

Japan Labor Issues

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The Japan Institute for Labour Policy and Training

International Research Exchange Section

8-23, Kamishakujii 4-chome, Nerima-ku, Tokyo 177-8502, Japan

TEL: +81-3-5903-6274 FAX: +81-3-3594-1113

For inquiries and feedback: j-emm@jil.go.jp

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Key topic

Social Inequality in the Prevalence of Working from Home under the COVID-19 Pandemic in Japan

TAKAMI Tomohiro

I. Introduction

This paper examines trends in working from home (WFH) in Japan under the spreading COVID-19 pandemic. Survey data shows the tendency that the implementation and continuation of WFH has a strong relationship with socioeconomic status—namely, occupation, educational attainment, and income level. This paper examines the social inequality of opportunities for WFH.

In Japan, telework, which refers to the way of working not restricted by location utilizing ICT devices, had been promoted in government policy even before the pandemic as a “flexible working arrangement” that contributes to work-life balance. However, most companies actually did not implement telework for various reasons.¹ Against this backdrop, the implementation of telework expanded rapidly in companies when the government issued its first state of emergency declaration in April 2020 in response to the arrival of the pandemic’s first wave.² With the government strongly urging the use of WFH, corporate behavior was seen to prioritize the prevention of infection spread over immediate economic activities as an emergency measures. However, there were many instances in which WFH was not continued after the state of emergency was lifted in stages by the end of May 2020. As of January 2022, states of emergency were subsequently declared a total of four times in areas such as Tokyo. The use of WFH has never been as widespread as it was during the first state of emergency.

Surveys conducted in various countries have

shown that not everyone has experienced WFH in the same way under the pandemic and that there are differences based on work characteristics and individual attributes. In the case of Japan, WFH expanded in response to the pandemic’s first wave and the declaration of a state of emergency in the spring of 2020. However, not everyone switched to WFH, and differences appeared in utilization rates depending on the industry and occupation. Moreover, the continuation of WFH is not uniform among people who engaged in it as “emergency measures” to the first wave, as some continued to work from home afterward, while others did not continue and returned to commute while infections were not over yet. So who have worked from home under the pandemic? Who continues to do so as their way of working amid the “new normal”? The following presents the situation surrounding the practice and continuation of WFH based on the data of “JILPT Panel Survey on the Impact of COVID-19 on Work and Daily Life” (3rd wave, December 2020 Survey).³



II. Descriptive statistics

The sample used in this paper consists of employed workers who have been continuously employed at the same company since April 2020. Let us take a look at the overall trends regarding respondents’ experience with WFH and its continuation. The JILPT survey grasps the situation whether or not respondents experienced WFH up to

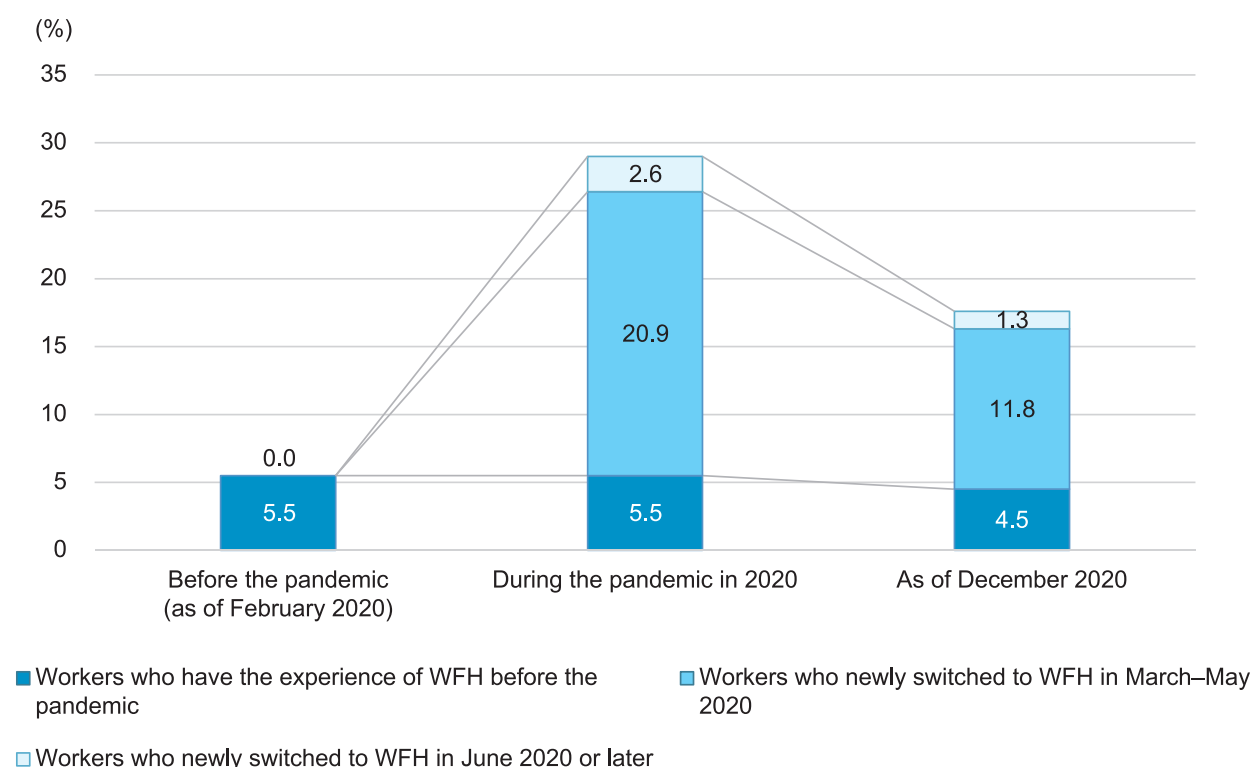


Figure 1. Percentage of workers who perform WFH at each time points

December 2020 as well as their continuation of it as of December. It also asks whether or not respondents have the experience of WFH before the pandemic. Figure 1 presents the status of respondents' working/not working from home at three time points—"before the pandemic" (as of February 2020), "during the pandemic in 2020," and "as of December 2020".⁴

Looking at overall trends, of all respondents in the sample, 29.0% worked from home "during the pandemic in 2020." Given that the percentage of those who have the experience of WFH "before the pandemic (as of February 2020)" was 5.5%, this suggests that WFH expanded significantly under the pandemic, particularly during the period from March to May 2020.⁵ The percentage of respondents who indicated that they worked from home "as of December 2020" was 17.6%; those respondents accounted for 60.6% of respondents who worked from home during the pandemic in 2020. In other words, there is a trend whereby about 30% of employed workers experienced WFH under the pandemic, and, of them, about 60% continue to do

so.

Table 1 shows trends in the practice and continuation of WFH by individual attribute.⁶ The percentages of respondents who worked from home vary by educational background, industry, occupation, size of enterprise, individual annual income, region of residence, and other attributes. Looking at industries, information and communications (73.9%); education, learning support (47.8%); and finance and insurance, real estate (46.8%) have high percentages, while medical, health care and welfare (7.3%) and accommodation and food services (6.9%) have low percentages. Looking at differences depending on occupation, administrative and managerial workers (section manager level or higher) (57.1%) and professional and engineering workers (39.2%) are high, while production/skilled workers (6.7%) are low. As for educational background, respondents who are university graduates (44.1%) have a higher percentage than respondents who are not university graduates (15.9%). Additionally, regular employees (35.7%) have a higher percentage than non-regular employees

Table 1. Practice and continuation of WFH during the pandemic in 2020 (by individual attribute)

		Worked from home during the pandemic in 2020 (yes or no)		N	Continue to work from home as of December 2020 (among people who worked from home "during the pandemic in 2020") (yes or no)		N
		Yes	No		Yes	No	
Total		28.9%	71.1%	2,885	60.6%	39.4%	835
Age group	20–29 years old	27.6%	72.4%	355	51.0%	49.0%	98
	30–39 years old	28.4%	71.6%	580	67.9%	32.1%	165
	40–49 years old	28.2%	71.8%	917	56.4%	43.6%	259
	50–59 years old	30.9%	69.1%	776	65.8%	34.2%	240
	60–64 years old	28.4%	71.6%	257	54.8%	45.2%	73
Sex	Male	35.1%	64.9%	1,622	63.3%	36.7%	569
	Female	21.1%	78.9%	1,263	54.9%	45.1%	266
Marital status	Married	32.4%	67.6%	1,545	62.5%	37.5%	501
	Unmarried	24.9%	75.1%	1,340	57.8%	42.2%	334
Educational Background	University graduates	44.1%	55.9%	1,334	63.8%	36.2%	588
	Non-university graduates	15.9%	84.1%	1,551	53.0%	47.0%	247
Type of employment	Regular employee	35.7%	64.3%	1,987	60.9%	39.1%	709
	Non-regular employee	14.0%	86.0%	898	58.7%	41.3%	126
Industry	Construction	28.1%	71.9%	160	40.0%	60.0%	45
	Manufacturing	34.2%	65.8%	687	66.8%	33.2%	235
	Electricity, gas, heat supply and water	26.8%	73.2%	41	54.5%	45.5%	11
	Information and communications	73.9%	26.1%	161	84.0%	16.0%	119
	Transport	19.3%	80.7%	181	40.0%	60.0%	35
	Wholesale and retail trade	19.9%	80.1%	392	57.7%	42.3%	78
	Finance and insurance, and Real estate	46.8%	53.2%	218	55.9%	44.1%	102
	Accommodations, eating and drinking services	6.9%	93.1%	72	80.0%	20.0%	5
	Medical, health care and welfare	7.3%	92.7%	385	42.9%	57.1%	28
	Education, learning support	47.8%	52.2%	92	40.9%	59.1%	44
	Services (not elsewhere classified)	27.0%	73.0%	371	53.0%	47.0%	100
	Others	26.4%	73.6%	125	66.7%	33.3%	33
Occupation	Administrative and managerial workers	57.1%	42.9%	289	61.2%	38.8%	165
	Professional and engineering workers	39.2%	60.8%	577	67.7%	32.3%	226
	Clerical workers	33.1%	66.9%	735	58.4%	41.6%	243
	Sales workers	29.2%	70.8%	414	56.2%	43.8%	121
	Service workers	12.5%	87.5%	271	58.8%	41.2%	34
	Production/skilled workers	6.7%	93.3%	493	36.4%	63.6%	33
	Others	12.3%	87.7%	106	76.9%	23.1%	13
Size of enterprise	29 or fewer employees	15.2%	84.8%	564	59.3%	40.7%	86
	30–299 employees	24.2%	75.8%	897	52.1%	47.9%	217
	300–999 employees	33.9%	66.1%	381	65.1%	34.9%	129
	1,000 or more employees	46.4%	53.6%	806	64.7%	35.3%	374
	Do not know	12.2%	87.8%	237	55.2%	44.8%	29
Years of service	Less than 5 years	24.9%	75.1%	947	57.6%	42.4%	236
	Less than 5–10 years	23.3%	76.7%	647	55.0%	45.0%	151
	Less than 10–20 years	28.0%	72.0%	683	65.4%	34.6%	191
	20 or more years	42.3%	57.7%	608	63.0%	37.0%	257
Individual annual income before the pandemic (2019)	Less than 3 million yen	14.1%	85.9%	1,185	52.7%	47.3%	167
	3 million yen to less than 5 million yen	26.2%	73.8%	864	52.2%	47.8%	226
	5 million yen to less than 7 million yen	40.9%	59.1%	472	62.7%	37.3%	193
	7 million yen or more	68.4%	31.6%	364	71.9%	28.1%	249
Region of residence	Tokyo metropolitan area (4 prefectures)	40.1%	59.9%	891	71.1%	28.9%	357
	Kansai (3 prefectures)	30.4%	69.6%	388	59.3%	40.7%	118
	Other regions	22.4%	77.6%	1,606	50.6%	49.4%	360
Experience of WFH before the pandemic	Workers who have the experience of WFH before the pandemic	-	-	-	82.3%	17.7%	158
	Workers who newly switched to WFH in March-May 2020	-	-	-	56.3%	43.7%	602
	Workers who newly switched to WFH in June 2020 or later	-	-	-	49.3%	50.7%	75

Note: Individual attributes (Age, marital status, educational background), type of employment, industry, occupation, size of enterprise, years of service and region of residence are based on the information as of April, 1, 2020.

