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Article

COVID-19-Related Job Separation and Income Decline in Japan

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I. Overview of analysis and data

This paper investigates the circumstances experienced by those who became separated from their employment due to the COVID-19 pandemic ("COVID-19-related job separation"), and, where the circumstances are disadvantageous, the factors that prompt such disadvantages to arise. The analysis concludes that those who experience COVID-19-related job separation are highly likely to see a decline in their income after changing employers/reemployment. It also reveals that this is related to the high rate of job separation for reasons attributable to the employer, and the high rate of change across industries in the process of changing employers/reemployment.

The job separation and reemployment trends among workers following the onset of the COVID-19 pandemic have been covered in Takahashi (2021). Said analysis revealed that younger people and non-regular employees tend to experience job separation, and that over 60% of those who find reemployment after being unemployed/"unoccupied" (neither working nor looking for work) see a decline in their income, among other trends.

It is, however, necessary to note that job separation and reemployment occur all the time, regardless of whether such a crisis as the COVID-19 pandemic is in progress. It is therefore unclear whether the above trends are specific to job separation and reemployment due to the COVID-19 crisis. Being aware that the approach leads to a considerably small sample size, we therefore divide cases of job separation after the onset of the COVID-19 pandemic into COVID-19-related job separation and normal job separation and compare the two, with the aim of revealing the distinctive characteristics of COVID-19-related job separation.

The analysis draws on data from the first to fourth wave of the "JILPT Panel Survey on the Impact of COVID-19 on Work and Daily Life."[1] The study has been built on the JTUC Research Institute for Advancement of Living Standards (RENGO-RIALS)' "39th Short-Term Survey of Workers in Japan" (April 2020), by surveying the same respondents, in the first to fourth wave of JILPT panel survey conducted in May, August, and December 2020 and March 2021. The survey subjects are divided into employees of private enterprises or freelance workers as of April 1, 2020. In the case of employees of private enterprises, who are the focus of this analysis, subjects were allocated from respondents registered with an online survey company using stratified sampling by sex, age group, residential region, and regular/non-regular employee status (by 180 cells), based on data from the *Employment Status Survey*.[2]

The subjects of the analysis in this paper are the 2,501 respondents who were employees of private enterprises as of April 1, 2020, and responded to the RENGO-RIALS survey and all of the four waves of the JILPT panel survey. Of those subjects, 310 people had experienced job separation in the period from April 2020 to March 2021 (that is, the timing

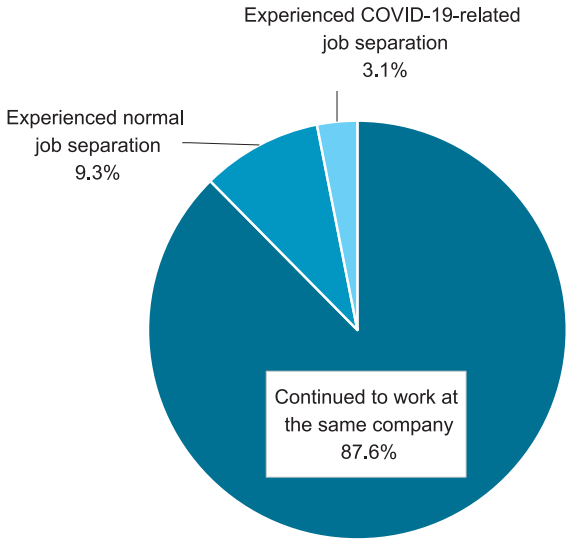
of the fourth wave), of whom 249 were reemployed as employed workers within said period.

II. Definition and identification of those who experienced COVID-19-related job separation

In this paper, the term "those who experienced COVID-19-related job separation" is used to refer to those who became separated from their employment as a result of the onset of the COVID-19 pandemic. The following method was used to identify those subjects.

