Column

Job Separation and Reemployment amid the COVID-19 Crisis in Japan

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I. Background

The COVID-19 pandemic has dealt a significant blow to the Japanese economy. Particularly in the second quarter (April-June) of 2020, in which the declaration of a state of nationwide emergency from April to May was also an influencing factor, the GDP growth rate in real terms was down 8.3% from the previous quarter, sinking to its lowest level since the end of the Second World War.¹

Despite such an economic crisis, the effects on employment were relatively minimal. While Japan's unemployment rate (the seasonally adjusted value) rose from 2.4% in January 2020 to 3.1% in October 2020,² the extent of the increase was comparatively low in comparison with other developed countries.³ In addition to being due to the underlying tendency toward personnel shortage that predated the crisis, this may also be the result of factors such as the government's moves to encourage enterprises to protect employees' jobs through means that include relaxing the eligibility for and raising the possible amounts provided as Employment Adjustment Subsidies (*koyō chōsei joseikin*), which partially subsidize payments to furloughed workers.

At the same time, there are also other trends that cannot be identified from the official statistics such as those quoted above. While overall the unemployment rate has seen only a slight increase, there may be certain people who are highly susceptible to experiencing job separation (changing employers, or becoming unemployed or "unoccupied," which is used here to refer to those neither working nor looking for work). The first aim of this paper is

to draw on multiple regression analysis to reveal the types of people who have experienced job separation in the COVID-19 crisis in Japan.



The official statistics also fail to reveal which types of people

who have experienced being unemployed/unoccupied in the pandemic are likely to find new employment (reemployment). It is likewise unclear what kinds of differences exist between their previous jobs and their work after reemployment. Shedding light on these questions is therefore the second aim of this paper.

II. Data and analysis overview

We have drawn on data from the May Survey (first survey), August Survey (second survey), and December Survey (third survey) of the "Survey on the Impact that Spreading Novel Coronavirus Infection Has on Work and Daily Life." This series of surveys are a panel study of individuals who were registered with an online survey company. In this paper, we analyze the responses from the 3,172 persons who responded to all three surveys and were employees of private enterprises as of April 1, 2020.

The analysis in this paper is structured into two. In step one, the 3,172 respondents who were employed as of April were divided into three categories—(1) people who have continued to work at the same company, (2) people who have changed employers and are working at a different company (without experiencing being unemployed/unoccupied),

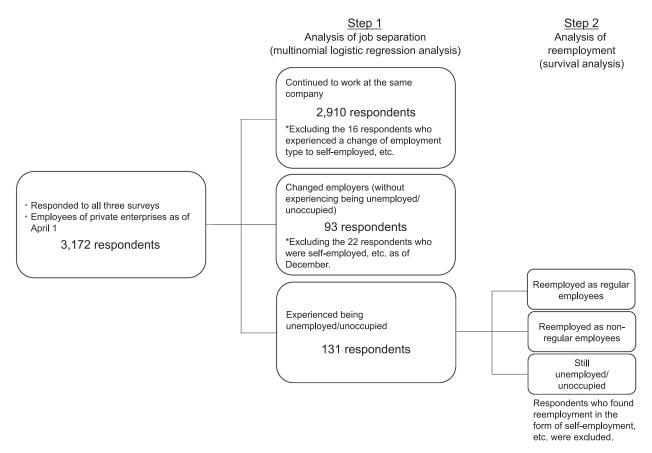


Figure 1. Categories and analysis overview

and (3) people who have experienced being unemployed/unoccupied; analysis was conducted to reveal which people, with which kinds of attributes, and which kinds of working styles, tend to enter each of the categories.

Step two is to elucidate which of those people who have experienced being unemployed/ unoccupied tend to find reemployment, and which types of people tend to remain unemployed/ unoccupied. It should also be noted that given the differing implications of reemployment as a regular employee and reemployment as a non-regular employee, we treat them as separate categories. In addition, we provide insights on the differences between the relevant respondents' previous jobs and their jobs after reemployment. Figure 1 sets out the categories used and an overview of the analysis.

III. Who has experienced job separation?

Firstly, let us look at the correlations between

the basic attributes and the experiences over the 8 months from May to December of those who were employees of private enterprises as of April 2020 (Table 1). It should be noted that due to the survey design, and in consideration of reliability, the 38 respondents who changed employment type to selfemployment, etc. have been excluded from the analysis (N=3,134). Table 1 shows the results as follows. 92.9% of all respondents continued to work at the same company. The rates of turnover or experiences of being unemployed/unoccupied are higher among women than men. Among young people, and among non-regular employees, there were high percentages who changed employers or experienced being unemployed/unoccupied. Among non-university graduates, and among people not responsible for earning a livelihood ("nonbreadwinners"), there were high percentages who experienced being unemployed/unoccupied.

