Column

How Women Bear the Brunt of COVID-19's Damages on Work

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I. The number of workers on temporary leave ('furlough') in April was largest ever

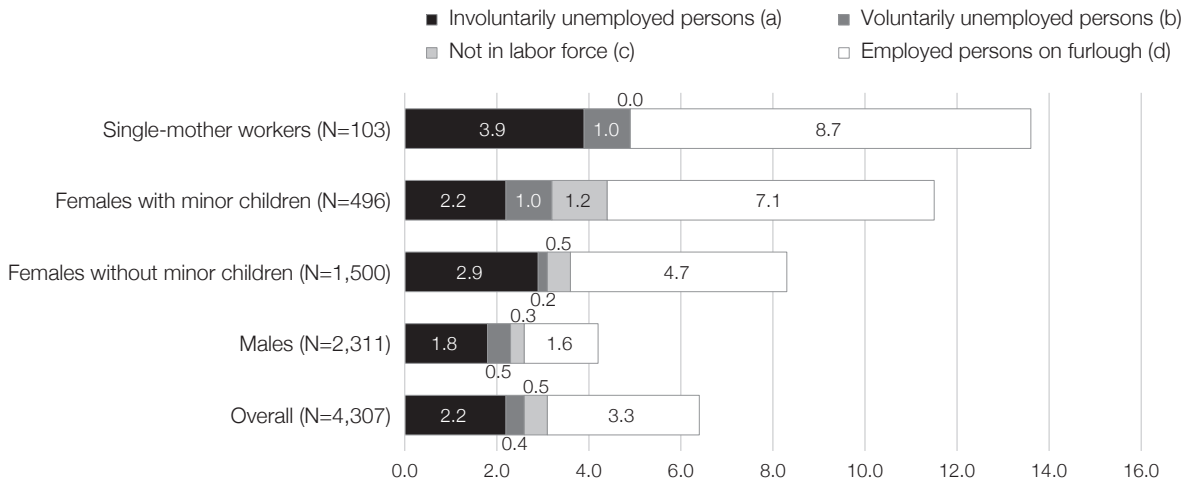
The government, companies, and individuals are being forced to voluntarily curtail economic activities to contain the novel coronavirus. As a result, the world's countries, including Japan, are finding themselves in a condition that deserves to be called a "designed recession"[1] and, since April, the Japanese economy has fallen so far as to be facing the "worst postwar crisis" (Prime Minister Abe). It is believed there is a strong possibility the situation will develop into a major depression if condition does not improve. In fact, according to the results of the May Economy Watchers Survey released by the Cabinet Office on June 8, the indicator for current economic conditions (DI) stood at 15.5%. Although the DI had recovered slightly from its lowest point in April (7.9), it continued to be far below the DI of January (41.9), prior to the coronavirus pandemic.

With the lifting of the state of emergency declaration (May 25), there are signs of a slight improvement in recent business confidence. However, the risk of a resurgence in infections remains, and therefore it is likely that a full recovery is still a long way away. When *The Asahi Shimbun* (June 23) newspaper surveyed 100 major companies about when they expect the economy to recover to its pre-coronavirus level, none of the managers surveyed anticipated a V-shaped recovery during the year. Most companies (45) said they expect the recovery will be in "autumn of 2021 or later."[2] Despite the enormous economic stimulus being provided by the government,[3] it is likely that deteriorating corporate earnings and the poor employment environment will continue for a long period of time.

Shocking statistics telling of the employment situation's severity are coming to light one after another. According to the April *Labour Force Survey*, which was announced by the Ministry of Internal Affairs and Communications (MIC) on May 29, the number of employees on temporary leave ('furlough') was at 5.97 million. This is the largest figure since December 1967, the earliest time that comparison is possible. This is a number equivalent to about 9% of total employed persons (66.25 million) and about 3.4 times the number of unemployed persons (1.78 million). The number of people who cease job-hunting activity is also rising rapidly, and the population not in the labor force has grown by 940,000 since March. In other words, as of April, one in ten workers is in a condition of either being on furlough or being discouraged job seekers and can thus be referred to as latent unemployed persons.