The first step was to divide respondents into "those who continued to work at the same company" and "those who experienced job separation." More specifically, based on the responses to a question in the fourth wave of the panel survey, which asks respondents about their careers in and after April 2020, those who responded that they "are working and have not experienced losing or leaving their employment at all" were classified as "those who continued to work at the same company" and all other respondents were classified as "those who experienced job separation."[3]

The second step involved dividing "those who experienced job separation" into "those who experienced normal job separation" and "those who experienced COVID-19-related job separation." The fourth wave of the survey asked respondents to what extent their "employment and/or income was affected in connection with COVID-19" and asked those who responded that they experienced some kind of effect about the specific nature of that effect. In this paper, "those who experienced job separation" who selected "dismissal from company," "termination of employment on expiration of the contract term," "unemployment as a result of employer's business suspension/discontinuation or bankruptcy," or "voluntary resignation" as the specific effect on their employment, were classified as "those who experienced COVID-19-related job separation"; all others were classified as "those who experienced normal job separation." That is, we took "people who experienced job separation" and singled out those whose job separation was clearly a result of the COVID-19 pandemic.



Note: The subjects of analysis were employees of private enterprises as of April 1, 2020. Same applies to Tables 1 and 2.

Figure 1. Continued employment and job separation in the COVID-19 crisis (N=2,501)

The percentages of those who continued to work at the same company, those who experienced normal job separation, and those who experienced COVID-19-related job separation as defined and identified above were 87.6%, 9.3%, and 3.1%, respectively (Figure 1). This shows us that those who experienced COVID-19-related job separation account for around a quarter of all those who experienced job separation.

III. What types of workers have experienced COVID-19-related job separation?

In this section, what types of workers have experienced COVID-19 job separation are focused. Firstly, let us compare the profiles of those who continued to work at the same company, those who experienced normal job separation, and those who experienced COVID-19-related job separation, on the basis of the data in Table 1. It should be noted that employment type, industry, occupation, and size of enterprise refer to those as of April 2020.

This shows us that many of those who experienced COVID-19-related job separation were

Table 1. Profile of people who experienced COVID-19-related job separation

(%)

	Continued to work at the same company	Experienced normal job separation	Experienced COVID-19-related job separation
N	2,191	232	78
Male	57.6	50.9	50.0
Female	42.4	49.1	50.0
Aged 34 or under	17.5	25.9	24.4
Aged 35–49	45.5	40.9	48.7
Aged 50 or over	37.0	33.2	26.9
Non-university graduate	53.4	59.5	56.4
University graduate or higher	46.6	40.5	43.6
Non-breadwinner	33.3	34.5	39.7
Breadwinner	66.7	65.5	60.3
Regular employee	71.0	47.0	56.4
Non-regular employee	29.0	53.0	43.6
Construction	5.9	4.3	2.6
Manufacturing	26.0	17.2	21.8
Electricity, gas, heat supply and water	1.6	1.7	2.6
Information and communications	6.2	6.9	2.6
Transport	6.6	8.2	3.8
Wholesale and retail trade	13.6	14.7	12.8
Finance and insurance	6.2	3.4	6.4
Real estate	2.5	1.3	3.8
Accommodation and food services	2.3	6.0	12.8
Medical, health care and welfare	9.0	12.1	3.8
Education, learning support	3.4	5.2	1.3
Postal services, cooperative associations	1.0	0.9	0.0
Services (not elsewhere classified)	12.7	14.7	20.5
Others	2.8	3.0	3.8
Do not know	0.2	0.4	1.3
Managerial workers (section manager level or higher)	11.6	4.3	3.8
Professional and engineering workers	16.8	17.7	10.3
Clerical workers	26.3	25.4	33.3
Sales workers	15.2	15.1	16.7
Service workers	8.4	12.5	17.9
Security workers	0.5	0.9	0.0
Production/skilled workers	10.1	8.6	6.4
Transport and machine operation drivers	2.3	2.6	1.3
Construction and mining workers	1.1	0.4	0.0
Carrying, cleaning, and packaging workers	3.8	8.2	5.1
Others	3.1	2.2	3.8
Do not know	0.7	2.2	1.3
99 or fewer employees	35.6	43.1	32.1
100–999 employees	27.6	21.6	33.3
1,000 or more employees	28.9	19.4	24.4
Do not know	7.9	15.9	10.3

Note: Employment type, industry, occupation, and size of enterprise refer to those as of April 2020.