Secondly, we shall use multinomial logistic

Table 1. Respondents' basic attributes and experiences in the 8-month period

(%)Experienced being Continued to work at Ν Changed employers unemployed/ the same company unoccupied Total 3.134 92.9 3.0 4.2 94.9 2.5 2.6 Male 1,723 90.4 Female 1,411 3.5 6.1 4.4 Aged 20-34 706 89.8 5.8 Aged 35-49 93.9 2.6 3.4 1,367 Aged 50 or over 1,061 93.5 2.5 4.1 Non-university graduate 1,705 92.1 2.8 5.2 University graduate or higher 1.429 93.8 3.2 3.0 Non-breadwinner 1,121 90.3 2.8 7.0 Breadwinner 2,013 94.3 3.1 2.6 95.3 2.3 2.4 Regular employee 2,094 Non-regular employee 1,040 88.0 4.3 7.7

Note: "Regular employee" and "non-regular employee" refer to respondents' employment type as of April 1, 2020 (both refer to employees of private enterprises). "The 8-month period" refers to the 8 months from May 2020 onward (the same applies in Table 2).

Table 2.1. Determinants of job separation (multinomial logistic regression analysis)

Model 1	Chan	ged employers		Experienced being unemployed/unoccupied		
	В	S.E.	В	S.E.		
Female	0.427	0.218 *	0.797	0.193 **		
Age	-0.022	0.010 *	-0.014	0.008 †		
University graduate or higher	0.172	0.220	-0.412	0.198 *		
Constant	-2.785	0.477 **	-2.755	0.413 **		
N		3,134				
Chi-square		39.813 **				
Nagelkerke R-square		0.028				

Note: The base category is people who "continued to work at the same company." **: p<0.01, *: p<0.05, †: p<0.1

regression analysis to look at the effects on job separation of several explanatory variables simultaneously (Table 2). The base category is people who continued to work at the same company. Model 1 looks at the effects of gender, age, and educational background. The results suggest that women tend to change employers or experience being unemployed/unoccupied, that young people tend to change employers or experience being unemployed/unoccupied, and that university graduates do not tend to experience being unemployed/unoccupied.

In Model 2, the explanatory variables include—in addition to gender, age, and educational background—whether respondents are responsible for earning a livelihood ("breadwinners") and whether respondents were non-regular employees as of April 2020. The results suggest that breadwinners tend to change employers but do not tend to experience being unemployed/unoccupied; that non-regular employees tend both to change employers and to experience being unemployed/unoccupied. On the other hand, in this model, women's tendency to change employers and tendency to experience

Table 2.2. Determinants of job separation (multinomial logistic regression analysis)

	Changed employers		Expe	Experienced being		
Model 2	Chan	ged employers	unemplo	unemployed/unoccupied		
	В	S.E.	В	S.E.		
Female	0.367	0.247	0.250	0.223		
Age	-0.029	0.010 **	-0.017	0.008 *		
University graduate or higher	0.270	0.224	-0.252	0.200		
Breadwinner	0.637	0.257 *	-0.443	0.216 *		
Non-regular employee	0.948	0.242 **	0.945	0.210 **		
Constant	-3.294	0.507 **	-2.611	0.417 **		
N		3,134				
Chi-square		88.644 **				
Nagelkerke R-square		0.061				

Notes: 1. The base category is people who "continued to work at the same company." **: p<0.01, *: p<0.05, †: p<0.1 2. "Regular employee" and "non-regular employee" refer to respondents' employment type as of April 1, 2020.

Table 2.3. Determinants of job separation (multinomial logistic regression analysis)

	Chan	and amplayors	Expe	Experienced being unemployed/unoccupied		
Model 3	Chang	ged employers	unemplo			
	В	S.E.	В	S.E.		
Female	0.520	0.269 †	0.220	0.252		
Age	-0.023	0.011 *	-0.014	0.009		
University graduate or higher	0.116	0.241	-0.366	0.228		
Breadwinner	0.678	0.278 *	-0.365	0.243		
Non-regular employee	0.545	0.273 *	0.696	0.241 **		
Suspension of business/	0.512	0.276 †	0.055	0.274		
increase of non-business days	0.513	0.276	0.055	0.274		
Monthly income index	-0.012	0.005 *	-0.012	0.004 **		
Constant	-2.634	0.685 **	-1.813	0.586 **		
N		3,092				
Chi-square		83.555 **				
Nagelkerke R-square		0.065				

