 | 0.31 | -0.02 |
|  | Other service | 0.03 | 0.03 | 0.95 | 0.34 | 0.02 |
|  | Miscellaneous | 0.00 | 0.03 | 0.08 | 0.94 | 0.00 |
| Company size (employees, B.M. = 3,000-) | 1-29 | 0.07 | 0.02 | 4.55 | 0.00 | 0.12 |
|  | 30-99 | 0.07 | 0.01 | 4.85 | 0.00 | 0.12 |
|  | 100-299 | 0.06 | 0.02 | 3.97 | 0.00 | 0.09 |
|  | 300-999 | 0.04 | 0.01 | 2.95 | 0.00 | 0.07 |
|  | 1,000-2,999 | 0.04 | 0.02 | 2.54 | 0.01 | 0.05 |
| Work-leisure choice (B.M. <br> = Equally important) | Work-oriented | -0.02 | 0.03 | -0.53 | 0.60 | -0.01 |
|  | More or less work-oriented | -0.02 | 0.01 | -2.14 | 0.03 | -0.04 |
|  | More or less leisure-oriented | 0.01 | 0.01 | 0.55 | 0.58 | 0.01 |
|  | Leisure-oriented | -0.02 | 0.02 | -1.17 | 0.24 | -0.02 |
| Occupation (B.M. = Clerical, secretarial) | General affairs, HRM | 0.01 | 0.02 | 0.58 | 0.56 | 0.02 |
|  | Sales | 0.05 | 0.02 | 2.31 | 0.02 | 0.09 |
|  | Customer service | 0.09 | 0.03 | 2.93 | 0.00 | 0.07 |
|  | Analysis, patent | -0.03 | 0.03 | -0.87 | 0.39 | -0.02 |
|  | R\&D | 0.02 | 0.02 | 0.94 | 0.35 | 0.04 |
|  | Medical, educational | 0.08 | 0.03 | 2.99 | 0.00 | 0.11 |
|  | Workplace supervisor | 0.08 | 0.02 | 3.42 | 0.00 | 0.10 |
|  | Manufacturing operation | 0.01 | 0.03 | 0.54 | 0.59 | 0.02 |
|  | Driver | 0.23 | 0.04 | 6.36 | 0.00 | 0.19 |
|  | Security, sanitation | 0.15 | 0.05 | 2.82 | 0.01 | 0.06 |
| Managerial position (B.M. = Rank \& file) | Senior staff, unit head | 0.01 | 0.01 | 1.22 | 0.22 | 0.03 |
|  | Section manager | 0.01 | 0.01 | 1.01 | 0.31 | 0.02 |
|  | Department Manager | 0.02 | 0.02 | 1.02 | 0.31 | 0.02 |
| WT system (B.M. = Normal) | Flexitime (medium) | -0.01 | 0.01 | -1.08 | 0.28 | -0.02 |
|  | De facto system (loose) | 0.09 | 0.02 | 5.32 | 0.00 | 0.10 |
|  | Nothing special (loose) | 0.07 | 0.02 | 3.68 | 0.00 | 0.07 |
| Type of work place (as 2nd or $\mathrm{N}^{\text {th }}$ work place) | Affiliates, branch offices | 0.00 | 0.01 | 0.18 | 0.86 | 0.00 |
|  | Home | 0.04 | 0.01 | 3.95 | 0.00 | 0.08 |
|  | Customers' site | 0.01 | 0.01 | 1.47 | 0.14 | 0.03 |
|  | Trains, cars | 0.00 | 0.01 | -0.06 | 0.95 | 0.00 |
|  | Hotels | 0.01 | 0.01 | 0.41 | 0.68 | 0.01 |
|  | Cafe | -0.03 | 0.02 | -1.36 | 0.17 | -0.03 |
| Constant |  | 5.12 | 0.07 | 75.89 | 0.00 |  |

- Occupation: sales, customer service, medical \& educational, workplace supervisor, driver, security \& sanitation.
- Managerial position: none.
- WT system: de facto system, nothing special.
- Type of workplace: home.

The survey found that flexibility of WT management and workplace is a factor leading to long working time as above.

### 4.3. Factors affecting the flexibility in WT management and in workplace (multivariable analysis, Probit)

- Explained variable: WT flexibility, workplace flexibility.
- Explaining variables: gender, age, annual income, education, spouse, dependent children, ATWT, industry, company size, work-leisure choice, occupation, managerial position.