(14.0%). There are also differences depending on size of enterprise, as large enterprises with 1,000 or more employees (46.4%) have a high percentage. Differences also exist depending on income level, as, when looking at individual annual income before the pandemic (2019), the high income group of 7 million yen or more has a high percentage (68.4%), while the low income group of less than 3 million yen has a low percentage (14.1%).

Next, let us examine the percentage of those who continued WFH among workers who worked from home during the pandemic in 2020. Here, too, differences emerge when looking at industries and occupations. Looking at those differences by industry, the percentage of those who continue to work from home is high in the information and communication (84.0%). In contrast, education, learning support, which had a comparatively high work-from-home percentage for “during the pandemic 2020,” has a low percentage of respondents who continue to do so (40.9%). Differences are also apparent in terms of income level and region of residence. Looking at income levels, a high continuation rate is seen in the high income group of 700 million yen per year or more (71.9%) but relatively low in the low income level. And by region of residence, the continuation rate is high for the Tokyo metropolitan area (71.1%). Furthermore, there are differences depending on the experience of WFH before the pandemic, as there is a relatively low continuation rate among those who newly switched to WFH after the pandemic arrived (in or after March 2020).

III. Estimation results

Based on the basic statistics described above, a regression analysis is conducted to explore what the determinants of the practice and continuation of WFH under the pandemic are. First regression is performed with the practice of WFH during the pandemic in 2020 as the explained variable for full sample (Analysis (1)). Then second regression is performed with whether or not WFH is continued as of December 2020 as the explained variable for those who practiced (experienced) WFH (Analysis

(2) and (3)).

The results are presented in Table 2. It can be seen that the practice of WFH depends on educational background, type of employment, industry, occupation, size of enterprise, individual annual income, and region of residence (1). By level of educational background, university graduates were more likely to practice WFH, and by type of employment, non-regular employees tended not to work from home. By industry, workers in information and communications and education, learning support were more likely to practice WFH but workers in transport; wholesale and retail trade; accommodation and food services; and medical health care and welfare were less likely to practice WFH. By occupation, administrative and managerial workers, professional and engineering workers, clerical workers, sales workers, and service workers were more likely to work from home than production/skilled workers. And by size of enterprise, workers in large corporations were more likely to work from home than workers in enterprises with 29 or fewer employees. Moreover, workers with higher individual annual income before the pandemic (2019) were more likely to work from home. Residents of the Tokyo metropolitan area tended to work from home.

Regarding whether or not workers continue to work from home as of December 2020, the results indicate that type of employment, industry, occupation, individual annual income, and region of residence are relevant (2). Conspicuous differences of tendency in continuation by industry are thought to depend on whether the nature of work is suitable for WFH. Additionally, there are differences in terms of individual annual income before the pandemic, and workers with higher income levels were more likely to practice WFH and continue that practice as a “new normal” way of working.

When the variable regarding the experience of WFH before the pandemic is also taken into account (3), it is shown that workers who newly switched to WFH after the pandemic’s arrival (i.e., workers who “worked from home for the first time in March-May 2020” or who “worked from home for the first time in June 2020 or later”) are less likely to continue

Table 2. Determinants in practice and continuation of WFH (logistic regression)

	(1)		(2)			(3)	
Explained variable	Practice of WFH		Continuation of WFH as of December 2020				
Target sample	Full sample		Workers who worked from home				
Model			Model 1		Model 2		
	B	S.E.	B	S.E.	B	S.E.	
Age	-.003	.006	-.006	.010	-.009	.010	
Female	.104	.130	-.079	.203	-.082	.208	
Married	.165	.109	.131	.175	.112	.180	
University graduates	.679	.112 **	.118	.186	.089	.191	
Non-regular employee	-.494	.157 **	.614	.266 *	.545	.270 *	
Industry (ref. manufacturing)							
Construction	-.293	.229	-1.080	.358 **	-1.223	.371 **	
Electricity, gas, heat supply and water	-.641	.403	-.261	.638	-.226	.642	
Information and communications	1.135	.224 **	.893	.304 **	.739	.310 *	
Transport	-.498	.242 *	-1.032	.409 *	-1.018	.417 *	
Wholesale and retail trade	-.497	.190 **	-.076	.298	-.097	.304	
Finance and insurance, and Real estate	-.011	.192	-.538	.266 *	-.511	.271 †	
Accommodations, eating and drinking services	-1.232	.575 *	1.229	1.242	1.177	1.243	
Medical, health care and welfare	-2.262	.378 **	-.554	.618	-.639	.630	
Education, learning support	.929	.272 **	-1.209	.391 **	-1.136	.397 **	
Services (not elsewhere classified)	-.036	.179	-.572	.274 *	-.791	.285 **	
Others	.112	.258	.196	.420	.150	.428	
Occupation (ref. production/skilled workers)							
Administrative and Managerial workers	1.850	.256 **	.288	.468	.333	.477	
Professional and engineering workers	1.959	.229 **	.982	.438 *	.992	.444 *	
Clerical workers	1.929	.223 **	.920	.436 *	.926	.441 *	
Sales workers	1.714	.244 **	.607	.453	.555	.460	
Service workers	1.191	.297 **	1.450	.561 *	1.401	.569 *	
Others	.708	.381 †	1.825	.828 *	1.801	.827 *	
Size of enterprise (ref. 29 or fewer employees)							
30–299 employees	.397	.162 *	-.528	.287 †	-.441	.290	
300–999 employees	.533	.189 **	-.058	.321	.138	.327	
1,000 or more employees	.949	.167 **	-.314	.292	-.274	.296	
Do not know	.127	.271	-.399	.485	-.300	.495	
Years of service	.000	.007	.003	.010	.001	.010	
Individual annual income before the pandemic (2019)	.002	.000 **	.001	.000 **	.001	.000 **	
Region of residence (ref. other regions)							
Tokyo metropolitan area (4 prefectures)	.446	.114 **	.737	.178 **	.722	.182 **	
Kansai (3 prefectures)	.188	.152	.321	.234	.254	.239	
Experience of WFH before the pandemic (ref. Workers who have the experience of WFH before the pandemic)							
Workers who newly switched to WFH in March-May 2020					-1.311	.246 **	
Workers who newly switched to WFH in June 2020 or later					-1.389	.343 **	
Constant	-3.898	.341 **	-.918	.609	.354	.660	
Chi-square value		988.366 **		131.993 **		165.849 **	
2 log-likelihood		2483.089		987.757		953.901	
Nagelkerke R ²		0.415		0.198		0.244	
N		2,885		835		835	

Note: * $p < .05$; ** $p < .01$; † $p < .10$.

WFH than those who have the experience of WFH before the pandemic. This suggests that although WFH became widespread during the pandemic's spread, it is having difficulty taking root.

IV. Conclusions

Although the use of WFH spreads in Japan under the COVID-19 pandemic, particularly following the first declaration of a state of emergency in April and

May 2020, but has not fully taken root since then as the spread of infection is not over yet. This paper considered the large differences that exist in the practice and continuation of WFH as they relate to individual attributes. First, there are differences in the experience of WFH relating to educational background, type of employment, industry, occupation, size of enterprise, income level, and region of residence. Specifically, white-collar workers (such as managerial workers and professionals), workers in large corporations, high-income groups, and highly educated groups tended to practice WFH. Additionally, occupation and income level tended to have a bearing on whether or not WFH was continued. Occupation, educational background, and income level have been treated as indicators of a person's socioeconomic status. A person's type of employment and the size of his or her employing enterprise are also significantly related to his or her socioeconomic status in the Japanese context. In brief, the findings of this paper show that there are social class-based differences in work-from-home opportunities under the pandemic. The option of WFH was not equally available to everyone under the pandemic, indicating that social inequity exists in terms of work-from-home opportunities.

Inequity of work-from-home opportunities has a lot to do with job characteristics and job skill levels. For example, the fact that white-collar work and jobs in the information and communications industry had characteristics that are more suited to WFH and that larger companies were more likely to have systems for such work in place may be behind the differences in work-from-home rates. Given that infections continue to spread, however, class disparities in work-from-home opportunities can lead to disparities in the stability of working

conditions, infection risk, and well-being, and therefore cannot be overlooked from the standpoint of social equality. Society as a whole should expand possibilities for WFH by measures such as making work content and procedures more feasible to WFH or raising workers' skill levels.

1. For instance, the reasons cited by companies for not using telework in a JILPT corporate survey conducted in 2014 included difficulties in managing progress and working hours and problems in ensuring information security.
2. WFH's expansion in April-May 2020 is shown in JILPT (2020). See also Okubo (2020), which is based on another survey.
3. For the survey's design and an overview of its findings, see JILPT (2021).
4. Regarding the figures for "during the pandemic in 2020," respondents who indicated that they practiced WFH at any time during that period were counted as "worked from home." Figures for "before the pandemic (as of February 2020)" indicate the percentages of respondents who have the experience of WFH before the pandemic among those who practiced WFH under the pandemic.
5. Of those who worked from home under the pandemic in 2020, 72.1% reported that they first experienced it between March and May 2020.
6. The individual attributes and employment situation discussed here are based on information current as of April 1, 2020.

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TAKAMI Tomohiro

Vice Senior Researcher, The Japan Institute for Labour Policy and Training. Research interest: Sociology of work.