Notes: 1. The base category is people who "continued to work at the same company." ** p<0.01, * p<0.05, † p<0.1

being unemployed/unoccupied are statistically insignificant. The tendencies among women to change employers or experience being unemployed/unoccupied indicated in Model 1 appear to be related to the fact that few women are breadwinners, and many women are non-regular employees.⁶

Model 3 incorporates two explanatory variables uniquely relevant to the COVID-19 pandemic:

whether respondents' employers had suspended business or increased their non-business days before or in May 2020,⁷ and the level of respondents' monthly income closest to the May Survey (first survey) in comparison with their monthly income in a typical month prior to the pandemic (monthly income index).⁸ The results suggest that suspension of business/increase of non-business days had a

^{2. &}quot;Regular employee" and "non-regular employee" refer to respondents' employment type as of April 1, 2020.

^{3. &}quot;Suspension of business/increase of non-business days" and the "monthly income index" were items covered in questions in the May 2020 Survey (first survey). The 13 people who had changed employers and the 29 people who had experienced being unemployed/unoccupied by the time that survey was conducted were, therefore, excluded from the analysis.

slight positive effect on the tendency to change employers, and that decline in monthly income had a positive effect on both tendency to change employers and tendency to experience being unemployed/unoccupied (the effect on tendency to experience being unemployed/unoccupied was substantial). It can be suggested that suspension of business at one's place of employment slightly encourages the change of employers, and the decline in monthly income strongly encourages becoming unemployed/unoccupied. It appears that while in cases where suspending business is the only measure that needs to be taken, there is still leeway for both enterprises and workers to accept the changing circumstances, decline in monthly income increases the severity of the situation, for both parties.

IV. The reemployment of people who experienced being unemployed/unoccupied

Let us now analyze the state of reemployment among people who have experienced being unemployed/unoccupied. In Table 3, the 122 respondents who had experienced being unemployed/unoccupied in or before November 2020 among the 131 respondents who had experienced being unemployed/unoccupied were classified according to their status as of December, for each of the basic attributes. This revealed firstly,

that just under half were reemployed as of December, secondly, that men and those who had been regular employees as of April tended to be reemployed as regular employees and women and those who had been non-regular employees as of April tended to be reemployed as non-regular employees, and thirdly, that young people, non-breadwinners, and people who were non-regular employees as of April had a strong tendency to become unoccupied.

For people who were unemployed/unoccupied, we were able to identify in which month(s) they were unemployed/unoccupied and in which month they entered reemployment. A discrete-time multinomial logistic regression analysis—a type of survival analysis—was therefore conducted to reveal which types of the people who were unemployed/unoccupied promptly found reemployment. The analysis subjects were respondents who were unemployed/unoccupied in month t, and the explained variables were whether those respondents were "regular employees," "non-"still unemployed/ regular employees," or unoccupied" (excluding "self-employed, etc.") in month t+1. The base category was "still unemployed/unoccupied."

Table 4 presents the results of that analysis. Firstly, the number of months for which subjects were still unemployed/unoccupied had a significant

Table 3. The basic attributes and December status of people who experienced being unemployed/unoccupied

						(%
	N	Regular employee	Non-regular employee	Self-employed, etc.	Unemployed	Unoccupied
Total	122	16.4	29.5	1.6	18.0	34.4
Male	43	25.6	20.9	0.0	16.3	37.2
Female	79	11.4	34.2	2.5	19.0	32.9
Aged 20-34	37	18.9	21.6	2.7	10.8	45.9
Aged 35-49	44	18.2	34.1	0.0	20.5	27.3
Aged 50 or over	41	12.2	31.7	2.4	22.0	31.7
Non-university graduate	80	16.3	27.5	1.3	21.3	33.8
University graduate or higher	42	16.7	33.3	2.4	11.9	35.7
Non-breadwinner	73	6.8	32.9	2.7	17.8	39.7
Breadwinner	49	30.6	24.5	0.0	18.4	26.5
Regular employee	48	35.4	10.4	2.1	25.0	27.1
Non-regular employee	74	4.1	41.9	1.4	13.5	39.2

Note: "Regular employee" and "non-regular employee" refer to respondents' employment type as of April 1, 2020.