II. Females are three to four times more likely to be on furlough than males

The most recent JILPT survey revealed that the coronavirus pandemic is having a larger impact on the jobs of females than males. This is particularly true for females who are rearing children. When the survey asked 4,307 employees (aged 20 to 64) of private companies who were employed on April 1 about their employment situation in May,[4] it found a remarkable gender gap in terms of percentage of persons who



Source: Statistics based on the JILPT "Survey on the Impacts that Spreading Novel Coronavirus Infection has on Work and Daily Life" (conducted around the end of May 2020).
Notes: 1. The aggregated respondents are 4,307 employees who worked at a private enterprise on April 1.
2. (a)=Dismissed, had employment contract terminated, or became unemployed due to company bankruptcy, (b)=Not employed but engaged in job-hunting activity (excluding (a)), (c)=Not employed and not engaged in job-hunting activity, and (d)=Employed but worked zero hours in May.
3. "Minor child" refers to a dependent child who is under the age of 18.

Figure 1. Percentages of private sector workers who became unemployed or furloughed (%, as of the end of May 2020)

became unemployed or furloughed. In particular, it was apparent that female employees who are raising children under the age of 18 are in particularly disadvantageous circumstances (Figure 1).

First, the percentage of "involuntarily unemployed persons" due to dismissal, termination of employment contract, or company bankruptcy was 1.8% for males but 2.9% for females without minor children and 2.2% for females with minor children (of which, "single-mother workers" was 3.9%). While these percentages are low when the occurrence of involuntary unemployment is viewed as a whole, the situation of females (and particularly single-mother workers) is much more serious than that of males.

Looking next at the combined percentage of "voluntarily unemployed persons" who left employment of their own will and persons "not in the labor force" who ceased job-hunting activity, the percentages for males and females without minor children fall below 1%; however, that for females with minor children rises to 2.2%.

Where the largest gender gap appears is the percentage of "employed persons on furlough," which refers to people who are employed but were not actually working. The percentage of people on furlough among males was 1.6%. However, this percentage rises to 4.7% for females without minor children and to 7.1% for females with minor children. Compared to males, the underlying risk of unemployment resulting from being on furlough is three times higher for females without minor children and 4.4 times higher for females with minor children. Looking only at single-mother workers, the furloughed take-up rate reaches 8.7%, making it clear that the novel coronavirus is having a particularly large impact on the jobs of single mothers.

III. Many child-rearing females are obliged to temporarily reduce labor supply

Females have higher percentages of people working in non-regular employment and in small enterprises than males. Personnel adjustment resulting from an economic slowdown tends to begin with small enterprises, which have weaker management foundations, and to take place in non-regular employment rather than among regular employees. Consequently, females typically have

a higher risk of losing employment than males in recessions.

However, it is worth noting that, unlike during ordinary economic slowdowns, this recession is characteristic in that many child-rearing females are voluntarily refraining from working. One underlying factor is a sudden change in social living brought by the temporary closure of nurseries, kindergartens, elementary schools, junior high schools and high schools. The temporary closure of schools–which began with a request from the Prime Minister and was originally intended to last for roughly one month ("from March 2 until the spring break")—ended up lasting for three whole months until the end of May. Around the same time, nurseries and kindergartens were also driven through the phases of "voluntary stay at home" and "restricted use" to, beginning in April, "partial closure" and then "complete closure." Even if only temporary, the new burdens of having to care for and educate children placed a heavy burden on parents.

Mothers cannot even ask grandparents, whose risk of death by infection is higher, to care for their children, and therefore their time available for work necessarily decreases. Although some women are successfully balancing work at home and child-rearing, there are undoubtedly many other women who find working while caring for children difficult. It can be imagined that the burden of increased housework and child-rearing duties resulting from the pandemic is not being fairly distributed between husbands and wives and thus a heavy load ends up being placed upon mothers.