<https://www.jil.go.jp/english/profile/takami.html>

Article

Analysis of Regular Employees Whose Inclination to Change Jobs Has Increased in the COVID-19 Pandemic

TAKAHASHI Koji

1. Background: The increase in the rate of regular employees inclined to change jobs

While the COVID-19 pandemic has seen a decline in the percentage of workers changing employers (referred to here as “job change”), there has been a rise in the percentage of regular employees inclined to change jobs. This analysis addresses said trend by exploring what characterizes those regular employees who have become more inclined to change jobs. The results reveal that people whose work has been reduced as part of measures to adapt to the pandemic have become more inclined to change jobs as they wish to work to their full potential.

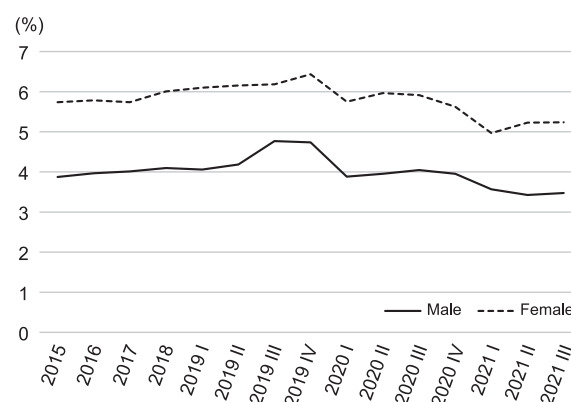
The pandemic has seen changes in the nature of job change and workers’ attitudes toward it. Figure 1 presents the trends in the percentage of workers changing jobs (job change rate) based on data from the *Labour Force Survey* by the Ministry of Internal Affairs and Communications. This shows that the job change rate, which was on an upward trend from 2015 to 2019, has declined among men and women since the beginning of 2020. This is thought to be attributable to the decrease in the number of job vacancies advertised by enterprises which has resulted from the stagnation of economic activity in the pandemic.¹

Drawing again on data from the *Labour Force Survey*, Figure 2 shows the trends in the rate of workers who are inclined to change jobs. Looking firstly at the graph of trends by sex, it can be seen that while the job change rate has declined during the pandemic, the rate of workers inclined to change

jobs has remained at a similar level or been on the increase. The graph presenting trends by employment type shows that the rate of regular employees inclined to change jobs has likewise been on the increase in the pandemic.



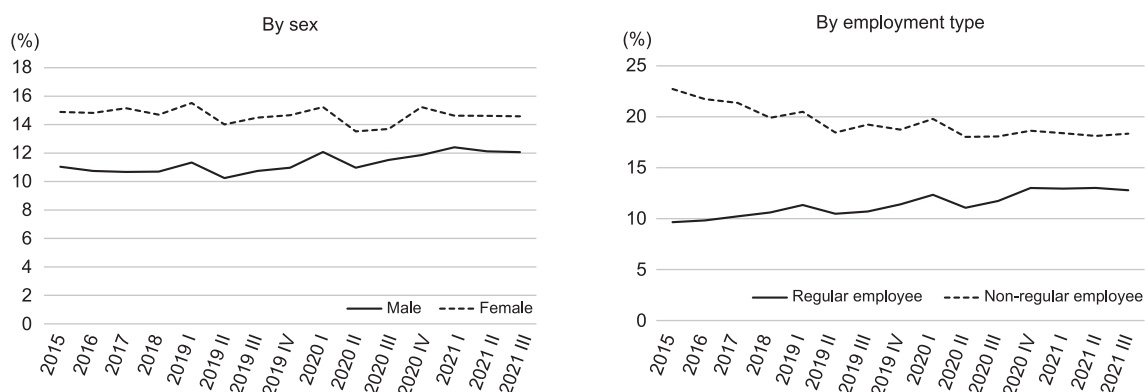
That is, focusing specifically on regular employees, the above trend indicates that in a labor market in which there is generally little job change, only the rate of those inclined to change jobs is on the increase. This poses the research question of what characterizes such regular employees who have become more inclined to change jobs during the pandemic—namely, amid difficulty in changing



Source: *Labour Force Survey*, Ministry of Internal Affairs and Communications.

Note: The figure shows the number of people who changed jobs (changed employers) as a percentage of the total number of employed people at each survey timing. As “people who changed jobs” refers to those who left their employment and entered new employment within the one year prior to the survey, in some cases, the actual timing of the job change was a year previously.

Figure 1. Trends in the job change rate



Source: Labour Force Survey, Ministry of Internal Affairs and Communications.

Notes: 1. The graphs show the numbers of people who responded that they are “inclined to change job, etc.” (“*tenshoku nado wo kibō shite iru*”) as a percentage of the numbers of employed people at each survey timing.

2. “Regular employees” refer to those who are called “regular employees” in their workplace, excluding management executives. All other employees are treated as “non-regular employees.”

Figure 2. Trends in the rate of workers inclined to change jobs

jobs due to the dwindling numbers of vacancies. This analysis explores the characteristics of and conditions affecting those regular employees who have become more inclined to change jobs in the pandemic, as well as seeking to identify what kind of approach to working they wish to pursue after changing jobs.

2. Analysis using data from the JILPT panel survey of individuals

This analysis seeks to answer the questions posed above by drawing on data from the “JILPT Panel Survey on the Impact of COVID-19 on Work and Daily Life.” This panel survey of individuals has built on the Rengo 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 five survey waves conducted in May, August, and December 2020, and March and June 2021, respectively.² 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*.³

The subjects of the analysis in this paper are people who were regular employees of private enterprises as of April 1, 2020, who did not subsequently become separated from their employment or change jobs prior to the fifth wave (June 2021), and who responded to the RENGO-RIALS survey and all five waves of the JILPT panel survey. While the analysis in this paper draws mainly on the questions from the fifth wave, the subjects of analysis are limited to those who responded to all surveys, including the RENGO-RIALS’ survey, given the possibility of differing tendencies in respondents’ responses depending on the timing at which they joined the sample.

The fifth wave of the JILPT panel survey addresses changes in respondents’ attitudes amid the pandemic. More specifically, it includes a question asking respondents about how the importance they attach to certain items has changed in comparison with prior to the onset of the pandemic (“In contrast with prior to the onset of the COVID-19 pandemic, have the following items become important to you?”). The 11 items listed in this question include an “environment conducive to changing jobs” (job change conducive environment). This question is used to ascertain the increase (or decrease) in the inclination toward changing jobs among respondents. Namely, those who responded that a job change

conductive environment became “much more important” or “slightly more important” to them can be considered to have become more inclined to change jobs, and those who responded that it became “slightly less important” or “much less important” can be seen to be less inclined to change jobs.

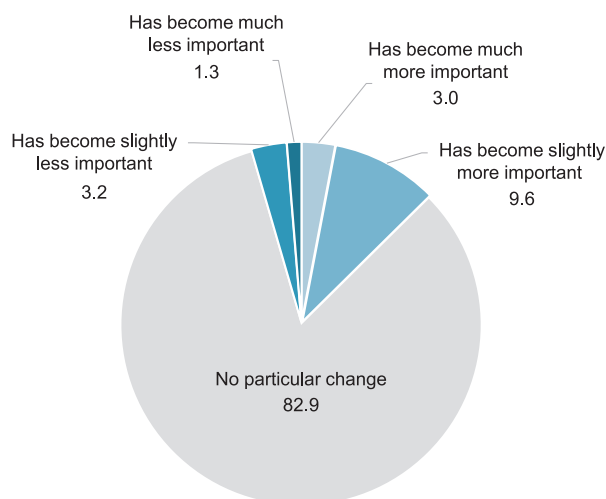
3. Changes in the perceived importance of a job change conducive environment

Figure 3 shows the changes in perceptions of the importance of a job change conducive environment as compared with prior to the onset of the pandemic. The subjects of analysis are regular employees who have not become separated from their employment or changed jobs during the pandemic. While 82.9% of all respondents felt that there was “no particular change” in their perception of the importance of such an environment, it is notable that the percentage of respondents for whom it had become more important was 12.6% (3.0% + 9.6%), in contrast with the 4.5% (1.3% + 3.2%) for whom it had become less important. Although this cannot be described as a dramatic shift, it certainly confirms a growing inclination among regular employees toward changing jobs.

It must be noted that what can be ascertained from the changes in the perception of the importance of a job change conducive environment is whether there has been a relative (as compared with prior to

the onset of the pandemic) increase or decrease in the inclination toward changing jobs. Therefore, even those who responded that such an environment has become more important to them may have a low inclination toward changing jobs.

Figure 4 addresses this by looking at the correlation between the change in the perception of



Note: The question reads: “In contrast with prior to the onset of the COVID-19 pandemic, have the following items become important to you?” This figure shows responses regarding the item: “an environment conducive to changing jobs.”

Figure 3. Change in the perceived importance of a job change conducive environment as compared with prior to the onset of the pandemic (N=1,434; %)

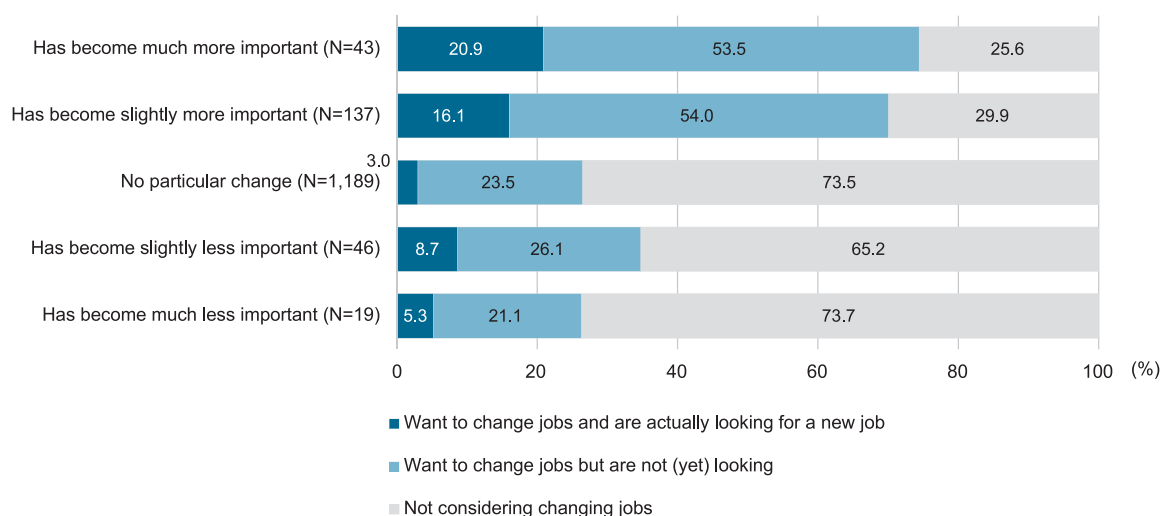


Figure 4. Change in the perceived importance of a job change conducive environment and intention to change jobs at the time of the survey

importance of a job change conducive environment and the intention to change jobs at the timing of the fifth wave of the JILPT panel survey. The results show that over 70% of those who responded that a job change conducive environment became “much more important” or “slightly more important” responded that they want to change jobs. This confirms that many people for whom a job change conducive environment has become more important have a greater inclination toward changing jobs to the extent that they are in fact intending to change jobs.