Table 4. Determinants of the reemployment of people who experienced being unemployed/unoccupied (discrete-time multinomial logistic regression analysis)

	Regu	ılar employee	Non-regular employee		
	В	S.E.	В	S.E.	
Number of months still	0.641	0.202 **	-0.244	0.124 +	
unemployed/unoccupied	-0.641	0.202	-0.244	0.134 †	
Female	0.256	0.543	0.870	0.540	
Age	-0.019	0.023	0.004	0.015	
University graduate or higher	-0.032	0.510	0.327	0.390	
Breadwinner	1.359	0.592 *	0.625	0.506	
Non-regular employee	-1.604	0.604 **	1.527	0.486 **	
Constant	-0.762	1.210	-3.728	1.006 **	
Person-month		359			
Chi-square		59.280 **			
Pseudo-coefficient of determination		0.143			

Notes: 1. The base category is "still unemployed/unoccupied." **: p<0.01, *: p<0.05, †: p<0.1. Cluster-robust standard errors were used.

negative effect for both "regular employees" and "non-regular employees." This demonstrates that the shorter the period of being unemployed/ unoccupied, the stronger the tendency for reemployment. Conversely, this means that the longer the period of being unemployed/unoccupied, the lesser the tendency for reemployment. The results also indicate a statistically significant tendency for breadwinners to enter reemployment as regular employees. Likewise, for breadwinners finding reemployment as a non-regular employee, (while not statistically significant) the coefficient is positive, suggesting that breadwinners are generally likely to find reemployment.9 Additionally, the effect of the non-regular employee dummy variable indicates that people who were regular employees in April tended to be reemployed as regular employees, and people who were non-regular employees at that time tended to be reemployed as non-regular employees.

We now come to the question of what kinds of differences exist between respondents' previous jobs and their jobs after reemployment. Figure 2 shows the employment types before and after reemployment and changes in monthly income (increase/decrease in comparison with a typical month prior to the pandemic) for the 56 respondents who experienced being unemployed/occupied in or before November 2020 and had reemployment (in this case, were employees again) as of December. While, given the small sample size, it is necessary to be cautious about the robustness of the results, the analysis reveals that, while 22.7% of those who were regular employees in their original became non-regular employees reemployment, 8.8% of those who were non-regular employees became regular employees, suggesting that there is a stronger tendency to become a nonregular employee than to become a regular employee. Similarly, just 5.4% saw an increase in monthly income, while as many as 33.9% saw a decrease.

These results reflect the harsh conditions surrounding reemployment in the COVID-19 crisis. However, a comparison of the life satisfaction levels of those who were still unemployed/unoccupied (people still unemployed/unoccupied as of December) and those in reemployment in Figure 3 distinctly shows that satisfaction levels among those in reemployment are high. While circumstances

^{2.} The subjects of the analysis were 121 respondents. The one respondent who was "unemployed in May, self-employed, etc. in June" was excluded from the analysis.

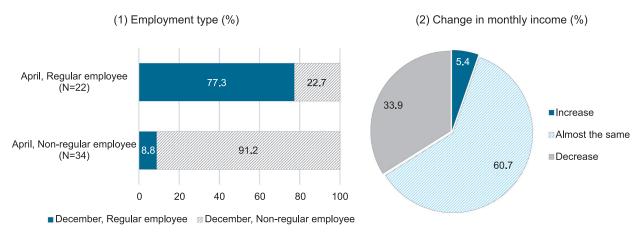


Figure 2. Circumstances before and after reemployment (N=56)

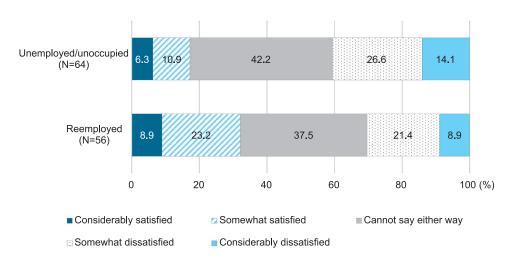


Figure 3. Life satisfaction levels of those still unemployed/unoccupied and those in reemployment

may be difficult, there is no question of the importance of providing support for reemployment.

V. Key insights

This analysis has looked at the actual state of job separation (changing employers or being unemployed/unoccupied) and unemployed/unoccupied to reemployment amid the COVID-19 crisis. It has provided us with the following insights.