In past recessions, a so-called "added worker effect" was observed whereby wives supplemented the household's income by beginning new employment or increasing their working hours to cope with lower earnings by their husbands or income uncertainties.[5] However, in the case of the current recession associated with the pandemic, wives' behavior in terms of supplying labor is exactly the opposite. Despite lower earnings by their husbands and income uncertainties, more and more wives have no choice but to temporarily reduce their supply of labor.

IV. Working hours fell 15.5% and monthly income fell 8.8% on average for child-rearing females

The labor supply of child-rearing females (average weekly working hours from March until May) has declined significantly, although temporarily (Table 1).

The working hours of male employees were, in comparison with a normal month of 43.0 hours, 42.3 hours in March, 39.6 hours in April, and 37.9 hours in May. This represents a rate of change for the March-May average against the normal month of −7.1%. On the other hand, the working hours of female employees with minor children were, in comparison with a normal month of 31.2 hours, 28.1 hours in March, 26.6 hours in April, and 24.3 hours in May. This represents a rate of change for the March-May average against the normal month of −15.1%. The rate of decrease in the working hours for child-rearing females is more than double that of males, and the decline of working hours is particularly large in March (−9.9%), when the temporary closures of schools began.

In comparison with working hours, the extent of decrease in monthly income is mild for both sexes. Nonetheless, it remains true that a disparity exists between males and females. The average monthly income of male employees was 302,000 yen (approximately US$2,850) in a normal month, 294,000 yen (US$2,770) in March, and 288,000 yen (US$2,720) in April. This represents a rate of change for the March–April average against the normal month of −3.9%. On the other hand, the average monthly income of female employees with minor children was 149,000 yen (approximately US$1,410) in a normal month, 139,000 yen (US$1,310) in March, and 133,000 yen (US$1,250) in April. This is a rate of change for the March–April average against the normal month of −8.8%.

One reason that the decreases in March–April income were unexpectedly mild is thought to be the success of enterprises' self-help efforts as well as so-called "disaster relief" measures, which were public policies to mitigate economic hardship for

Table 1. Average working hours and monthly income from March to May

	Total		Males		Females without minor children (a)		Females with minor children		Single Mothers	
	Weekly working hours	monthly income (10,000 yen)	Weekly working hours	monthly income (10,000 yen)	Weekly working hours	monthly income (10,000 yen)	Weekly working hours	monthly income (10,000 yen)	Weekly working hours	monthly income (10,000 yen)
Normal month	39.0	24.1	43.0	30.2	35.2	17.7	31.2	14.9	32.5	14.9
March	37.8	23.2	42.3	29.4	33.6	16.9	28.1	13.9	30.0	14.1
April	35.3	22.6	39.6	28.8	31.4	16.2	26.6	13.3	27.7	13.3
May	33.2		37.9		28.8		24.3		24.8	
Rate of change (Apr–May average (b) against normal month, %)	**–9.1**	**–4.8**	**–7.1**	**–3.9**	**–11.3**	**–6.3**	**–15.5**	**–8.8**	**–15.4**	**–7.8**
N	4,203	3,797	2,274	2,035	1,457	1,322	472	440	101	95

Source: Same as Figure 1.

Notes: 1. The aggregated respondents are 4,203 employees (including those on furlough) who worked at a private enterprise on March 1, April 1, and the survey time. However, the working hours for March are the figures for 3,533 people who responded to both the April Survey and May Survey.

2. (a) "Minor child" refers to a dependent child who is under the age of 18. (b) March–April average is used for monthly income.