4. Characteristics of regular employees to whom a job change conducive environment has become more important

Now let us look at what characterizes the regular employees to whom a job change conducive environment has become more important—namely, who have a stronger inclination to change jobs. Table 1 presents the results of an ordinal logistic regression analysis using change in the perception of the importance of a job change conducive environment as the explained variable. The more the perceived importance has increased, the greater the value of the explained variable.

In Model 1, sex, age, educational background, and whether the respondent is responsible for earning a livelihood (“breadwinner”) are adopted as explanatory variables. This indicates that among younger respondents, there is a tendency to increase the perceived importance of a job change conducive environment which is significant at the 0.01 level.

In Model 2, industry, occupation, and size of enterprise are additionally incorporated as explanatory variables. However, none of these variables have a significant effect on the explained variable, and the model itself is not significant.

Model 3 additionally incorporates the measures being taken in response to COVID-19 by the respondents’ employers (the enterprises that employ them) at the fifth wave of the JILPT panel survey (respondents are allowed to select multiple responses) as explanatory variables. This shows that where the measures “suspending business (e.g., shutdown, closure, etc.) or increasing non-business days” or

“reduction of work” have been adopted, there is a significant increase in the perception of the importance of a job change conducive environment.

Model 4 additionally incorporates the most recent working hours and monthly salary data from the fifth wave as explanatory variables. This indicates that the rise and decline in monthly salary has a negative influence at the 0.05 level. That is, people whose monthly salary has declined tend to perceive a job change conducive environment as more important.

It is incidentally also necessary to note that in Model 4, the coefficient for “suspending business (e.g., shutdown, closure, etc.) and/or increasing non-business days” is not significant, which suggests that the impact of business suspension is in fact the impact of the decline in salary due to the business suspension.⁴ On the other hand, “reduction of work” remains significant at the 0.01 level in Model 4 as well. This means that “reduction of work” has an effect on the explained variables that is unconnected with the decline in monthly salary. Namely, the reduction of work itself prompts regular employees to consider a job change conducive environment more important.

In summary, this analysis indicates that younger regular employees, regular employees whose work has been reduced, and regular employees whose monthly salary has declined tend to have developed a stronger inclination toward changing jobs.

5. Respondents’ thoughts on working style once the pandemic has been resolved

Let us now look at what kinds of working styles the regular employees who see greater importance in a job change conducive environment—namely, who have a stronger inclination to change jobs—wish to pursue after changing jobs. Figure 5 presents respondents’ thoughts on the way in which they would like to work once the pandemic has been resolved, as an indicator closely resembling respondents’ intended ways of work after changing jobs.

This indicates that those respondents to whom a job change conducive environment has become more important tend to respond that they “want to

Table 1. Determinants of change in the perceived importance of a job change conducive environment (ordinal logistic regression analysis)

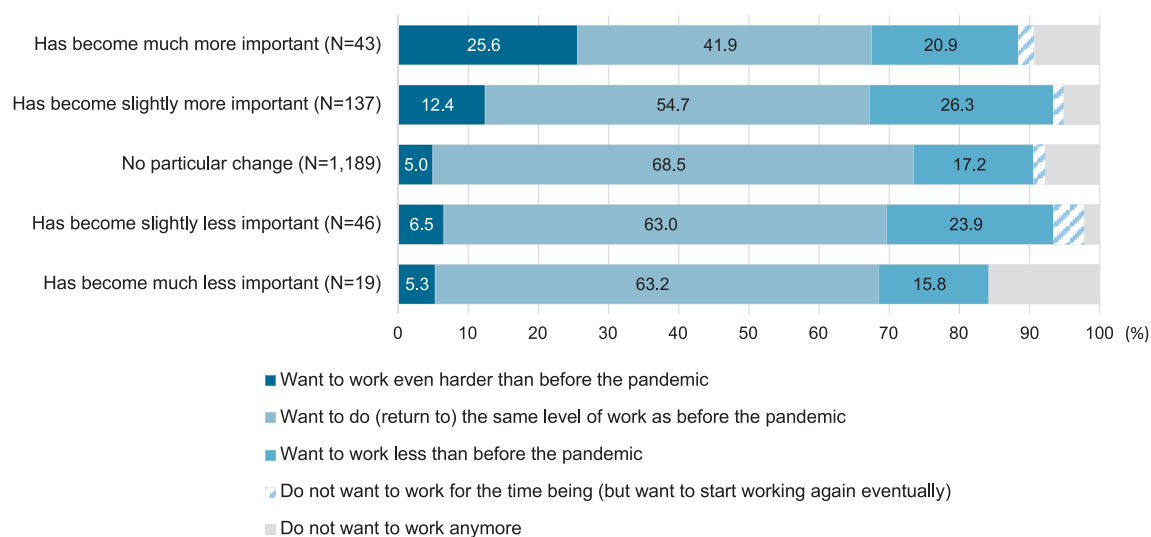
Explained variable: Change in the perceived importance of a job change conducive environment (5. It has become much more important – 1. It has become much less important)	Model ①		Model ②		Model ③		Model ④	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Female	0.095	0.170	0.060	0.194	0.085	0.197	0.074	0.197
Age	-0.029	0.007 **	-0.029	0.008 **	-0.027	0.008 **	-0.027	0.008 **
University graduate or higher	0.056	0.144	0.150	0.158	0.214	0.161	0.222	0.161
Breadwinner	-0.244	0.185	-0.264	0.189	-0.238	0.193	-0.232	0.193
Construction (ref. Manufacturing)			0.004	0.318	0.098	0.325	0.095	0.327
Information and communications			-0.221	0.312	-0.134	0.321	-0.127	0.321
Transport			-0.415	0.344	-0.547	0.347	-0.556	0.347
Wholesale and retail trade			0.001	0.277	0.029	0.285	0.046	0.286
Finance and insurance			-0.420	0.340	-0.403	0.347	-0.400	0.348
Real estate			-0.370	0.466	-0.292	0.469	-0.278	0.472
Accommodation and food services			0.129	0.623	-0.066	0.644	-0.074	0.645
Medical, health care and welfare			0.171	0.290	0.203	0.301	0.233	0.302
Education, learning support			-0.016	0.605	0.071	0.612	0.003	0.612
Services (not elsewhere classified)			0.048	0.268	-0.017	0.273	-0.001	0.273
Other industries or "Do not know"			0.076	0.360	0.104	0.366	0.136	0.367
Managerial workers (ref. Clerical workers)			-0.008	0.259	-0.046	0.262	-0.069	0.262
Professional and engineering workers			-0.112	0.233	-0.130	0.236	-0.152	0.237
Sales workers			-0.007	0.262	-0.051	0.268	-0.078	0.269
Service workers			0.407	0.344	0.475	0.352	0.421	0.353
Production/skilled workers			-0.190	0.306	-0.355	0.315	-0.397	0.315
Transport and machine operation drivers			0.777	0.461	0.698	0.465	0.626	0.467
Carrying, cleaning and packaging workers			0.690	0.473	0.897	0.482	0.880	0.483
Other occupations or "Do not know"			-0.316	0.421	-0.313	0.428	-0.324	0.430
99 or fewer employees (ref. 1,000 or more employees)			0.050	0.185	0.051	0.196	0.063	0.197
100–999 employees			-0.204	0.186	-0.244	0.190	-0.246	0.191
Do not know			-0.145	0.447	-0.043	0.456	-0.033	0.457
Suspending business (e.g., shutdown, closure, etc.) or increasing non-business days					0.645	0.306 *	0.552	0.309
Shortening business hours					-0.161	0.304	-0.201	0.304
Temporary leave					0.839	0.455	0.794	0.455
Reduction of workdays					0.332	0.314	0.326	0.315
Encouragement of taking paid leave					0.315	0.238	0.306	0.238
Implementation of working from home/ telework					-0.120	0.212	-0.101	0.212
Changing workplace to an alternative location other than the default workplace					-0.768	0.399	-0.762	0.400
Change in commuting method					-0.316	0.407	-0.324	0.407
Staggering work hours					-0.112	0.226	-0.121	0.226
Reduction of work					1.173	0.318 **	1.116	0.320 **
Use of web or video conferencing					0.389	0.211	0.395	0.212
Cancellation or restriction of business trips					-0.283	0.221	-0.303	0.222
Suspension or termination of transfers					0.633	0.464	0.687	0.466
Dispatching staff to other companies					0.253	0.607	0.207	0.607
Cancellation or voluntary restraint of events, meetings, conferences, roundtables, etc.					0.003	0.205	0.004	0.206
Appropriate response to people with symptoms such as cough and fever					0.143	0.207	0.125	0.208
Preparation and provision of masks, alcohol-based disinfectant, and face shields					-0.235	0.191	-0.210	0.192
Change in working hours (increase/decrease in number of hours)							0.000	0.007
Change in monthly income (index: pre-pandemic =100)							-0.013	0.005 *
$\tau=1$	-5.797	0.445 **	-5.885	0.526 **	-5.806	0.543 **	-7.054	0.756 **
$\tau=2$	-4.533	0.400 **	-4.618	0.489 **	-4.534	0.507 **	-5.783	0.730 **
$\tau=3$	0.549	0.360	0.519	0.455	0.738	0.474	-0.490	0.697
$\tau=4$	2.100	0.382 **	2.078	0.473 **	2.323	0.492 **	1.100	0.707
N		1434		1434		1434		1434
Chi-square		23.776 **		38.311		75.412 **		80.893 **
Nagelkerke R-square		0.023		0.036		0.070		0.075

Notes: 1. ** $p<0.01$, * $p<0.05$. (ref.) denotes the reference group.

2. Industry, occupation, and size of enterprise refer to those as of April 1, 2020.

3. Increase or decrease in working hours (number of hours) is calculated by subtracting the actual weekly hours worked in a normal month prior to the pandemic from the most recent actual weekly hours worked from the fifth wave of the JILPT panel survey (June 17–23, 2021).

4. Increase or decrease in monthly salary (index: pre-pandemic = 100) is based on responses to a question from the fifth wave of the JILPT panel survey in which respondents were asked to select from nine categories to indicate how their most recent monthly salary compares with their original monthly salary (in a normal month) prior to the pandemic. Responses were converted to class values.



Note: The value labels for “do not want to work for the time being (but want to start working again eventually)” and “do not want to work anymore” have been omitted from the figure.

Figure 5. Change in the perceived importance of a job change conducive environment and desired ways of working once the pandemic is resolved

work even harder than before the pandemic.” This echoes the trend shown in Table 1—which reveals that those whose work has been reduced as a part of the response to the pandemic have developed a stronger inclination to change jobs—and it seems linked to the trend that those who have a stronger inclination to change jobs tend to wish to work to their full potential once the pandemic is resolved.