Table 7. Factors affecting the flexibility in WT management (Flexible $=1$, Probit)

| Number of obs $=5,718$ <br> Pseudo R-squared $=0.27$ |  | L. R chi2 $=1,031($ Prob $>$ chi2 $=0.00)$ Log likelihood $=-1,404$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coef. | Std. Err. | z | P>z | dF/dx |
| Male (B.M. = Female) |  | 0.08 | 0.09 | 0.93 | 0.35 | 0.01 |
|  | Age | 0.00 | 0.00 | -1.36 | 0.17 | 0.00 |
| Income (In) |  | 0.24 | 0.07 | 3.32 | 0.00 | 0.03 |
| Education (B.M. $=12$ years or less) | 14 years | -0.07 | 0.08 | -0.92 | 0.36 | -0.01 |
|  | 16 years or more | 0.01 | 0.06 | 0.18 | 0.86 | 0.00 |
| Spouse (B.M. = None) |  | -0.02 | 0.06 | -0.41 | 0.69 | 0.00 |
| Dependent children (under 15 years old, B.M. = None) |  | 0.01 | 0.06 | 0.20 | 0.84 | 0.00 |
| ATWT (In) |  | 0.97 | 0.12 | 7.86 | 0.00 | 0.11 |
| Industry (B.M. = Manufacturing) | Construction | -0.25 | 0.13 | -1.96 | 0.05 | -0.02 |
|  | Utilities | -0.41 | 0.23 | -1.78 | 0.07 | -0.03 |
|  | ICT | 0.27 | 0.11 | 2.59 | 0.01 | 0.04 |
|  | Transportation | -0.03 | 0.16 | -0.20 | 0.84 | 0.00 |
|  | Wholesale, retail | -0.01 | 0.10 | -0.12 | 0.91 | 0.00 |
|  | Bank, insurance | 0.02 | 0.12 | 0.14 | 0.89 | 0.00 |
|  | Research | -0.08 | 0.14 | -0.53 | 0.59 | -0.01 |
|  | Hotel, restaurant | 0.01 | 0.18 | 0.07 | 0.95 | 0.00 |
|  | Education | -0.23 | 0.20 | -1.16 | 0.25 | -0.02 |
|  | Medical, welfare | -0.15 | 0.17 | -0.90 | 0.37 | -0.02 |
|  | Service | -0.04 | 0.11 | -0.38 | 0.71 | -0.01 |
|  | Public service | -1.01 | 0.20 | -5.15 | 0.00 | -0.06 |
|  | Other service | 0.06 | 0.18 | 0.34 | 0.73 | 0.01 |
|  | Miscellaneous | 0.00 | 0.17 | 0.01 | 0.99 | 0.00 |
| Company size (employees, B.M. $=3,000-$ ) | 1-29 | -0.06 | 0.09 | -0.62 | 0.54 | -0.01 |
|  | 30-99 | -0.20 | 0.09 | -2.14 | 0.03 | -0.02 |
|  | 100-299 | -0.37 | 0.10 | -3.81 | 0.00 | -0.03 |
|  | 300-999 | -0.30 | 0.09 | -3.45 | 0.00 | -0.03 |
|  | 1,000-2,999 | -0.28 | 0.10 | -2.88 | 0.00 | -0.03 |
| Work-leisure choice (B.M. = Equally important) | Work-oriented | 0.00 | 0.18 | 0.01 | 0.99 | 0.00 |
|  | More or less work-oriented | 0.04 | 0.07 | 0.68 | 0.50 | 0.01 |
|  | More or less leisure-oriented | -0.04 | 0.07 | -0.60 | 0.55 | -0.01 |
|  | Leisure-oriented | -0.05 | 0.11 | -0.46 | 0.64 | -0.01 |
| Occupation (B.M. = Clerical, secretarial) | General affairs, HRM | 0.30 | 0.15 | 2.01 | 0.04 | 0.04 |
|  | Sales | 0.62 | 0.14 | 4.55 | 0.00 | 0.09 |
|  | Customer service | 0.34 | 0.19 | 1.73 | 0.08 | 0.05 |
|  | Analysis, patent | 0.75 | 0.19 | 3.88 | 0.00 | 0.14 |
|  | R\&D | 0.54 | 0.14 | 3.75 | 0.00 | 0.08 |
|  | Medical, educational | 0.40 | 0.20 | 1.96 | 0.05 | 0.06 |
|  | Workplace supervisor | 0.42 | 0.16 | 2.63 | 0.01 | 0.06 |
|  | Manufacturing operation | -0.06 | 0.18 | -0.32 | 0.75 | -0.01 |
|  | Driver | 0.59 | 0.21 | 2.77 | 0.01 | 0.10 |
| Managerial position (B.M. <br> $=$ Rank \& file) | Senior staff, unit head | 0.05 | 0.08 | 0.70 | 0.49 | 0.01 |
|  | Section manager | 1.15 | 0.08 | 13.75 | 0.00 | 0.24 |
|  | Department Manager | 1.36 | 0.11 | 12.20 | 0.00 | 0.34 |
| Constant |  | -8.38 | 0.78 | -10.76 | 0.00 |  |