Table 2. Determinants of COVID-19-related job separation (multinomial logistic regression analysis)

	Experienced normal job separation			Experienced COVID-19-related job separation		
	B	S.E.		B	S.E.	
Female	-0.151	0.188		-0.161	0.303	
Age	-0.018	0.007	*	-0.017	0.011	
University graduate or higher	0.031	0.160		0.021	0.263	
Breadwinner	0.531	0.178	**	0.047	0.283	
Non-regular employee	1.154	0.182	**	0.495	0.298	†
Construction (ref. manufacturing)	0.125	0.402		-0.728	0.782	
Information and communications	0.450	0.348		-0.817	0.778	
Transport	0.416	0.382		-0.594	0.725	
Wholesale and retail trade	0.182	0.314		-0.140	0.479	
Finance and insurance	-0.069	0.433		-0.025	0.556	
Real estate	-0.299	0.641		0.457	0.670	
Accommodation and food services	0.897	0.424	*	1.547	0.542	**
Medical, health care and welfare	0.538	0.309	†	-0.934	0.664	
Education, learning support	0.388	0.398		-1.192	1.064	
Services (not elsewhere classified)	0.302	0.303		0.376	0.418	
Others	0.169	0.366		0.159	0.524	
Managerial workers (ref. clerical workers)	-0.503	0.374		-1.301	0.647	*
Professional and engineering workers	0.149	0.238		-0.547	0.444	
Sales workers	-0.036	0.264		-0.322	0.389	
Service workers	-0.133	0.287		-0.299	0.431	
Production/skilled workers	-0.020	0.339		-0.943	0.567	†
Transport and machine operation workers	0.084	0.535		-0.491	1.134	
Carrying, cleaning, and packaging workers	0.359	0.330		-0.153	0.592	
Others	-0.249	0.343		-0.286	0.575	
99 or fewer employees (ref. 1,000 or more employees)	0.529	0.200	**	-0.049	0.331	
100–999 employees	0.082	0.219		0.351	0.318	
Do not know	0.622	0.259	*	-0.009	0.464	
Intercept	-2.739	0.460	**	-2.448	0.707	**
N		2,501				
Chi-square		145.373	**			
Nagelkerke R-square		0.096				

Notes: 1. ***p*<0.01; **p*<0.05; †*p*<0.1.
2. (ref.) denotes the reference group.
3. The base category is "people who continued to work at the same company."
4. Employment type, industry, occupation, and size of enterprise refer to those as of April 2020.

female, aged 49 or under, non-regular employees, employees in the accommodations, eating and drinking services (hereinafter referred to as "accommodation and food services") and services (services not elsewhere classified) industries, and clerical or service workers. In contrast, there were few managerial workers and production/skilled workers among those who experienced COVID-19-related job separation. However, it is necessary to consider the fact that the percentage of non-regular employees is higher among those who experienced normal job separation than among those who experienced COVID-19-related job separation, given that non-regular employees are inherently (that is, regardless of whether there are impacts from COVID-19 or not) more likely to experience job separation.