6. Key Findings: Regular employees with a greater inclination to change jobs are characterized by a desire to work harder

While the job change rate has seen a decline during the COVID-19 pandemic, the rate of regular employees inclined to change jobs has increased. This analysis to explore what kinds of regular employees have become more inclined to change jobs reveals that people whose work has been reduced as part of the response to the pandemic have become more inclined to change jobs as they are keen to work to their full potential.

Under calls for Work Style Reform, Japan has seen efforts to ensure the implementation of measures to reduce long working hours and achieve work-life balance for regular employees. Likewise, the key aims of telework, which is increasingly being

introduced in the pandemic, include not only curbing the percentage of employees commuting to work, but also allowing work to be pursued efficiently. At the same time, as shown in this analysis, a certain proportion of regular employees, presumably feeling that their work has been reduced against their will, are keen to change jobs in order to work to their full potential. Such people appear to be contributing significantly to the rise in the percentage of regular employees inclined to change jobs.

1. The Ministry of Health, Labour and Welfare’s “Report on Employment Service” (statistics on public employment placement services) shows that having risen from 1.20 in 2015 (annual average) to 1.60 in 2019 (annual average), the ratio of job vacancies to applicants (including part-time positions; seasonally adjusted values) saw a sharp decline in May 2020 to 1.18, recorded a low level of 1.04 in September to October 2020, and remains low at 1.16 in the most recent figures from September 2021.
2. In each survey wave where the sample fell short of the overall target number, additional subjects were surveyed to supplement the sample.
3. For a detailed summary of the survey implementation and preliminary report of survey results, see JILPT (2021).
4. The data does not cover whether a leave allowance was paid. However, as leave allowance is included in the monthly salary, if a leave allowance has not been paid, the extent of the decline in monthly salary is greater.

Reference

JILPT. 2021. Results of the “JILPT Panel Survey on the Impact of COVID-19 on Work and Daily Life” (June 2021, 5th wave) (First Aggregation). <https://www.jil.go.jp/english/special/covid-19/survey/documents/20210727.pdf>.

TAKAHASHI Koji

Senior Researcher, The Japan Institute for Labour Policy and Training. Research interest: Non-regular employment.
<https://www.jil.go.jp/english/profile/takahashi.html>

Special Feature on Research Papers (I)

Here is a special feature for two (I-II) including six significant papers selected by the Editorial Office of *Japan Labor Issues* from various relevant papers published in 2020–2021. Each author has arranged the original papers written in Japanese for the benefit of overseas readers. We sincerely thank authors for their effort. These papers address the latest subjects as well as conventional themes on labor and surely will offer useful information and deeper insights into the state of labor in Japan.

Editorial Office, *Japan Labor Issues*

Gender Equality in the Workplace from a Legal Perspective: Current Situation and Issues of Japan's Equal Employment Opportunity Act

NAKAKUBO Hiroya

With its 2006 revision, the Equal Employment Opportunity Act (EEOA), the cornerstone of Japan's gender equality legislation, which previously had a one-sided nature to improve the conditions of women rather than men, evolved into a law prohibiting discrimination "on the basis of sex" regardless of gender. In addition, the enactment of the Act on the Promotion of Women's Participation and Career Advancement in the Workplace, popularly called the Women's Advancement Promotion Act (WAPA), in 2015 brought the legal system for gender equality to a state of completion in a sense. Still, as "equality" legislation, the EEOA faces several challenges. It does not cover all stages of employment comprehensively, but enumerates the matters regarding which discrimination is prohibited. In particular, wage discrimination is beyond its reach and left to the provisions of Article 4 of the Labor Standards Act (LSA). Moreover, decisions on whether something constitutes indirect discrimination are made restrictively by Ministerial Ordinance, the prohibition of disadvantageous treatment because of pregnancy or childbirth is not explicitly established as a condition for equality, and the obligation for employers to take measures against sexual harassment is provided quite distinctly from prohibition of sex discrimination. Also, there are doubts about the effectiveness of the WAPA, such as the contents of an action plan being left up to employers, although the Act's significance as a step toward genuine equality is acknowledged. In the future, further strengthening of the EEOA should be considered, including stronger legal remedies for violations.

- I. Introduction
- II. Prohibition of discrimination on the basis of sex
- III. Relation to Article 4 of the Labor Standards Act
- IV. Indirect discrimination on the grounds of sex
- V. Disadvantageous treatment by reason of pregnancy and childbirth, etc.
- VI. Sexual harassment
- VII. Positive (affirmative) action programs
- VIII. Concluding remarks

I. Introduction

The cornerstone of Japan's gender equality legislation is the Equal Employment Opportunity Act (EEOA). However, it is actually somewhat cumbersome to talk about the Act. Even when noting the basic fact that

“more than 35 years have passed since its enactment in 1985,” it would be necessary to add the caveat that it was technically a revision of the Working Women’s Welfare Act enacted in 1972.

In fact, when the Working Women’s Welfare Act was reconfigured as the EEOA, its official name was actually the Act on Promotion of the Welfare of Female Workers Including Ensuring Equal Opportunities and Treatment of Men and Women in Employment, and it still strongly retained the character of legislation for the sake of the “welfare” of female workers. On the other hand, it was inadequate as an “equality” measure in ensuring equal opportunities and treatment between men and women. (The name of the law itself suggested that it considered equality to be only a part of “welfare” rather than an inherent human right.) This weakness was exemplified by the “provision on the duty to endeavor” (i.e., a non-binding provision), which mandated employers to only make efforts to give equal opportunities to women concerning recruitment, hiring, placements, and promotions.

Subsequently, with the 1997 revision, the Act was strengthened and expanded, for example by replacing the “provision on the duty to endeavor” with a straightforward prohibition on discrimination. In addition, the name was changed to the Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment, signifying a departure from the “welfare”-centered view. However, it remained a law structured so as to prohibit discrimination against “women,” and protections were not extended to male workers.

In that sense, the 2006 revision, the second major revision of the Act, represented a fundamental leap forward. It erased this one-sided character and evolved the EEOA into legislation that prohibits gender-based discrimination regardless of sex.¹ Thus, in discussing the EEOA as it exists today, it would be appropriate to take 2006 as a starting point. Of course, we should remember the historic developments and circumstances leading up to that point,² but I do not think it fruitful to spend much time discussing how inadequate the EEOA was in the past. In any event, subsequently, in 2015, the Act on the Promotion of Female Participation and Career Advancement in the Workplace, popularly called the Women’s Advancement Promotion Act (WAPA), was enacted, and while its provisions were mild, they made it mandatory for the larger employers to take proactive measures to redress inequalities between men and women, supplementing the EEOA’s mandate of formal equality. As a result, the legal framework governing this issue could be said to be complete at last, though it is by no means perfect.

In the sections below, this article examines the current status of workplace gender equality legislation in Japan and challenges remaining. Because this was originally prepared for a research conference for interdisciplinary discussions,³ I begin by giving an overview of the basic legal structure, and then offer my own rough insights into the path we should take, without going into detailed legal niceties. While the situation surrounding gender equality in Japan is in many ways rooted in social and cultural conditions and cannot be resolved by legal measures alone, I believe there is much room for further improvement in terms of legislation mandating equality.

II. Prohibition of discrimination on the basis of sex

The core of the EEOA’s equality provisions is in Articles 5 and 6, which are headed “Prohibition of Discrimination on the Basis of Sex.” Both articles address employers, and Article 5 stipulates that, with regard to the recruitment and hiring of workers, “employers shall provide equal opportunities for all persons regardless of sex.” Article 6 stipulates that “employers shall not discriminate against workers on the basis of sex,” and lists four specific areas where discrimination is prohibited: (i) placement of workers (including allocation of duties and granting of authority), and promotion, demotion, and training of workers; (ii) loans for housing and other similar fringe benefits as provided by Ordinance of the Ministry of Health, Labor and Welfare; (iii) change in job type and employment status of workers; and (iv) encouragement of retirement, mandatory retirement age, dismissal, and renewal of labor contracts.

Previously, these provisions respectively stated that “women workers must be offered opportunities equal to those of men” and that “women workers must not be treated differently from men because they are women,” but with the 2006 revision, it came to be framed as a regulation applying equally to both sexes. According to one interpretation, stipulations for recruitment and hiring are worded differently so that they allow employers more discretion in deference to their freedom of hiring.⁴ However, prohibition of discrimination is precisely to curtail employers’ “freedom” of hiring. They should not engage in sex discrimination when hiring workers, just as they should not after workers are hired. We can reasonably assume that the EEOA made separate provisions for recruitment and hiring because, prior to hiring, a labor contract has not yet been concluded between the employer and the worker; that is, it is simply a matter of legislative technique.⁵ It is true that there is the issue of what remedies are possible in the event of hiring discrimination, but in essence the prohibition of gender-based discrimination should be viewed as no different between Articles 5 and 6.

The contents of Article 6 had been divided into separate articles covering each item, but with the 2006 revision they were integrated into a single article. It was expanded with the addition of a number of items (demotion, encouragement of retirement, renewal of labor contracts, and so on), but, as the approach of enumerating items one-by-one was maintained, some areas were inevitably omitted. This stands in contrast to the comprehensive statements made in other provisions prohibiting discrimination, such as those on “working conditions” (Article 3 of the LSA, prohibiting discrimination because of nationality, creed, or social status) and “treatment” of workers (Article 35 of the Act on Employment Promotion etc. of Persons with Disabilities, prohibiting discrimination against disabled workers; Article 9 of the Act on Improvement of Personnel Management and Conversion of Employment Status for Part-Time Workers and Fixed-Term Workers, prohibiting discrimination because of part-time or fixed-term status). Even in cases that slip through the cracks of the EEOA, it is possible to provide civil remedies through a judicially made theory of public policy (Article 90 of the Civil Code) based on Article 14 of the Constitution of Japan.⁶ Still, it seems that the EEOA should, like other laws, thoroughly cover the entirety of employment relations.

Another significant problem with Articles 5 and 6 is that effective rules have not been established for proving whether or not discrimination in a specific case is based on sex. If the presence of discrimination is not apparent at first glance, the court needs to infer gender discrimination from circumstantial evidence, and a framework that can detect and highlight hidden bias would be required for this task. In this regard, the 2015 decision of the Hiroshima High Court⁷ issued in a case where discrimination against a female worker with regard to promotion was alleged, seems to show how stingy judges can be in inferring discriminatory intent. The court recognized that there was a notable difference in promotions of male and female employees as a whole, but said that it could not be proved specifically that this disparity resulted from discrimination against women. Furthermore, it noted that the promotion decision regarding the plaintiff was based on an appropriate personnel evaluation even though she had been given high marks for job achievements. Without going into a detailed discussion of this decision, it certainly seems to overemphasize the evaluation system’s formal “mechanisms for maintaining objectivity,” and too easily accept at face value the vague and subjective aspects of the evaluation, such as “ability and performance in maintaining a sense of unity in the workplace and improving teamwork.” We can only expect that judicial principles will develop through the accumulation of further precedents in the future. Under current circumstances, however, the concern is that relevant lawsuits are unlikely to be brought at all.