Firstly, it was revealed that non-regular employees tend to experience being unemployed/unoccupied, and the same trend is also slightly apparent among young people. The decline in employment of non-regular employees and young people in the COVID-19 pandemic has also been identified in previous research utilizing macro-level

data from the *Labour Force Survey* and other such sources, 10 and here we have corroborated such a conclusion through the analysis of microdata. Secondly, in addition to such trends, there are the effects of the factors unique to the COVID-19 crisis—namely, that suspension of business at workers' places of employment slightly prompts the change of employers, and that decline in monthly income urges becoming unemployed/unoccupied.

Thirdly, we also ascertained that the shorter the period of being unemployed/unoccupied, the stronger the tendency to find reemployment—or, conversely, that the longer the period of being unemployed/unoccupied, the lesser the tendency to find reemployment. Fourthly, breadwinners tend not to become unemployed or unoccupied, and, even if

Appendix. The determinants of reemployment among those who experienced being unemployed/unoccupied (males only) (discrete-time multinomial logistic regression analysis)

	Regular	employee	Non-regular employee		
	В	S.E.	В	S.E.	
Number of months in	-0.230	0.301	0.120	0.201	
unemployment/unoccupied	-0.230	0.301	0.120	0.201	
Age	-0.030	0.039	0.085	0.039 *	
University graduate or higher	-0.333	0.657	0.882	0.922	
Married (has spouse)	1.915	0.748 **	-1.081	0.780	
Breadwinner	0.909	1.260	-0.817	1.163	
Non-regular employee	-1.533	1.298	0.744	0.799	
Constant	-1.799	2.389	-6.754	2.055 **	
Person-month		135			
Chi-square		29.530 **			
Pseudo-coefficient of determination		0.187			

Notes: 1. The base category was "still unemployed/unoccupied." **: p<0.01, *: p<0.05, †: p<0.1. Cluster-robust standard errors were used.

2. There were 42 subjects. The one respondent who was "unemployed in May, self-employed, etc. in June" was excluded.

they do become unemployed or unoccupied, tend to promptly find reemployment. In other words, many non-breadwinners become unemployed/unoccupied for an extended period. Fifthly, the environment surrounding reemployment was on the whole difficult. More specifically, there was a tendency for reemployment to be as a non-regular employee, as opposed to as a regular employee, and the cases of decline in monthly income outweighed those in which it increased. At the same time, the levels of life satisfaction of those in reemployment were remarkably high in comparison with those still unemployed/unoccupied, and therefore the necessity of support for reemployment remains without question.

The analysis in this paper focused only on the actual state of job separation and reemployment in the COVID-19 pandemic. It is therefore difficult to reach clear implications for policy. However, at least, it can be said that there is a need for special support for people who have been unemployed/unoccupied for a long period (who include many non-breadwinners). There is also the suggestion that where measures are taken with the aim of preventing workers from becoming unemployed/unoccupied

while also curbing the spread of COVID-19, it is essential that although enterprises may suspend business and send employees on temporary leave, employees receive proper financial compensation.

- 1. See Cabinet Office, *National Accounts of Japan*, (October-December 2020, 1st Preliminary Estimates).
- 2. See the Ministry of Internal Affairs and Communications, *Labour Force Survey (Basic Tabulation)*. See also Figure 1, Statistical Indicators in *Japan Labor Issues*.
- 3. From OECD. Stat, *Monthly Unemployment Rate* (accessed February 18, 2021). The highest unemployment rates in 2020 following the COVID-19 crisis were 14.8% in the US (April), 5.0% in the UK (October), 4.6% in Germany (December), and 9.4% in France (July), which represent 11.3 percentage point, 1.0 percentage point, 1.2 percentage point, and 1.7 percentage point increases in comparison with January 2020, respectively.
- 4. In this paper, "job separation" refers to all of the following: changing employers (changing job to a different company), becoming unemployed (and looking for work), and becoming "unoccupied" (neither working nor looking for work).
- 5. For overviews of survey implementation and results of the first, second, and third surveys, see JILPT (2020a), JILPT (2020b), and JILPT (2021), respectively.
- 6. Though the relevant tables and figures are omitted here, the tendencies among women to change employers or to become unemployed/unoccupied are attributable to the fact that typically a large proportion of women are non-regular employees.
- 7. The survey question asked respondents whether their employers had taken the step(s) of "suspending business (e.g.

shutdown, closure, etc.) and/or increasing non-business days."

- 8. The typical month prior to the pandemic is represented as the index 100.
- 9. Incidentally, for men, the effect of being married (having a spouse) is stronger than that of being a breadwinner (see Appendix).
- 10. See Takahashi (2020) regarding the decline in employment of non-regular employees and Sakamitsu (2020) regarding the decline in employment of young people.

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