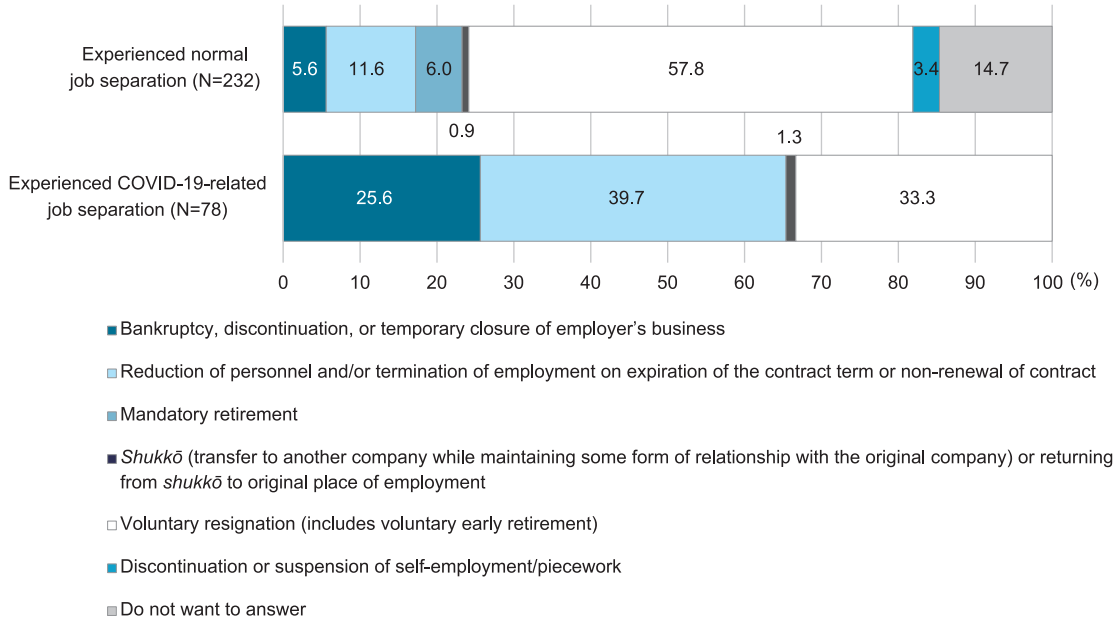
Drawing on the above profile for the explanatory

variables, a multinomial logistic regression analysis with "people who continued to work at the same company" as the base category was used to reveal which types of workers tend to experience COVID-19-related job separation (Table 2).[4]

This revealed that non-regular employees and workers in the accommodation and food services industry tend to experience COVID-19-related job separation, while managerial workers and production/skilled workers do not tend to experience COVID-19-related job separation. On the other hand, the types of workers who tend to experience normal job separation are younger people, breadwinners (people responsible for earning a livelihood),[5] non-regular employees, workers in the accommodation and food services and the medical, health care and welfare industries, those employed by small enterprises, and those who responded that they "do not know" the size of the enterprise they are employed by.

IV. Paths from job separation to changing employers/reemployment

Here, we explore the paths from job separation to changing employers/reemployment comparing those of people who experienced normal job separation and those who experienced COVID-19-related job separation. In a different question to that used above to identify those who experienced COVID-19-related job separation, the fourth wave of the survey asks those who experienced job separation in or after April 2020 the reason why they became separated from their employment (Figure 2).[6] According to the responses, among those who experienced COVID-19-related job separation, a high percentage—namely, 65.3% (25.6% + 39.7%)—are those whom we describe as "people who experienced job separation for reasons attributable to the employer" ("bankruptcy, discontinuation, or temporary closure," or "reduction of personnel and/or termination of employment on expiration of the contract term or non-renewal of contract"), while among those who experienced



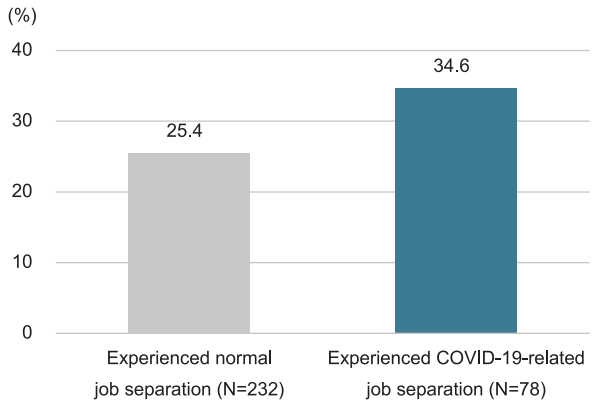
Notes: 1. The subjects of analysis were those who were employees of private enterprises as of April 1, 2020, and also experienced job separation in or before March 2021 (the timing of the fourth wave of the JILPT panel survey). The same applies to Figure 3 and Figure 4.
2. p=0.000.

Figure 2. Reasons for job separation

normal job separation there was a high percentage (57.8%) who resigned voluntarily.[7] Those who experienced normal job separation also included a high percentage who responded "do not want to answer" (14.7%), perhaps given that these cases may involve various issues.

