

June 5th, 2021 LERA 73rd Annual Meeting

Impact of the COVID-19 Crisis on Non-standard Employees in Japan

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1 Introduction

1.1 COVID-19's Uneven Impact on the Labor Market

- In the U.S., service workers, female workers, and those of Hispanic origin are reported to have been severely affected by job loss (Alon et al. 2020; Mongey et al. 2020; Groshen 2020).
- In Japan, service workers and female workers have also been affected (Takahashi 2021; Zhou 2021).
- ➤ In the case of Japan, we know that non-standard employees are vulnerable to economic crisis.

1.2 Non-standard Employees in Japan

- Most non-standard employees are "part-time" or "fixed-term contract" or "dispatched" workers.
- However, substantially, they are labeled as "non-standard" in line with the HR system of each firm.
- Such HR system is embedded in the "Japanese-style employment system" that divides its employees into members and non-members.
- Historically, non-standard employees (non-members) were utilized as an "employment buffer" to protect long-term employment practice for standard employees (Inagami and Whittaker 2005).

1.2 Non-standard Employees in Japan (cont'd)

- After the financial crisis (around 2009), many dispatched workers in manufacturing have had their contracts canceled and been pushed into poverty.
- The impacts of COVID-19
 - Optimistic prospect—"Japanese-style employment system" is not so prevalent in the service industry (Takahashi 2018).
 - Pessimistic prospects—(1) Apart from the "Japanese-style employment system," employers may pay more attention to retaining standard employees because they have become more precious due to labor shortage (MHLW 2015). (2) In the service industry, there are many part-time workers who are the most vulnerable in the labor market.

2 Economy and Employment Grasped by Official Statistics

2.1 Trends in Macro Indicators

Compared with the financial crisis, the unemployment ratio is lower and more stable even though GDP shows sharper decline.

Many businesses temporarily made their workers go on leave and/or reduced working hours, instead of dismissing them. Real GDP growth ratio (left axis, %) and unemployment ratio (right axis, %)



Source: National Accounts of Japan and Labor Force Survey.







Source: Monthly Labor Survey

2.2 Uneven Employment Losses during Pandemic

- The number of female employees decreased considerably. However, this is because there are so many female non-standard employees, and the number of non-standard employees decreased drastically.
- Service industries such as "accommodation, eating and drinking" and "living-related services and amusement" lost a huge amount of employment despite their small industry size. However, we have to keep in mind that non-standard employees disproportionately lost their jobs within each industry.
- In fact, non-standard employees suffered from employment losses even though the number of standard employees increased. On the other hand, after the financial crisis, both standard and non-standard employees decreased.

Change in number of employees by sex and employment types (2019 to 2020, thousand people)

| | 2019 | 2020 | | | |
|------------------------|------------------|------------------|---------------|--------|--|
| | (April-September | (April-September | Change | Change | |
| | average) | average) | (real number) | (%) | |
| All employees | 56,680 | 56,000 | -680 | -1.2 | |
| Male | 30,340 | 30,030 | -310 | -1.0 | |
| Female | 26,335 | 25,970 | -365 | -1.4 | |
| Standard employees | 35,120 | 35,500 | 380 | 1.1 | |
| Male | 23,390 | 23,450 | 60 | 0.3 | |
| Female | 11,725 | 12,050 | 325 | 2.8 | |
| Non-standard employees | 21,565 | 20,500 | -1,065 | -4.9 | |
| Male | 6,950 | 6,580 | -370 | -5.3 | |
| Female | 14,610 | 13,920 | -690 | -4.7 | |

Source: Labor Force Survey

Change in number of employees by industry and employment types (2019 to 2020, thousand people)



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Change in number of standard and non-standard employees (year-on-year, thousand people)



Source: Labor Force Survey

3 Work and Lives of Non-standard Employees

3.1 Data

- JILPT "Survey on the Impact that Spreading COVID-19 Infection Has on Work and Daily Life"
- > Web-based, nation-wide questionnaire survey
- Conducted in May and August 2020 (panel survey)
- Respondents: 4,307 employees working for private firms
- Answers from 2,403 standard employees and 1,172 non-standard employees, who responded to both May and August survey, are analyzed.

3.2 Working Hours

- Working hours index of non-standard employees (especially those of parttime and dispatched workers) has been lowered in May.
- Even if controlling for personal and occupational variables, disadvantage of non-standard employees remains.