Also, in the process of proving discrimination, in Japan there is no practice of “discovery” as in the United States, and securing sufficient evidence is a major hurdle for workers. This problem relates to the system of civil litigation procedures itself, and we can only wait for systemic reforms in the future. However, it should be noted that, according to Hideyuki Kobayashi, a renowned professor of civil procedure,⁸ even under the current system, a considerable amount of material can be obtained through the system of *bengoshi-shokai* (referral by a lawyer). It is hoped that the plaintiffs will make good use of this tool.

III. Relation to Article 4 of the Labor Standards Act

If Article 6 of the EEOA is to be made a comprehensive provision as described above, one issue lies in the relation to Article 4 of the LSA, which prohibits gender discrimination in wages. This article is in fact the earliest international example of legislation that sets out the principle of equal pay for men and women, but it is worded in the form of a prohibition on discrimination against women: “An employer must not use the fact that a worker is a woman as a basis for differential treatment in comparison to men with respect to wages.” Here “differential treatment” is understood to include not only less favorable but also more favorable treatment,⁹ and in substance, there is no discrepancy between this stipulation and the EEOA’s policy of prohibiting discrimination on the basis of sex.

Thus, even if making the EEOA a comprehensive regulation results in duplication of regulations on wages, there should be no particular problem with making additions to the EEOA while having it coexist with the regulations of the LSA.¹⁰ In actual court cases, wage disparities resulting from unequal placement and promotion have been challenged, and Article 4 of the LSA has often been cited together with the EEOA. While it is appropriate to leave the article in the LSA as it is, in order to indicate explicitly the importance of gender-equal wages (although there is room for reconsideration of the wording of the article, which appears one-sided), a mechanism that enables seamless solutions regardless of the matter, including discrimination in wages, is required as part of the EEOA as well.

IV. Indirect discrimination on the grounds of sex

Article 7 of the EEOA, which defines so-called indirect discrimination, was added with the 2006 revision, and is titled Measures on the Basis of Conditions Other than Sex. It stipulates, in very complicated words, that an employer shall not take measures that are facially sex-neutral but may cause de facto discrimination by reason of a person’s sex considering the proportion of men and women who satisfy the criterion, except in cases where there is a legitimate reason to take such measures. For example, in cases where a minimum height and weight (such as 170 centimeters and 60 kilograms) are established for recruitment and hiring without mention of gender, in practice women are more likely to be unequally excluded. This is illegal unless a legitimate reason is provided, such as these requirements being essential for the performance of job duties.

It is frequently pointed out that a major feature of this stipulation is that the measures in question are limited to those specified by the Ordinance for the Enforcement of the Act on Ensuring Equal Opportunities for and Treatment of Men and Women in Employment (MHLW Ministerial Ordinance). Article 2 of the MHLW Ministerial Ordinance specifies only three measures: (i) the above-described height, weight, and physical strength as criteria for recruitment and hiring; (ii) requiring “ability to comply with job transfers that entail change of residence” as pertains to recruitment, hiring, promotion, and reassignment considerations; and (iii) making “past experience of job transfer” a criterion for promotion. While the scope of (ii), initially limited to recruitment and hiring of *sogo shoku* (employees on the career track), was expanded in 2014, the overall coverage of indirect discrimination remains very limited. There would also be other potentially problematic requirements, such as the “head of household” requirement with regard to employee benefits, and specification of students from specific university departments for recruitment and hiring of graduates. It is understandable that a cautious approach was taken, as there was considerable debate over the appropriateness of the theory of indirect discrimination at the time of its introduction, but now it is time to move on to the next stage. It should be possible to identify and deal with problems potentially lurking in workplaces more appropriately by letting measures be challenged broadly from the viewpoint of indirect discrimination rather than defining them narrowly at the start, and judging in each case whether there is a risk of “de facto discrimination by reason of a person’s sex,” and when such risks are recognized, determining whether there is a “legitimate reason.”

V. Disadvantageous treatment by reason of pregnancy and childbirth, etc.

With the revision of the EEOA in 2006 to prohibit discrimination “on the basis of sex” for both men and women, matters unique to female workers such as pregnancy and childbirth were removed from provisions prohibiting discrimination, and instead special provisions were established in Article 9. The core of these provisions is Article 9, Paragraph 3, which prohibits disadvantageous treatment for women workers due to pregnancy, childbirth, and the like. In contrast to the American law which provides that sex discrimination includes discrimination on the basis of pregnancy, childbirth, or related medical conditions,¹¹ the Japanese EEOA regards it as something other than sex discrimination *per se*.

Comparing the previous EEOA of 1997 to the revised one, the scope was expanded in two areas. First, in addition to prohibiting discrimination due to pregnancy, childbirth, and prenatal and postnatal leave, prohibitions were expanded to apply to “other reasons relating to pregnancy, childbirth as provided by Ordinance of the Ministry of Health, Labor and Welfare” (including having received maternity health care measures under the EEOA, and incapacity or reduced effectiveness at work due to pregnancy and childbirth). Second, the previous prohibition of “dismissal” was expanded to “prohibiting dismissal or other disadvantageous treatment.” Regarding this provision (Article 9, Paragraph 3), much attention was paid to a Supreme Court decision issued in 2014¹² stating that it is a mandatory norm nullifying repugnant prescriptions and practices between the parties, and that demotion triggered by transfer to light duties because of a pregnant woman’s request, based on Paragraph 3 of Article 65 of the LSA, is a violation unless it falls into narrow exceptions.

In reality, reports of women workers being dismissed, having renewal of fixed-term contracts refused, or otherwise harassed due to pregnancy or childbirth are still common. Rectifying this through effective enforcement of above provision is crucial for achieving employment equality between men and women.¹³ In addition, it is necessary to prevent so-called maternity harassment even before such disadvantage occurs, and the 2016 revision of the EEOA (the current Article 11–3) brought about provisions that oblige employers to take measures to prevent it.

With regard to the Supreme Court decision mentioned above, I am a little uncomfortable about the way it positioned Paragraph 3 of Article 9 in the framework of the EEOA. The decision says, “The purposes of this Act are to promote securing equal opportunity and treatment between men and women in employment, and to promote measures, among others, to ensure the health of female workers with regard to employment during pregnancy and after childbirth” (Article 1), “the basic principle of this Act is to ensure respect for the maternity of women workers and enhancement of their professional lives” (Article 2), and “Employers shall not dismiss or give disadvantageous treatment to women workers by reason of pregnancy, childbirth, or for requesting absence from work” (Article 9, Paragraph 3). Here the problem lies with Article 2. The actual statutory text says, “The basic principle of this Act is to ensure that workers are able to lead fulfilling professional lives without being discriminated against because of sex, and in case of female workers with respect for maternity.” It is true that protections specific to women pertaining to pregnancy and childbirth are treated separately under Article 9, Paragraph 3, but they are integrated with the prohibition on discrimination based on sex applying to both men and women. It is unfortunate that the Supreme Court omitted this basic command of equality and made Article 2 look like caring only about female workers. It must be recognized that both aspects—prohibition of sex discrimination and respect for maternity—are necessary in order to ensure true equality.

VI. Sexual harassment

Concerning sexual harassment, the 1997 revision of the Act stipulating employers’ obligation to “consider” prevention of harassment of “women workers” was broadened and strengthened with the 2006 revision to impose an obligation to “take measures” in this regard for all “workers” of both sexes (Article 11, Paragraph 1). While the wording is quite difficult to understand—mandating employers to “take measures so that workers

they employ do not suffer any disadvantage in their working conditions by reason of said workers' responses to sexual speech or behavior in the workplace, or in their working environments do not suffer any harm due to said sexual speech or behavior"—it requires employers to take necessary employment management measures in two types of sexual harassment: "*quid pro quo*" and "hostile environment."

While this provision is part of Chapter 2: Securing, Etc. Of Equal Opportunity and Treatment between Men and Women in Employment, it is not in Section 1: Prohibition of Discrimination on the Basis of Sex, Etc., but in Section 2: Measures to be Taken by Employers. In contrast to the United States and Europe, where harassment is considered a type of discrimination and sexual harassment a form of gender-based discrimination, in Japan it is treated separately, and stipulated alongside measures for management of women workers' health during pregnancy and after childbirth (Articles 12 and 13). The above-mentioned obligation to take measures to prevent maternity harassment is also contained in the same Section 2 (Article 11-3, added with the 2016 revision).

Originally, the provisions of the EEOA were established in the form of a follow-up after sexual harassment lawsuits had become prevalent, claiming damages based on the tort provisions of the Civil Code. In such civil lawsuits, where the harasser is ordered to pay damages to the victim under Article 709 and the employer is also held liable vicariously under Article 715 of the Civil Code, the matter of sex discrimination is rarely clarified, and judgments tend to be made from the perspective of more general personal rights and sexual freedoms. The provisions of the EEOA have not changed this.

However, in the American law (Title VII of the Civil Rights Act of 1964) that created the notion of sexual harassment including the typology of "*quid pro quo*" and "hostile environment," there is a clear and logical categorization that sexual harassment is a form of sex discrimination: you are pressured to have sexual relations in return for benefits on the job, or placed in an unpleasant and hostile environment with sexual aspects, because you are a woman (or a man). In the case of hostile environments, the character of harassment is similar to that of bullying and mobbing based on race and/or religion. If derogatory comments are made to the effect that women are no good at their jobs and a hostile environment is created, this is clearly discrimination based on gender. Unlike race or religion, however, sex tends to invoke favorable and flirting feelings as well, and a special aspect of "*quid pro quo*" is added into consideration, but here again the victim is not regarded as a respectable worker but a lesser being (an object of sexual desire).

As we have seen, the EEOA takes the approach of enumerating the matters it covers rather than being applied comprehensively, and the extent to which it can incorporate these cases into the broader problem of gender-based discrimination is not without question. The need to change this legal structure is as described above. However, even under the current law, it does not seem appropriate to omit sexual harassment completely from the structure of prohibition of discrimination and handle it only in terms of "obligation to take measures." The position of sexual harassment prevention measures within the legal system governing equality should be clearly recognized.

As is well known in Japan, the nation's anti-harassment laws took a significant step forward with the newly imposed obligation to take measures to prevent workplace bullying by superiors (known as "power harassment" or *pawahara* in Japanese) in 2019.¹⁴ At the same time, previous harassment regulations were reinforced, and concerning sexual harassment, provisions were added to prohibit disadvantageous treatment of employees who come forward with complaints and those who respond and assist them (Article 11, Paragraph 2) and to stipulate the responsibilities of the national government, employers, and workers to prevent sexual harassment (Article 12). The new provision on "power harassment" was considered essential to respond to an urgent challenge of Japanese workplaces, where the number of complaints of bullying has increased markedly. On the other hand, there is a danger that sexual harassment will be overshadowed by the more fluid and expansive notion of "power harassment," which is characterized by the new law as "damaging the work environment" of the victim. It would be a good time to reconsider the unique features and commonalities of sexual harassment and power harassment, so that the discriminatory nature of sexual harassment will be acknowledged more squarely.