We next turn to the circumstances after job separation. In comparison with those who experience normal job separation, the percentage of those who experienced COVID-19-related job separation who experienced being unemployed/unoccupied in or after May 2020 is somewhat higher, although this is not a statistically significant difference (Figure 3). Moreover, at the state of employment as of March 2021, the employment rates of those who experienced normal job separation and those who experienced COVID-19-related job separation are almost the same (Figure 4). In fact, among those who experienced COVID-19-related job separation there is a somewhat higher percentage of those who were regular employees as of March 2021, perhaps due to the fact that the percentage of those who were originally regular employees was higher among those who experienced COVID-19-related job separation.[8]

Furthermore, a difference was observed in comparison between those who experienced normal job separation and those who experienced COVID-19-related job separation, both working as employed workers at the time of the survey. In terms of change of employment types, many of those experienced COVID-19 related job separation went from regular employment to regular employment, while many of those who experienced normal job separation went from non-regular employment to non-regular employment (Figure 5). Incidentally, while those who experienced COVID-19-related job separation also include many of those who went from regular employment to non-regular employment, there are also many of those who went from non-regular employment to regular employment. As far as these results suggest, there does not seem to be a particular problem with the state of change of employment types among those who experienced COVID-19-related job separation.

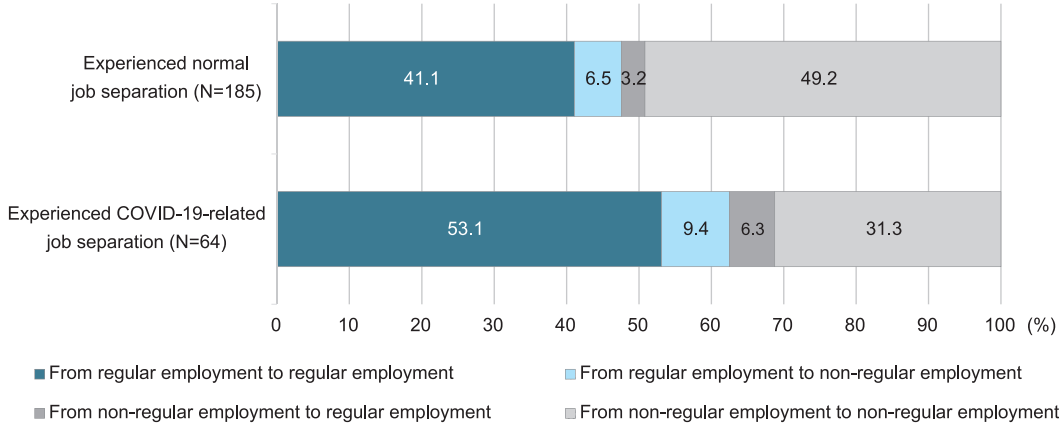


Note: p=0.117.

Figure 3. Percentages of people who experienced being unemployed/unoccupied

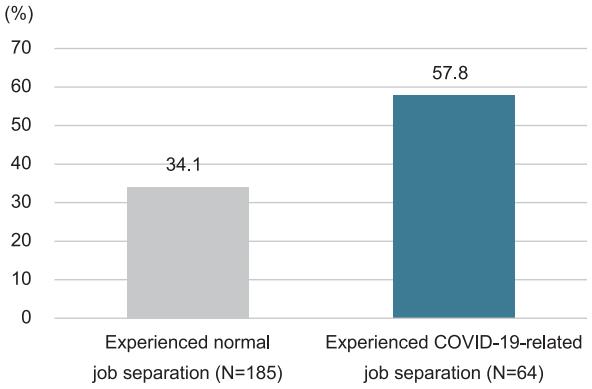
Note: p=0.198.

Figure 4. Employment status in March 2021



Notes: 1. The subjects of analysis were employees of private enterprises as of April 2020, and also experienced job separation and have changed employers/found reemployment as an employed worker in or before March 2021 (the timing of the fourth wave of the JILPT panel survey). Same applies to Figure 6, Figure 7, Figure 8, and Table 3.
2. p=0.085.