- Income(+).
- ATWT(+).
- Industry: ICT(+), public service( - ).
- Company size: 30-99( - ), 100-299( - ), 300-999( - ), 1,000-2,999( - ).
- Occupation: sales(+), analysis \& patent(+), R\&D(+), workplace supervisor(+), driver(+).
- Managerial position: section manager(+), department manager(+)

Table 8. Factors affecting the flexibility in workplace (Flexible $=1$, Probit)

| Number of obs $=5,718$ Pseudo R-squared $=0.27$ |  | L. R chi2 $=1,031($ Prob $>$ chi2 $=0.00)$ Log likelihood $=-1,404$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coef. | Std. Err. | z | P>z | dF/dx |
| Male (B.M. = Female) |  | 0.06 | 0.05 | 1.25 | 0.21 | 0.02 |
|  | Age | -0.01 | 0.00 | -2.94 | 0.00 | 0.00 |
| Income (In) |  | 0.12 | 0.05 | 2.61 | 0.01 | 0.05 |
| $\text { Education (B.M. }=12$years or less) | 14years | -0.02 | 0.05 | -0.45 | 0.65 | -0.01 |
|  | 16 years or more | 0.07 | 0.04 | 1.69 | 0.09 | 0.03 |
| Spouse (B.M. = None) |  | 0.01 | 0.04 | 0.33 | 0.74 | 0.01 |
| Dependent children (under 15 years old, B.M. = None) |  | 0.10 | 0.04 | 2.70 | 0.01 | 0.04 |
| ATWT (In) |  | 0.75 | 0.09 | 8.41 | 0.00 | 0.29 |
| Industry (B.M. = Manufacturing) | Construction | 0.28 | 0.08 | 3.40 | 0.00 | 0.11 |
|  | Utilities | 0.17 | 0.12 | 1.35 | 0.18 | 0.07 |
|  | ICT | 0.04 | 0.08 | 0.53 | 0.60 | 0.02 |
|  | Transportation | -0.22 | 0.11 | -2.09 | 0.04 | -0.09 |
|  | Wholesale, retail | -0.17 | 0.07 | -2.27 | 0.02 | -0.07 |
|  | Bank, insurance | -0.32 | 0.09 | -3.77 | 0.00 | -0.12 |
|  | Research | 0.25 | 0.10 | 2.57 | 0.01 | 0.10 |
|  | Hotel, restaurant | -0.16 | 0.12 | -1.27 | 0.21 | -0.06 |
|  | Education | 0.53 | 0.12 | 4.49 | 0.00 | 0.21 |
|  | Medical, welfare | -0.29 | 0.10 | -2.89 | 0.00 | -0.11 |
|  | Service | -0.08 | 0.08 | -0.97 | 0.33 | -0.03 |
|  | Public service | -0.18 | 0.08 | -2.14 | 0.03 | -0.07 |
|  | Other service | -0.12 | 0.13 | -0.89 | 0.37 | -0.05 |
|  | Miscellaneous | -0.06 | 0.11 | -0.50 | 0.62 | -0.02 |
| Company size (employees, B.M. = 3,000-) | 1-29 | -0.13 | 0.06 | -2.09 | 0.04 | -0.05 |
|  | 30-99 | -0.19 | 0.06 | -3.13 | 0.00 | -0.07 |
|  | 100-299 | -0.21 | 0.06 | -3.34 | 0.00 | -0.08 |
|  | 300-999 | -0.16 | 0.06 | -2.67 | 0.01 | -0.06 |
|  | 1,000-2,999 | -0.10 | 0.06 | -1.51 | 0.13 | -0.04 |
| Work-leisure choice (B.M. <br> = Equally important) | Work oriented | -0.08 | 0.12 | -0.66 | 0.51 | -0.03 |
|  | Somewhat work oriented | -0.09 | 0.04 | -1.99 | 0.05 | -0.04 |
|  | Somewhat leisure oriented | 0.03 | 0.05 | 0.69 | 0.49 | 0.01 |
|  | Leisure oriented | -0.02 | 0.07 | -0.26 | 0.80 | -0.01 |
| Occupation (B.M. = Clerical, secretarial) | General affairs, HRM | 0.08 | 0.08 | 0.94 | 0.35 | 0.03 |
|  | Sales | 0.92 | 0.07 | 12.36 | 0.00 | 0.12 |
|  | Customer service | 0.30 | 0.11 | 2.83 | 0.01 | 0.12 |
|  | Analysis, patent | 0.84 | 0.13 | 6.49 | 0.00 | 0.32 |
|  | R\&D | 0.68 | 0.08 | 8.49 | 0.00 | 0.27 |
|  | Medical, educational | 0.54 | 0.11 | 5.09 | 0.00 | 0.21 |
|  | Workplace supervisor | 0.45 | 0.09 | 4.81 | 0.00 | 0.18 |
|  | Manufacturing operation | -0.03 | 0.09 | -0.38 | 0.70 | -0.01 |
|  | Driver | 0.37 | 0.13 | 2.91 | 0.00 | 0.15 |
|  | Security, sanitation | 0.65 | 0.20 | 3.26 | 0.00 | 0.25 |
| Managerial position (B.M. $=$ Rank \& file) | Senior staff, unit head | 0.18 | 0.05 | 3.89 | 0.00 | 0.07 |
|  | Section manager | 0.41 | 0.07 | 6.04 | 0.00 | 0.16 |
|  | Department Manager | 0.68 | 0.10 | 6.64 | 0.00 | 0.26 |
| Constant |  | -5.19 | 0.53 | -9.72 | 0.00 |  |