Working hours index (usual week before pandemic equals 100)

OLS regression models of working hours index of 2nd week in May

| Explained variable: | Mo | del (1) | Мо | del (2) | Model (3) | | Model (4) | |
|--|--------|-----------|---------|-----------|-----------|--------------|-----------|--------------|
| Working hours index of the 2nd week in May | В | S.E. | В | S.E. | В | S.E. | В | S.E. |
| Non-standard | -6.266 | 0.915 ** | | | -5.884 | 1.051 ** | -3.454 | 1.122 ** |
| Part-time workers/temporary workers | | | -6.435 | 1.030 ** | | | | |
| Contract employees/entrusted employees | | | -3.009 | 1.761 † | | | | |
| Dispatched workers | | | -12.379 | 2.607 ** | | | | |
| Personal variables | | | | | | \checkmark | | \checkmark |
| Occupational variables | | | | | | | | \checkmark |
| Constant | 89.451 | 0.524 ** | 89.451 | 0.524 ** | 85.096 | 3.859 ** | 91.448 | 4.529 ** |
| N | | 3575 | | 3575 | | 3575 | | 3575 |
| F-value | | 46.863 ** | | 18.827 ** | | 15.325 ** | | 9.372 ** |
| Adjusted R-square | | 0.013 | | 0.015 | | 0.020 | | 0.076 |

**: p<0.01, *: p<0.05, †: 0.1

- "Part-time workers," "temporary workers," "contract employees," and "entrusted employees" above are names in each firm.
- Majority of "part-time workers" and "temporary workers" are known to be part-time workers.
- Majority of "contract employees" and "entrusted employees" are known to be full-time fixed-term contract workers.
- Personal variables include gender, age, year of education, and breadwinner dummy.
- Occupational variables include industry, occupation, firm size, and region.

3.3 Order of Absence from Work/ Allowance for Absence

- > Non-standard employees were more likely to be furloughed.
- In addition, they tend to be furloughed without enough allowance. (This tendency is apparent in part-time workers.)

| | | | Absence order, with | Absence order, with |
|--|------|------------------|---------------------|---------------------|
| | | | 50% or more | less than 50% |
| | Ν | No absence order | allowance | allowance |
| Standard employees | 2403 | 89.1 | 7.3 | 3.6 |
| Non-standard employees | 1172 | 78.9 | 9.2 | 11.9 |
| Part-time workers/temporary workers | 838 | 77.3 | 8.6 | 14.1 |
| Contract employees/entrusted employees | 233 | 86.3 | 8.2 | 5.6 |
| Dispatched workers | 101 | 75.2 | 16.8 | 7.9 |

Situation of absence order and absence allowance (%)

3.4 Monthly Income

- Monthly income index of non-standard employees (especially those of part-time and dispatched workers) has decreased during the pandemic.
- Even if controlling for personal and occupational variables, disadvantage of nonstandard employees remains.
- Order of absence without sufficient allowance partially explains the gaps of monthly income index between standard and non-standard employees.



Monthly income index of May (usual week before pandemic equals 100)

| Explained Variable: | Mo | del (1) | (1) Model (2) Model (3) | | Model (3) | | Mod | lel (4) |
|--|--------|------------|-------------------------|-----------|--------------|-----------|--------|--------------|
| Monthly income index of May | В | S.E. | В | S.E. | В | S.E. | В | S.E. |
| Non-standard | -8.099 | 0.737 ** | | | -8.288 | 0.845 ** | -5.600 | 0.906 ** |
| Part-time workers/temporary workers | | | -10.140 | 0.827 ** | | | | |
| Contract employees/entrusted employees | | | -1.560 | 1.414 | | | | |
| Dispatched workers | | | -6.256 | 2.093 ** | | | | |
| Personal variables | | | | | \checkmark | | | \checkmark |
| Occupational variables | | | | | | | | \checkmark |
| Constant | 92.890 | 0.422 ** | 92.890 | 0.420 ** | 82.618 | 3.104 ** | 93.289 | 3.657 ** |
| N | | 3575 | | 3575 | | 3575 | | 3575 |
| F-value | | 120.692 ** | | 51.406 ** | | 31.986 ** | | 11.045 ** |
| Adjusted R-square | | 0.032 | | 0.041 | - | 0.042 | | 0.090 |

OLS regression models of monthly income index of May (1)