Figure 5. Change of employment types



Note: p=0.001.

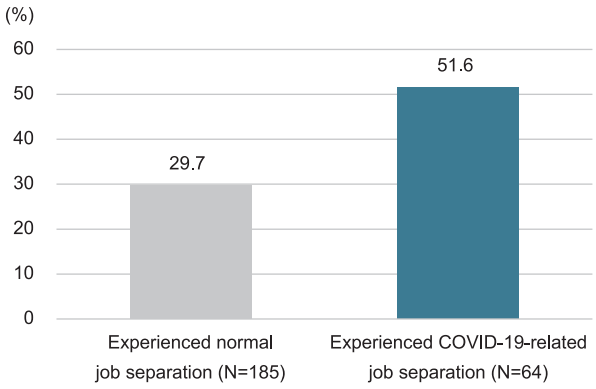
Figure 6. Percentages of people whose monthly income declined

As the analysis above has shown, a comparison of the paths from job separation to changing employers/reemployment indicates that those who experienced COVID-19-related job separation are not necessarily suffering disadvantages in comparison with those who experienced normal job separation. However, looking at people who changed employers/found reemployment as employed workers and their responses when asked about the state of their most recent monthly income in comparison to that prior to the start of the COVID-19 pandemic, it becomes apparent that those who experienced COVID-19-related job separation are at a disadvantage. The percentage of those who found that their monthly income declined is demonstrably higher among those who experienced COVID-19-related job separation, at 57.8%, in comparison with 34.1% among those who experienced normal job separation.[9] (Figure 6).

V. Income decline due to change across industries

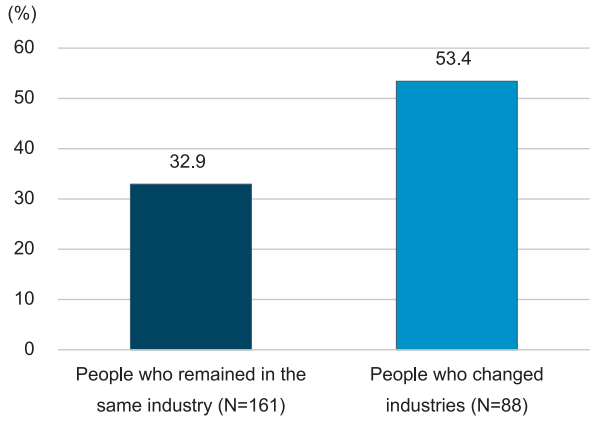
Why has so many people who experienced COVID-19-related job separation faced with a decline in their monthly income? One conceivable cause is the difficulty of changing employers/reemployment within the same industry, because specific industries are intensively bearing the brunt of the COVID-19 crisis. Figure 7 shows the percentages of those who changed employers across industries ("people who changed industries") comparing those who experienced normal job separation and those who experienced COVID-19 job separation, both working as employed workers as of March 2021.[10] This shows that in the case of those who experienced COVID-19 job separation, the majority changed across industries.

Figure 8 then shows that the percentage of those who experienced a decline in monthly income is



Note: p=0.002.

Figure 7. Percentages of those who changed industries



Note: p=0.002.

Figure 8. Percentages of those who experienced a decline in monthly income

high among those who changed across industries. More specifically, among those who changed across industries, the percentage who experienced a decline in monthly income is higher, at 53.4%, in contrast with 32.9% among those whose new employment was in the same industry ("those who remained in the same industry").

Here we must address the question of whether change across industries in fact serve as an explanation of the decline in monthly income among those who experienced COVID-19-related job separation. In order to provide a clear answer, a set of binomial logistic regression models was conducted with monthly income decline as the explained variable, and the COVID-19-related job separation dummy, the reasons for job separation and state of changes in employment type (regarding which the above analysis has shown a difference between those who experienced normal job separation and those who experienced COVID-19-related job separation),[11] and the change across industries dummy as explanatory variables. The analysis subjects were the 249 workers who found reemployment as employed workers.