3. Working hours and monthly income are roughly calculated based on 12 categories. In specific, working hours of 60 or more hours are considered to be 60 hours and monthly income of 500,000 yen or more is considered to be 500,000 yen; the median value is used for the other categories.

the nationals. A series of relief measures targeting household finances is being put forth as novel coronavirus countermeasures. They include the job retention program named "Employment Adjustment Subsidy with COVID-19 special provisions", compensation in respect of closure of nurseries and schools named "business suspension allowances for parents and guardians", special rental subsidies named "housing security benefits ", and lump-sum payments to child-rearing households.[6] It is doubtful whether these relief measures will be sufficient in coping with the novel coronavirus over an extended time. However, at least in a short-term, they appear to be effective to a certain degree.

V. Remote workers are less likely to be furloughed, except for child-rearing females

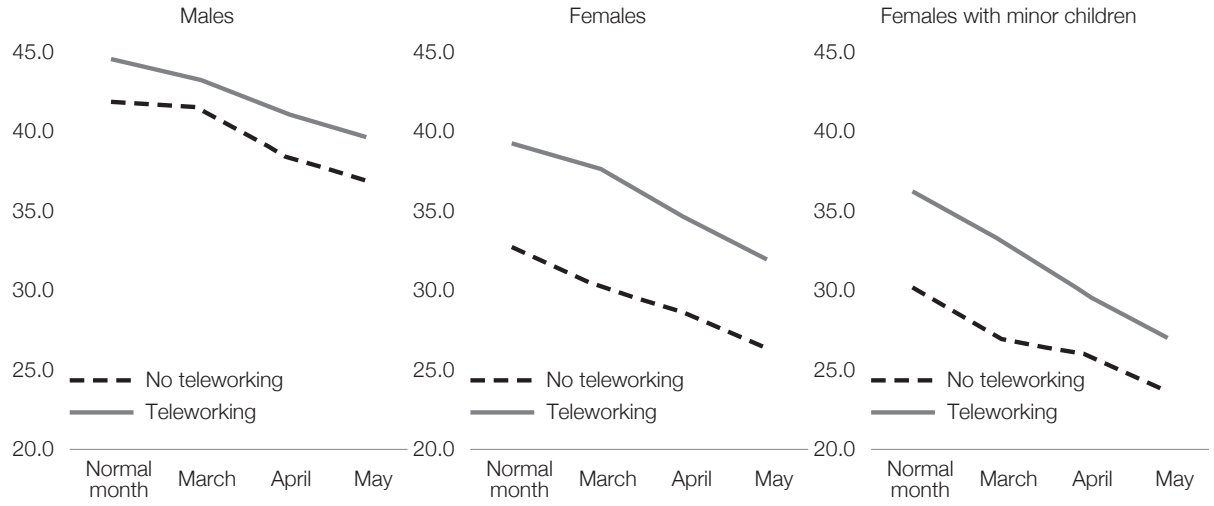
Due to the effects of the novel coronavirus, traditional work style of "commuting to the company at a specified time" is no longer a norm. Staggered commuting at off-peak hours as well as teleworking by using a personal computer or other device at home is suddenly becoming more commonplace. Although It's often said that Japanese companies lagged in IT use and internet literacy, this time they had a quick catch-up. Many Japanese companies were forced to implement teleworking in response to the stay-at-home request that was issued during the state of emergency declaration in April. According to a survey of roughly 25,000 people throughout Japan that was conducted by Persol Research and Consulting Co., Ltd., in April, the teleworking implementation rate among companies reached 27.9%, which represented a doubling in just one month.[7] Additionally, according to a survey by the Japan Productivity Center of 1,100 employees in May, 29% of workers are engaged in teleworking.[8] The teleworking rate approached 30% in JILPT's May Survey as well.

The percentage of employed persons on furlough among teleworking employees is notably low (Table 2). The furloughed take-up rates in May is 1.0% for those engaged in "teleworking" and 4.2% for those committed "no teleworking". In the cases of males and females without minor children, the gap of furloughed take-up rates is as large as 4 or 5 times between teleworking workers and non-teleworking workers. But for females with minor children, the gap is almost negligible (1.2 times).