**: p<0.01, *: p<0.05, †: 0.1

OLS regression models of monthly income index of May (2)

| Explained Variable: | Model (1) | | Мо | del (2) | Model (3) | | |
|---|--------------|-----------|--------|--------------|-----------|--------------|--|
| Monthly income index of May | В | S.E. | В | S.E. | В | S.E. | |
| Non-standard employees | -5.600 | 0.906 ** | -4.410 | 0.821 ** | -3.070 | 0.789 ** | |
| Working hours index of the 2nd week in May | | | 0.345 | 0.012 ** | 0.292 | 0.012 ** | |
| Absence order, with less than 50% allowance | | | | | -23.008 | 1.279 ** | |
| Personal variables | \checkmark | | | \checkmark | | \checkmark | |
| Occupational variables | \checkmark | | | \checkmark | | \checkmark | |
| Constant | 93.289 | 3.657 ** | 61.774 | 3.493 ** | 68.557 | 3.365 ** | |
| N | 3575 | | | 3575 | | 3575 | |
| F-value | | 11.045 ** | | 35.014 ** | | 45.916 ** | |
| Adjusted R-square | 0.090 | | | 0.255 | | 0.317 | |

**: p<0.01, *: p<0.05, †: 0.1

3.5 Job and Life Satisfaction

- Job and life satisfaction levels of non-standard employees (especially those of part-time workers) have declined during the pandemic.
- Even if controlling for personal and occupational variables, disadvantage of non-standard employees remains.
- Decline in well-being of non-standard employees can be explained by working hours index, absence order without sufficient allowance, and monthly income index.



Change in satisfaction levels before and after pandemic (%)

| Explained Variable: | Мо | del (1) | Мос | del (2) | Мос | Model (3) | | Model (4) | |
|--|--------|-----------|--------|-----------|--------------|--------------|--------|--------------|--|
| Change in job satisfaction level | В | S.E. | В | S.E. | В | S.E. | В | S.E. | |
| Non-standard | -0.116 | 0.027 ** | | | -0.088 | 0.031 ** | -0.078 | 0.034 * | |
| Part-time workers/temporary workers | | | -0.131 | 0.030 ** | | | | | |
| Contract employees/entrusted employees | | | -0.071 | 0.052 | | | | | |
| Dispatched workers | | | -0.091 | 0.077 | | | | | |
| Personal variables | | | | | \checkmark | | | \checkmark | |
| Occupational variables | | | | | | | | \checkmark | |
| Constant | -0.256 | 0.015 ** | -0.256 | 0.016 ** | -0.321 | 0.114 ** | -0.224 | 0.137 | |
| Ν | | 3575 | | 3575 | | 3575 | | 3575 | |
| F-value | | 18.251 ** | | 6.506 ** | | 6.238 ** | | 2.992 ** | |
| Adjusted R-square | | 0.005 | | 0.005 | | 0.007 | | 0.019 | |
| Explained Variable: | Мо | del (1) | Мос | del (2) | Мос | del (3) | Moc | lel (4) | |
| Change in life satisfaction level | R | | B | | B | | R | | |
| Non-standard | -0.161 | 0.030 ** | | 0.2. | -0.086 | 0.034 * | -0.084 | 0.038 * | |
| Part-time workers/temporary workers | | | -0.181 | 0.034 ** | | | | | |
| Contract employees/entrusted employees | | | -0.118 | 0.058 * | | | | | |
| Dispatched workers | | | -0.095 | 0.085 | | | | | |
| Personal variables | | | | | | \checkmark | | \checkmark | |
| Occupational variables | | | | | | | | \checkmark | |
| Constant | -0.380 | 0.017 ** | -0.380 | 0.017 ** | -0.239 | 0.126 † | -0.211 | 0.152 | |
| N | | 3575 | | 3575 | | 3575 | | 3575 | |
| F-value | | 28.830 ** | | 10.174 ** | | 13.577 ** | | 3.377 ** | |
| Adjusted R-square | | 0.008 | | 0.008 | | 0.017 | | 0.023 | |
| | | | | | | | | | |

OLS regression models of change in satisfaction levels (1)