Table 3 provides the results of the analysis. Firstly, Model 1 shows that the COVID-19-related job separation dummy raises the likelihood of monthly income decline at a significance level of 0.01. In contrast, Model 2 shows that the job separation for reasons attributable to the employer dummy is significant at the 0.10 level, and where

Table 3. Determinants of monthly income decline (binomial logistic regression analysis)

Explained variables = Monthly income decline	Model 1		Model 2		Model 3		Model 4	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
COVID-19-related job separation	0.976	0.297 **	0.692	0.333 *	0.721	0.351 *	0.578	0.359
Job separation for reasons attributable to the employer			0.600	0.316 †	0.561	0.329 †	0.578	0.334 †
From regular employment to non-regular employment (ref. from regular employment to regular employment)					0.633	0.537	0.309	0.554
From non-regular employment to regular employment					-2.037	1.086 †	-2.480	1.108 *
From non-regular employment to non-regular employment					-0.269	0.290	-0.373	0.298
Changing across industries							0.842	0.298 **
Constant	-0.661	0.155 **	-0.775	0.168 **	-0.639	0.225 **	-0.829	0.239 **
N		249		249		249		249
Chi-square		11.012 **		14.584 **		22.929 **		30.987 **
Nagelkerke R-square		0.058		0.077		0.119		0.158

Note: **p<0.01; *p<0.05; †p<0.1.

this is controlled for, the COVID-19-related job separation dummy becomes significant at the 0.05 level. The high level of the likelihood of monthly income decline among those who experienced COVID-19-related job separation is to some extent attributable to the fact that many of those who experienced COVID-19-related job separation are those who were separated from their employment for reasons attributable to the employer. On the other hand, even where the state of shifts in employment type are controlled for in Model 3, there is no significant change in the coefficient of the COVID-19-related job separation dummy. Moreover, additionally incorporating the change across industries dummy in Model 4 results in the change across industries dummy itself becoming significant at the 0.01 level and the COVID-19-related job separation dummy no longer being significant. Therefore, the high level of likelihood of monthly income decline among those who experienced COVID-19-related job separation is also attributable to the high numbers of those who changed across industries among those who experienced COVID-19-related job separation.

VI. Key insights

This analysis regarding people who experienced COVID-19-related job separation found neither an extremely high unemployment/unoccupied rate, nor a low employment rate (as of March 2021, the timing of the fourth wave of the JILPT panel survey). It also indicated no particular disadvantage concerning the trends in change in employment types. However, the percentage who experienced a decline in monthly income after changing employers/reemployment was remarkably high. The potential factors behind this were revealed to be the high rate of job separation for reasons attributable to the employer and the high rate of change across industries when changing employers/finding reemployment.

Given the extreme circumstances of the COVID-19 pandemic, it is natural that many of those who are experiencing COVID-19-related job separation have been separated from their employment due to reasons attributable to their employer. It is also conceivable that those who lose their employment for reasons attributable to their employer are often insufficiently prepared for changing employers/reemployment, and that this is one of the factors behind the decline in income among those who experience COVID-19-related job separation. This indicates a necessity to ensure that those who experience COVID-19-related job separation receive unemployment benefits that are generous in terms of their amount and the period of time for which they can be received.

The analysis also made the more important discovery that many of those who experience COVID-19-related job separation change across industries when changing employers/finding reemployment, which in turn leads to a decline in their income. As the impacts of the COVID-19 pandemic are intensified on particular industries, it is difficult for those who experience COVID-19-related job separation to find an employer to change to/reemployment within the same industry. Those people are consequently unable to sufficiently utilize their previously developed experience and skills when changing employers/finding reemployment, and this is one possible factor behind the decline in their income.