Table 2. Percentages of being furloughed and transition of working hours by teleworking/not teleworking

	Total		Males		Females without minor children		Females with minor children	
	No teleworking	Teleworking	No teleworking	Teleworking	No teleworking	Teleworking	No teleworking	Teleworking
Percentage of being furloughed (%)	4.2	1.0	2.1	0.5	5.8	1.2	7.0	5.9
Weekly average working hours								
Normal month	37.3	42.9	42.0	44.7	33.7	40.4	30.1	36.1
March	36.0	41.5	41.6	43.3	31.7	39.0	27.0	33.2
April	33.7	39.1	38.6	41.4	29.9	36.2	25.9	29.8
May	31.6	37.1	36.9	39.7	27.4	33.4	23.8	27.0
N	2,963	1,240	1,459	815	1,117	340	387	85
Percentage of obs. (%)	70.5	29.5	64.2	35.8	76.7	23.3	82.0	18.0

Source: Same as Figure 1.
Note: The aggregated respondents are 4,203 employees (including employed persons on furlough) who worked at a private enterprise on March 1, April 1, and the survey time. However, the working hours for March are the figures for 3,533 people who responded to both the April Survey and May Survey.



Source: Same as Figure 1.
Note: Same as Table 2.

Figure 2. Changes in weekly average working hours by teleworking/not teleworking

Looking at changes in average working hours, only in the case of males, teleworking workers fell at a slightly milder pace than non-teleworking workers in April (Table 2, Figure 2). In the case of females, the working hours of both teleworking workers and non-teleworking workers fell at roughly the same pace. When only child-rearing females are examined, teleworking workers even had a slightly steeper decline of working hours in April and May than non-teleworking workers.

However, it is unclear whether the notably low furloughed take-up rate and relatively mild decline in working hours among teleworking workers are effects from the use of teleworking. Teleworking is mainly being applied to the employees of large enterprises and regular employees, and those workers may belong to advantageous groups experiencing fewer employment adjustment. This makes it necessary to check the effects of teleworking after controlling size of enterprise and employment status. As can be expected, the estimation results show that teleworking do have a negative impact on

Table 3. Effects that teleworking has on the labor supply

	Total	Males	Females without minor child	Females with minor children
Probability of being on furlough [probit model]	−0.0271***	−0.0132*	−0.0558***	0.0016
	(0.008)	(0.007)	(0.020)	(0.032)
Rate of change in working hours (%) [OLS model]	−0.655	−0.713	0.026	−6.035*
	(0.936)	(0.996)	(2.029)	(3.490)
N	4,203	2,274	1,457	472

Source: Same as Figure 1.
Notes: 1. The marginal effects of using teleworking (probit model) and coefficient estimates (OLS model) are reported. The figures in parentheses are the standard error. Included in the explanatory variables are size of enterprise, employment status, age of the youngest child, and marital status.
2. The rate of change of working hours is the rate by which the average working hours of April/May change with respect to the average working hours of the normal month.
3. *p-value＜0.1, **p-value<0.05, ***p-value<0.01

the furloughed take-up rate for males and females without minor children. For females with minor children, however, the effect of teleworking is insignificant (Table 3).

Looking at the situation as a whole, the effect of teleworking in terms of softening the decrease in labor supply is conspicuous for males but limited for females. Particularly in the case of child-rearing females, it appears the use of teleworking is not demonstrating the effects that might be expected. Possible factors behind this are the novel coronavirus's making it difficult to choose to eat out, increased housework associated with preparing meals and the like, and increased child-rearing burden associated with the temporary closure of nurseries and schools. In other words, it seems likely that many women could not cope with teleworking alone and thus had no alternative but to be absent from work.