Job Satisfaction

Life Satisfaction

| Model (1) | | Мос | Model (2) | | Model (3) | |
|--------------|------------------------------|--|---|--|---|--|
| В | S.E. | В | S.E. | В | S.E. | |
| -0.064 | 0.034 † | -0.040 | 0.034 | -0.047 | 0.034 | |
| 0.004 | 0.001 ** | | | | | |
| | | -0.572 | 0.053 ** | | | |
| | | | | 0.006 | 0.001 ** | |
| ```` | / | | \checkmark | | \checkmark | |
| \checkmark | | | ~ | | ~ | |
| -0.594 | 0.144 ** | -0.175 | 0.135 | -0.739 | 0.148 ** | |
| | 3575 | | 3575 | | 3575 | |
| | 4.734 ** | | 6.230 ** | | 5.136 ** | |
| | 0.036 | | 0.050 | | 0.040 | |
| | | | | | | |
| Model (1) | | Model (2) | | Model (3) | | |
| В | S.E. | В | S.E. | В | S.E. | |
| -0.073 | 0.038 † | -0.053 | 0.038 | -0.062 | 0.038 † | |
| 0.003 | 0.001 ** | | | | | |
| | | -0.473 | 0.059 ** | | | |
| | | | | 0.004 | 0.001 ** | |
| | / | | \checkmark | | \checkmark | |
| \checkmark | | \checkmark | | \checkmark | | |
| | | | | | | |
| -0.507 | 0.160 ** | -0.170 | 0.151 | -0.566 | 0.165 ** | |
| -0.507 | 0.160 ** 3575 | -0.170 | 0.151 3575 | -0.566 | 0.165 ** 3575 | |
| -0.507 | 0.160 ** 3575 4.234 ** | -0.170 | 0.151 3575 5.114 ** | -0.566 | 0.165 ** 3575 4.140 ** | |
| | Mod | $\begin{tabular}{ c c c c c } \hline Model (1) \\ \hline B & S.E. \\ \hline -0.064 & 0.034 & \dagger \\ \hline 0.004 & 0.001 & ** \\ \hline \hline 0.004 & 0.001 & ** \\ \hline \hline & $$-0.594 & 0.144 & ** \\ \hline & $$-0.594 & 0.144 & ** \\ \hline & $$3575 & $$4.734 & ** \\ \hline & $$0.036 & $$ \\ \hline & $$0.036 & $$ \\ \hline & $$Model (1) & $$B & $$S.E. \\ \hline & $$-0.073 & $$0.038 & $$$ \\ \hline & $$0.003 & $$0.001 & ** \\ \hline & $$$$$ \\ \hline & $$$$$$$$$$$$$$$$$$$$$$ | $\begin{tabular}{ c c c c c } \hline Model (1) & Model (1) & B & S.E. & B & & & & & & & & & & & & & & & & & $ | $\begin{tabular}{ c c c c c c c } \hline Model (1) & Model (2) \\ \hline B & S.E. & B & S.E. \\ \hline -0.064 & 0.034 & \dagger & -0.040 & 0.034 \\ \hline 0.004 & 0.001 & ** & & \\ \hline -0.572 & 0.053 & ** & \\ \hline & & \checkmark & & \checkmark & \\ \hline & & & \checkmark & & & \\ \hline & & & & \checkmark & & \\ \hline & & & & & & & \\ \hline & & & & & & &$ | $\begin{tabular}{ c c c c c c } \hline Model (1) & Model (2) & Model (2) \\ \hline B & S.E. & B & S.E. & B \\ \hline -0.064 & 0.034 & \dagger & -0.040 & 0.034 & -0.047 \\ \hline 0.004 & 0.001 & ** & & & & & & & & & & & & & & & & &$ | |

OLS regression models of change in satisfaction levels (2)

Job Satisfaction

Life Satisfaction

4 Conclusion

4.1 Characteristics of the Gap

- Non-standard employees suffered from employment losses even though the number of standard employees increased.
- Their working hours were shortened without sufficient allowance, leading to a decrease in monthly income.
- As a result, well-being of non-standard employees has deteriorated.
- In particular, part-time workers (and dispatched workers) seem to be affected more than others.

4.2 Causes of the Gap

- Importance of standard employees induced the situation in which nonstandard employees lost their jobs while the number of standard employees increased.
- Part-time and dispatched workers share hourly wage system, and it may have contributed to reduction in working hours.
- Originally, there were no subsidies for absence allowance for some part-time workers. They were implemented amid the pandemic. This may cause employers to fail to apply for it.
- In sum, outside the "Japanese-style employment system," current HR policy, difference in wage system, and institutional separation have created disadvantage for non-standard employees.

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