- Age ( - ).
- Income(+).
- ATWT(+).
- Dependent children(+).
- Industry: construction(+), transportation( - ), wholesale \& retail( - ), bank \& insurance( - ), research(+), education(+), medical \& welfare( - ), public service( - ).
- Company size:1-29( - ), 30-99( - ), 100-299( - ), 300-999( - ).
- Occupation: sales(+), customer service(+), analysis \& patent(+), R\&D(+), medical \& educational(+), workplace supervisor(+), driver(+), security \& sanitation(+).
- Managerial position: senior staff \& unit head(+), section manager(+), department manager(+).

As seen above, the characteristics of those working under the flexible WT management and in flexible workplace are: workers with high income, long working hours, and white-color employees such as in sales and specialist jobs, and more employees in managerial position than rank \& file employees.

Table 9. Difference of work consciousness and degree of satisfaction in relation to the flexibility of WT management


### 4.4. Differences of work consciousness and degree of satisfaction in relation to the flexibility of WT management

According to Table 9, workers with flexibility of WT management are:

- likely to give priority to their jobs,
- likely to be satisfied with their income and job contents,
- likely to be dissatisfied with the length of time to spend with their friends and families, and time to spend for their hobbies, and
- likely to think of their work very frequently, on their way to/from work, at home, and even while they are out other than for work.

Looking at their visions for the future from Table 10, workers with flexibility of WT management have more motivation for career success in his/her company and desire for independence, and they also have more commitment to their own jobs.

Table 10. Visions for future work in relation to WT management flexibility

|  | Wish to gain experience in various companies in order to join the top management in the futrue | Wish a moderata promotion to a managerial position | Wish to continue working for the same company until retirement age, regardless of promotion | Wish to make a contribution in this company by utilizing my experience and expertise | Do not stick to this company if my experience can be utilized | Wish to try my ability to run my own business |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less flexible | 5 | 8 | 18 | 15 | 20 | 3 |
| Flexible | 12 | 7 | 11 | 20 | 22 | 5 |
| Total | 5 | 8 | 17 | 15 | 20 | 3 |
|  | Wish to change companies as soon as I can find a more favorable situaition | Have no particular requests or problems to consider | Wish to quit my job if the conditions are met | Wish to quit the job as soon as possible | Others | Total |
| Less flexible | 10 | 12 | 8 | 1 | 1 | 100 |
| Flexible | 7 | 8 | 5 | 1 | 1 | 100 |
| Total | 10 | 11 | 8 | 1 | 1 | 100 |

## 5. Tentative conclusion

The middle- and long-term governmental policies and corporate management is going in the direction of more flexibility of WT management and workplace. However, it is not really acknowledged as a problem that the flexibility itself makes working time longer.

If workers themselves can decide the length of their working time according to the needs of their work and life, flexibility is not bad. Flexibility in itself means that working time can be either longer or shorter than normal working hours. In Japan, however, it acts just as a way to make working time longer.

The difficulty in giving consideration to the future direction is that not all Japanese workers are necessarily dissatisfied with their working time. Workers with flexibility of WT management are also not satisfied with their time to spare, but at the same time they very frequently think of their work and also have positive attitudes toward their jobs.

It may be said that Japanese workers, who do not know how people spend their vacation or spare time in Europe, are likely to be content with their present situation. However, when we come to think of the many victims who suffer from death by overwork or depression
resulting from long working hours and various other demerits, shorter working hours is indispensable. This may be achieved by appealing the benefit of taking leaves or vacation to those who work hard and value long working hours, as well as developing legal systems and human resource management.


[^0]:    ${ }^{1}$ PhD in Labor Economics (Waseda U niv.), Senior Researcher at JILPT.
    Email:ogura@jil.go.jp