VI. The pandemic could be a good opportunity to narrow gender gap in employment

JILPT's May Survey shows that the novel coronavirus has disproportionate impact on women, reflected both on their deeper declining working hours and on their higher furloughed take-up rates relative to males. There are concerns that this situation will severely impact women's careers if it continues. Moreover, if women's earning keeps declining, it will also have a major impact on household finances.[9]

However, the picture may not be entirely bad for working women. Some researchers point out that the wave of teleworking and other forms of work-style reform that is surging forward as a result of the novel coronavirus pandemic will have long-term benefits for women.[10]

Teleworking—which does not require commuting by train and permits childcaring and work to take place side by side—is a working manner expected to help eliminating the gender gap. Other highly time-flexible forms of working, such as staggered commuting at off-peak hours and discretionary work system, are also seen as work styles that make it easier for women to continue working as regular employees. It is anticipated that these kinds of highly flexible work styles will expand speedily, spurred by infection control measures, and become firmly rooted in Japanese society even after the pandemic ends.

If flexible work styles become a new norm, it is highly likely that they will bring revolutionary changes to women's lifestyles. Heretofore, many Japanese women have led a "full-time housewife"-type lifestyle whereby they leave the career battlefield upon becoming pregnant or giving birth and then later reenter employment as part-timers when their child-rearing duties decrease.[11] If a major "work-style revolution" were to occur as a

result of the pandemic, the number of women who continue working as regular employees even through childbirth and child-rearing will likely increase. Indeed, it may no longer be a fantasy to imagine a near future in which the full-time dual earner model replaces the traditional "full-time housewife"-type lifestyle. In this sense, the pandemic has the potential to be an excellent opportunity for closing the employment inequality gap between men and women.

The opinions expressed herein are those of the author and do not reflect the opinions of Japan Institute for Labour Policy and Training. The author is grateful to Ms. Yuko Watanabe of JILPT for her contributions in constructing the dataset for analysis.

1. Greg Mankiw's Blog, "COVID-19 & the Economy: A Q&A Session" (May 05, 2020).
2. *The Asahi Shimbun*, "Korona Kiki: Sakiyuki Shincho" (the coronavirus crisis: a cautious outlook) (June 23, 2020).
3. The government has raised coronavirus relief spending to the unprecedented amount of approximately 234 trillion yen through two times of supplementary budgets.
4. For survey details, see Press Release "Results of the 'Survey on the Impact that Spreading Novel Coronavirus Infection has on Work and Daily Life' (May Survey, a follow-up survey coupled with the respondents of April Survey) (First Aggregation)."
5. Theoretically, a scenario in which employment opportunities dwindle in a recession and more people stop looking for work and wait for recovery (a situation referred to in economics as the "discouraged worker effect") is also possible. However, it is reported that, in Japan, the effects of the so-called "added worker effect," whereby wives' employment increases in a manner corresponding to decreases in their husbands' earnings during a recession, has been predominant since the 2000s.
6. A "cash handouts of 100,000 yen to all citizens" was added to relief measures in May.
7. *Nihon Keizai Shimbun*, "Nihon ni mo Seika Shugi no Nami: Korona Kiki ga Yobimizu ni" (the coronavirus crisis induces a wave of performance-based payment reform in Japan) (May 17, 2020).
8. *Nihon Keizai Shimbun*, "Zaitaku, Seisanseikojo Saguru" (groping for better productivity with workers remotely working at home) (June 21, 2020).
9. Zhou Yanfei, (2020) "Koronashokku de Kawaru Josei no Hataraki-kata" (how the work style of women are changing amid the coronavirus crisis), *The Toshi Mondai* (July 2020).
10. Titan Alon, Matthias Doepke, Jane Olmstead-Rumsey, Michèle Tertilt, "The impact of the coronavirus pandemic on gender equality," VOX CEPR Policy Portal–Research-based policy analysis and commentary from leading economists (April 19, 2020) https://voxeu.org/article/impact-coronavirus-pandemic-gender-equality.
11. Zhou Yanfei, *Hinkon Sengyo Shufu* (the impoverished full-time housewife), Tokyo: Shincho-sha, 2019, 37–54.

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