VII. Positive (affirmative) action programs

Following the prohibition of discrimination (including indirect discrimination) based on sex (Articles 5, 6, and 7), the EEOA makes “special provisions for measures pertaining to women workers” (Article 8), and states that the prohibitions stipulated in the preceding sections “shall not preclude employers from taking measures in connection with women workers with the purpose of improving circumstances that impede the securing of equal opportunity and treatment between men and women in employment.” This means that while it is possible that taking positive (affirmative) action on behalf of women workers may violate the “prohibition of discrimination on the basis of sex” in a strict sense, it is permissible in some cases since it contributes to the promotion of equality in real terms.¹⁵ However, the Act only stipulates that taking positive (affirmative) action is acceptable, and whether or not to take positive (affirmative) action is left up to employers.

This state of affairs was transformed in 2015 by the enactment of the WAPA, mentioned above at the beginning of this article. It requires private-sector employers who consistently employ more than 300 workers¹⁶ to assess the current situation and analyze issues to be addressed relating to female participation and career advancement in the workplace covering the four required areas (that is, female hiring rate, gender differences in the number of years of continuous employment, condition of working hours, and ratio of female workers in managerial positions), then draw up an action plan, notify it to the Minister of Health, Labor and Welfare, ensure all workers are aware of it, and publicize it (Article 8, Paragraphs 1 through 5). The action plan must establish goals to be achieved and outline specific steps to be taken (Article 8, Paragraph 2), and in particular, “numerical and quantitative” goals must be set for at least one of the four required items listed above (Article 8, Paragraph 3). In addition, separately from the action plan, the employer is required to periodically release information about the status of female participation and career advancement in the workplace, in order to “contribute to women’s career options” (Article 16; the current Article 20 after the 2019 revision).

Because its role as part of an economic strategy was emphasized when it was enacted, opinions on this Act are to some extent divided, with some criticizing it as not being a measure for genuine female empowerment.¹⁷ Also, the specifics of action plans, including numerical goals, are left up to employers, and it is natural to question its effectiveness. However, even as a mild piece of legislation, it is considered a significant step in that it legally mandates employers’ self-assessment and self-improvement actions. Simply prohibiting discrimination cannot immediately negate the results of past inequities, and there remain a wide range of problems that cannot necessarily be attributed to discrimination. Herein lies the significance of positive (affirmative) action, and even if the stance toward measures and their specific content is left up to employers, it is now clear that employers must do something for the betterment of female participation and career advancement. I expect that there will be significant effects over the long term because enterprises will assess their own situations, make improvements, and, by releasing their data, will also be exposed to the gaze of society.

The items which fall under the purview of the Act by the name of “female participation and career advancement in the workplace” relate not only to gender equality but also to more general work-life balance. While the EEOA is concerned with gender equality, work-life balance is also a particularly important factor for women’s work, and when taking positive (affirmative) action, it would be natural to aim for both. With the 2019 revision of the Act and the accompanying revision of the Ministerial Ordinance, this became clearer in that in setting numerical goals and regularly disclosing data as part of action plans, employers are required to select one item each falling under the categories of “provision of opportunities relating to the working lives of women workers” and “maintenance of a work environment that contributes to the balance of working life and family life.”

VIII. Concluding remarks

In this article, I have sought to give an overview of the significant provisions of the EEOA, but as I have engaged in studying American labor law, the possibility of bias toward that perspective cannot be denied. In the United States, Title VII of the Civil Rights Act of 1964, which was enacted to combat racial discrimination, had “sex” added at the final stage as one of the causes of illegal discrimination on a par with race,¹⁸ making it quite a powerful law governing gender-based discrimination. Also, sexual harassment is placed as a form of sex-based discrimination, and so is disadvantageous treatment due to pregnancy and childbirth. One may question to what extent this is relevant to the EEOA in Japan, but at the very least, it seems beneficial to review the Act from the perspective of a more thorough “prohibition of discrimination.”

In this connection, although this article did not touch on it, there are significant issues regarding how remedies for legal violations should be addressed. The EEOA contains provisions for advice, guidance or recommendation from Directors of Prefectural Labor Offices (Article 17), conciliation by Dispute Adjustment Commission (Article 18 and below), and public release of the name of the violating company (Article 30). Still, the law lacks binding force, and ultimately, individual workers must fight civil cases in court on their own. On the other hand, the U.S. has an Equal Employment Opportunity Commission (EEOC) with the authority to bring lawsuits on behalf of victimized workers, and this plays a considerable role in the swift rectification of violations. While this discussion is necessarily a wide-ranging one involving differences in judicial systems, it seems safe to say that a number of measures must be taken to fundamentally strengthen the effectiveness of the EEOA.

At the same time, in Japan, full-time employees are expected to work long hours, and it is still common for women to leave the workforce after the birth of a child, as they take on greater responsibilities such as housework and child rearing.¹⁹ Also, even if women try to find a new job afterwards, under the Japanese employment system which favors long-term employment, many of them become non-regular workers and can only obtain low-level working conditions. In order to address this structural disparity between men and women, not only the EEOA but also measures for work-life balance and flexible work style, including the normalization of working hours, and measures to improve the treatment of non-regular workers need to be further strengthened.

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Notes

1. Hiroya Nakakubo, “Phase III” of the Japanese Equal Employment Opportunity Act, Japan Labor Review vol. 4, no. 3 (Summer 2007): 9.
2. For a brief overview by the author, see Hiroya Nakakubo, *Danjo koyo kikai kinto ho 30 nen no ayumi* [The Equal Employment Opportunity Act: A 30-year history], DIO: Data Information Opinion (Monthly Report edited by Rengo Research Institute for Advancement of Living Standards), no.303 (April 2015): 4–7.
3. The Japan Industrial Relations Research Association’s 2020 Conference on Labor Policy Study, Main Theme Session — “Female Labor from the Perspective of Equality.”
4. See Satoshi Nishitani et al. (ed), *Shin kihon ho kommentar rodo kijyunho rodo keiyaku ho* [New commentary on basic labor laws: Labor Standards Act and Labor Contracts Act], 2nd ed. (Nippon Hyoron sha, 2020), 503 (section written by Koichi Tominaga).
5. While this does not necessarily seem inevitable, Article 9 of the Act on Comprehensive Promotion of Labor Policies and Article 34 of the Act on Employment Promotion etc. of Persons with Disabilities similarly stipulate prohibition of discrimination against disabled persons in the context of recruitment and hiring separately.
6. See the *Nissan Motor Co.* case (Supreme Court (Mar. 24, 1981) 35–2 *Minshu* 300), invalidating sex discrimination regarding mandatory retirement age before the EEOA explicitly outlawed it in 1985. Article 14 (1) of the Constitution provides that there shall be no discrimination in political, economic, or social relations because of race, creed, sex, social status, or family origin. Its spirit was realized through Article 90 of the Civil Code, which says that private legal actions repugnant to public policy are null and void.
7. The *Chugoku Denryoku* case, Hiroshima High Court (Jul. 28, 2013) 2088 *Rokeisoku* 3.

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8. Hideyuki Kobayashi, *Shoko no shushu to wakai ni tsuite* [On collection of evidence and out-of-court settlement], Chuo Rodo Jiho no. 1227 (January 2018): 10, at 15.
 9. *Kihatsu*, Administrative Notification No. 17, issued by the Director of the Labor Standards Inspection Office, September 13, 1947.
 10. In the United States, the Equal Pay Act of 1963 mandating equal pay for men and women stipulates certain justifications for differences in wages, and an adjustment provision (called the Bennett Amendment) was made to carry these over when Title VII of the Civil Rights Act of 1964 was adopted. In contrast, there would be no need to do so in Japan given the very simple provision of Article 4 of the LSA.
 11. Pregnancy Discrimination Act of 1978.
 12. The *Hiroshima Chuo Hoken Seikatsu Kyodo Kumiai* case, Supreme Court (Oct. 23, 2014) 68-8 *Minshu* 1270.
 13. It is not always easy to determine what constitutes an illegal “disadvantage” when working conditions actually change due to pregnancy, childbirth, etc. As an example of a judgment from the viewpoint of public policy, with regard to bonus payment, see the *Toho Gakuen* case, Supreme Court (Dec. 4, 2003) 862 *Rohan* 14.
 14. Labor Measures Comprehensive Promotion Act, Article 30-2. See Fumiko Obata, *The Law to Prevent “Power Harassment” in Japan*, Japan Labor Issues, vol.5, no.28 (January 2021) : 23.
 15. Specifically, when the ratio of women workers in a given employment management category is substantially small (less than 40%), implementation could be feasible. Ministerial Notification No. 614, Oct. 11, 2006.
 16. “Duty to endeavor” in this same regard was also imposed on employers with 300 or less full-time employees, but the 2019 revision of the law makes it mandatory for employers with more than 100 employees, effective April 2022.
 17. One author argues, after analyzing various debates on the legislative process of the WAPA, that the positive (affirmative)-action character of the law should not be neglected. Masumi Minagawa, *Josei katsuyaku suishin ho no seiritsu: ‘Seicho senryaku’ kara ‘pojitibu akushon’ e* [From economic growth strategy to positive (affirmative) action for women: The making of the Women’s Advancement Promotion Act], Japanese Journal of International Society for Gender Studies, no. 14 (2016): 8–31.
 18. See Gillian Thomas, *Because of Sex: One Law, Ten Cases, and Fifty Years That Changed American Women’s Lives at Work* (St. Martin’s Press, 2016).
 19. Hiroya Nakakubo, *Glass Ceiling or Iron Weight?: Challenges for Female Employees on Their Path to Becoming Managers and Executives in Japan*, Hastings International and Comparative Law Review, vol. 32, no. 2 (Jan. 2016): 399.

NAKAKUBO Hiroya

Specially Appointed Professor, Hitotsubashi University.



Gender Inequality in Access to Managerial Positions in Japan from a Cross-National Comparative Perspective: The Role of Labor Markets and Welfare States

TAKENOSHITA Hirohisa

TAGAMI Kota

This paper addresses the cross-national variations in the levels of gender inequality in access to managerial positions and explores the role of state-level institutions generating those differences. More specifically, we adopt the “varieties of capitalism” approach in addressing the questions of how the development of human capital affects the transition to higher-status positions or promotions to managerial positions within an organization, and what kinds of mechanisms produce the gender disparity in the opportunities to develop firm-specific skills. We go on to highlight the “welfare state paradox” and explore how in Nordic countries the typical family and welfare policies aimed at boosting women’s participation in the labor market and supporting their employment are paradoxically precluding women from being promoted to managerial positions. In doing so, we address two factors: firstly, the impacts that the family and welfare policies themselves have on women’s promotions, and secondly, the effects of the expansion of women’s employment in the care-related services of the public sector on women’s promotions. In light of the observations, we investigate the trends in the proportion of women in managerial positions in the US, Europe, Japan and other Asian countries since 2000 based on the data obtained from the International Labour Organization database. Finally, we build on the findings of this cross-national comparative approach to explore the developments regarding the gender gap in promotions to managerial positions in Japan, based on the results of analysis using the data from the 2015 Social Stratification and Social Mobility survey.