These trends seem to suggest that, firstly, it is necessary to provide those who experience COVID-19-related job separation with job placement services that ensure that they find suitable new employment—in other words, highly precise matching of workers with potential new employers/reemployment. Secondly, the trends also indicate the value of temporarily transferring workers to other industries in the form of *shukkō*—which typically refers to transfer to another company while maintaining some form of relationship with their original company—and providing support for such transfers. The fact that many of those who experienced COVID-19-related job separation change across industries when changing employer/finding reemployment shows that there are many cases in which changing across industries is necessary, particularly in economic crises like the

current COVID-19 pandemic. On the other hand, the fact that many of those who change across industries face a decline in income tells us that leaving developments up to the natural mechanisms of the labor market could cause those who change across industries to suffer disadvantages. Given the need to eradicate such disadvantages, and the potential for *shukkō* to help in doing so, there appears to be considerable room for adopting the approach of utilizing *shukkō* and supplementing wages after placement.[12]

1. Note that the JILPT panel survey had been named the "Survey on the Impact that Spreading Novel Coronavirus Infection Has on Work and Daily Life" until the third wave (December 2020 Survey).
2. See JILPT (2021) for a detailed implementation and the first aggregation results of the fourth wave of the panel survey.
3. To be exact, those who responded, "found reemployment (changed employers/launched own business) after losing or leaving previous employment," "currently looking for employment after losing or leaving previous employment," and "neither found reemployment nor currently looking for employment after losing or leaving previous employment" were categorized as "those who experienced job separation."
4. Industry categories with low responses—namely, "electricity, gas heat supply and water," "postal services, cooperative associations" and "do not know"—were incorporated into the "others" (other industries) category, and occupation categories with low responses—"security workers," "construction and mining workers," and "do not know"—were incorporated into the "others" (other occupations) category.
5. It has been revealed that breadwinners tend to experience job separation but change employers without experiencing being unemployed/unoccupied (without a gap between jobs). See Takahashi (2021).
6. Respondents who have experienced job separation twice or more were asked about their "most recent experience."
7. It is thought that the reason that those who experienced COVID-19-related job separation—who by definition are expected to have experienced either "dismissal from company," "termination of employment on expiration of the contract term" (which refers to non-renewal of a fixed-term contract that had been repeatedly renewed), "unemployment as a result of employer's business suspension/discontinuation or bankruptcy," or "voluntary resignation"—include those who experienced "*shukkō* (transfer to another company while maintaining some form of relationship with the original company), or returning from *shukkō* to original place of employment" is due to the fact that those who experienced job separation twice or more provided responses on reasons for job separation that refer to a job separation not related to COVID-19. Furthermore, the fact that those who experienced normal job separation include "discontinuation/suspension of self-employment/piecework" is also due to the reasons behind the second or subsequent job separation.
8. This difference is, however, not statistically significant.
9. It should be noted that among those who continued to work at the same company, the percentage of those who experienced a decline in monthly income is 24.7%.
10. Using the 15 industry categories shown in the profile in Table 1, those whose industry category as of April 2020 was the same as that as of March 2021 were classified as "people who remained in the same industry," while those for whom that was not the case were classified as "people who changed industries." (It must be noted, however, those who went from "do not know" to "do not know" were classified as "people who changed across industries.")
11. The "job separation for reasons attributable to the employer" dummy was created by combining the following job separation reasons: "Bankruptcy, discontinuation, or temporary closure of employer's business," "reduction of personnel and/or termination on expiration of the contract term or non-renewal of contract."
12. In relation to this, the Ministry of Health, Labour and Welfare (MHLW) provides support for *zaisekigata shukkō*—a form of *shukkō* where a contract formed between the company from which the worker is being transferred and the company to which they are being transferred ensures that the worker has a contractual employment relationship with both companies—as a means of maintaining employment in the COVID-19 crisis. More specifically, in addition to its existing activities developing potential *shukkō* opportunities and matching workers with those opportunities through the Industrial Employment Stabilization Center of Japan, alongside subsidizing places of employment from which workers are sent on *shukkō* by means of Employment Adjustment Subsidies (*koyō chōsei joseikin*), the MHLW established the Industrial Employment Stabilization Subsidy in February 2021 to subsidize the wages and/or expenses of companies from which workers are sent on *shukkō* and the companies they are sent to, among other approaches. See the MHLW website for details (https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/koyou_roudou/koyou/jigyounushi/page06_00001.html [in Japanese])

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