- I. Introduction
- II. The role of human capital development
- III. Welfare states and women’s employment
- IV. Trends in the proportion of women in managerial positions in each country since 2000
- V. Gender inequality in promotions to managerial positions in Japan
- VI. Conclusions

I. Introduction

In social stratification research, considerable interest is directed at revealing the unequal distribution of socioeconomic resources by looking at their linkage with social status and the various institutions behind it. The stratification approach to exploring gender inequality in labor markets allows us to adopt various perspectives in our analysis. For instance, while men who are expected to play a breadwinner role will continue working regardless of their family circumstances, women who are expected to do household chores tend to

leave the labor market when they have young children. This leads to the substantial gender gap in labor force participation.

In recent years, many countries see an increase in the employment rates of women and a rise in women's continuous commitments to the labor market, due to family and labor market policies by welfare states and the organizational measures to support combining work and family life. However, this is not to suggest that the increase in the employment rate of women entirely eradicates the inequality between men and women. In the field of social stratification research, the emerging occupational distinction between men and women is referred to as "occupational gender segregation." There are significant gender differences in occupations and work and such differences in occupation lead to considerable discrepancies in subsequent careers, possibility of promotions, and wages (Charles and Grusky 2004; Grusky and Levanon 2006; Jarman et al. 1999).

In Japanese society, on the other hand, the degree of gender occupational segregation is relatively small in comparison with other countries. Nevertheless, the extent of gender inequality may be underestimated if the focus is exclusively on occupation (Shirahase and Ishida 1994). This underestimation, for instance, occurs when it comes to the occupation category *jimushoku*: a clerical and administrative job in an organization. Even if women is employed in this occupational category as well as men, the specific treatment that they receive from their employer differs significantly by gender. In the Japanese organizational setting, the clerical jobs are distinguished between jobs in a career track (*sougoushoku*) and those in a non-career track (*ippanshoku*). As clerical workers in a career track have more training opportunities to develop firm-specific skills in their organization, these workers are more likely to climb up corporate ladders and finally become managers. When clerical workers are hired on a non-career track, they are assigned easier and routine tasks that do not require on-the-job training. These jobs involved little prospects for promotions (Konno 2000). In recent years, enterprises often fill jobs in a non-career track by employing non-regular workers, such as temporary staff dispatched from agencies or employees with the fixed-term contract. This means that while they may belong to the same occupational category, men and women have significantly different prospects for subsequent promotions.

In many advanced countries, the employment rate of women is continuously rising, and, in that sense, gender inequality is diminishing. And yet, in the case of socio-economically high-status positions, gender inequality firmly persists. In contemporary industrial societies, professional or managerial jobs have higher levels of autonomy in their work in comparison with other types of jobs and in turn receive higher wages and job stability from employers (Goldthorpe 2007). Such disparities in access to higher socioeconomic positions form the principal component of gender pay gaps (Mandel 2012; Mandel and Shalev 2009). Likewise, in Japanese society these gender gaps in managerial positions are an area of gender inequality where the levels of disparity are particularly high (Yamaguchi 2017).

This paper addresses the gender inequality in access to managerial positions from the cross-national comparative perspective. We draw on previous research on European countries to discuss the key issues regarding the roles the differing institutions in each country play in forming and maintaining gender inequality in access to authority in an organizational setting. Having done so, we then refer to our own analysis utilizing data from the 2015 Social Stratification and Social Mobility survey (the SSM Survey) to investigate gender inequality in transition into managerial positions in Japanese society.

II. The role of human capital development

Stratification researchers have often addressed the question of how the systems that Japanese enterprises guarantee for regular employees—such as long-term stable employment and seniority-based wages—have formed gender inequality in the labor market. Mary Brinton argues that enterprise-based skills and human capital development systems are decisively important predictors for gender inequality in Japanese society (Brinton 1993).

Drawing on the terms adopted by Gary Becker, this paper uses “general skills” to refer to skills that can be acquired at an external educational institution or from vocational trainings provided by public employment agencies or other institutions, and those skills can be transferred across organizations. Meanwhile, “firm-specific skills” refer to skills that can only be applied at a certain enterprise. As it is difficult to hire workers with firm-specific skills from outside of an organization, a personnel with the relevant skills must be trained internally. Given the costs involved in developing firm-specific skills, if workers leave their employment after a short period of time, the enterprise is no longer able to recoup those costs, rendering internal personnel development inefficient. Namely, to develop firm-specific skills across workers efficiently, enterprises need to deter workers from changing employers and maintain and continue the employment relationships with those workers over a long period of time (Becker 1964). Long-term stable employment, seniority-based wages, and welfare programs provided by employers played significant roles in deterring workers from changing employers and developing long-term employment relationships.

In contrast, employers tend to assign workers, who are likely to leave their employment after a short period of time, to departments and roles that do not require advanced skills, because employers cannot gain the financial returns to human capital investment. If an enterprise determines, based on the gender-based allocation of work and family responsibilities, that women are on average highly likely to leave their employment after a short period of time to become homemakers or raise their children, enterprise will not invest in skill development for women, and instead assign them to more routine tasks not requiring advanced knowledge or expertise (Yamaguchi 2017).

In their approach to cross-national comparative research of human capital development and gender inequality among workers, Estévez-Abe et al. draw on the “varieties of capitalism” theory (Estévez-Abe, Iversen and Soskice 2001; Estévez-Abe 2006). Placing the central focus of analysis on enterprises, the varieties of capitalism theory addresses the differing approaches to fiscal and monetary policy, labor market policy, and skills development between liberal market economies (LMEs)—economies relying on market mechanisms—and coordinated market economies (CMEs)—economies using non-market forms of coordination mechanisms. It also highlights that the approach does not assume one particular type of non-market coordination mechanism but rather that each country assembles a variety of coordination measures (Hall and Soskice 2001).

Estévez-Abe et al. suggest that where there is uncertainty regarding the prospects for the employment in an enterprise or the current work, workers themselves are unlikely to invest in the development of firm-specific skills and industry-specific skills, and likely to actively invest in knowledge and skills that they can also transfer across different organizations or industries. In contrast, where there are high levels of employment protection in the form of strict regulations on dismissal and other such measures developed through government policies and labor-management bargaining, both workers and enterprises feel comfortable to invest in the development of firm- and industry-specific skills, given the assumption that they will maintain a long-term employment relationship (Estévez-Abe, Iversen and Soskice 2001). A long-term employment relationship between the worker and the enterprise is a prerequisite for firm-specific skills because such skills are developed through on-the-job training (OJT). This situation hinders organizations from providing training for women, who are anticipated to have a high rate of turnover due to the greater family responsibility among married women. This means fewer possibilities for enterprise-based training opportunities and promotions for women, creating a significant gender gap in transitions into managerial positions or other such higher-status positions in the enterprise (Estévez-Abe 2006).

In contrast, in countries with LMEs, neither workers nor firms operate on the assumption of a long-term employment relationship, and the emphasis is placed on the development of general skills not specific to a particular enterprise or industry. Schools and other educational institutions are expected to fulfill a significant role in the development of professional skills for workers, and there is less institutional gender inequality in access to education and training in schools. As a result, it seems that there is less gender inequality in LMEs (Estévez-Abe 2006; Estévez-Abe et al. 2001).

III. Welfare states and women's employment

The previous section discussed women's employment from the perspective of human capital development, the employment practices that enterprises adopt to support it, and the state employment policies that complement those practices. In this section, we explore the kinds of impacts that the state-level welfare and family policies have on women's employment and occupational attainments.

Hadas Mandel and her collaborators reveal how the welfare state support for women's employment as typically seen in Nordic countries affects gender inequality in occupational attainments (Mandel and Semyonov 2006; Rosenfeld, Van Buren and Kalleberg 1998; Yaish and Stier 2009). When doing so, it is important to focus on two aspects of welfare states. Firstly, welfare states develop support systems for families with children, providing cash benefits and care services. By taking responsibility for providing care for small children, the state government promotes women's employment, and provides families with the conditions that allow them to combine work and family life. Secondly, to provide direct care services in the public sector, the welfare state employs a large number of women. Looking at the first of these two aspects, the family policies implemented in Nordic countries, which provide universal services for working mothers, have allowed more women with young children to work (Esping-Andersen 1999). And in terms of the second, by employing many women to provide various services to women, welfare states directly generate new employment opportunities.

Both family policies and job creation for women in the public sector have significantly increased women's participation in the labor market. In fact, the rates of women's participation in the labor market are higher in Nordic countries with social democratic regimes, whereby the state universally provides services for citizens, as opposed to liberal countries such as the UK or the US, where the provision of welfare by the state is minimal and residual, and emphasis is placed on the allocation of resources through market mechanisms (Esping-Andersen 1999). In other words, the states in the liberal regime only provide welfare benefits for poor people who cannot gain resources from market.

On the other hand, the family policies that support women's employment do not necessarily encourage the transition of women into managerial positions and other such higher-status positions within an organization. For instance, while paid maternity leave and childcare leave maintain the mother's connection with the labor market and guarantee the mother's right to return to employment, long-term leave may lead women to lose an opportunity to pursue their career and acquire work-related skills. In addition, in Nordic countries, equal treatment for part-time employment and full-time employment is prescribed by law, such that companies are obliged to provide the same employee benefits to workers on shorter working hours as they would to full-time workers, resulting in comparatively fewer disadvantages to working shorter hours. Women with young children therefore tend to choose to work part-time or shorter hours in order to combine work and family life, and consequently lose their opportunities for access to skill development within enterprises (Dämmrich and Blossfeld 2017; Abendroth, Maas and van der Lippe 2013; Mandel and Semyonov 2006).

Such circumstances may hinder employers from assigning women to managerial positions. For employees who are to be promoted to managerial positions, OJT is extremely important, and working reduced hours or taking long periods of leave due to childbirth or raising children may present difficulties for receiving such education and training while working. Employers regard female workers, who have limited opportunities to develop firm-specific skills, as less productive and thereby justify the discriminatory practice against women. Thus, this leads to the possibility of greater gender inequality in occupational attainment (Mandel and Semyonov 2006; Dämmrich and Blossfeld 2017).

The expansion of women's employment in the public sector may also exacerbate occupational gender segregation. The rise in women engaged in providing care-related services may hinder women from progressing into other occupations, such as positions in the private sector. This situation causes women to choose lower-paid jobs providing care and thereby constrain their occupational choices, which in turn may prevent women from achieving a higher socioeconomic status in an organization. The expansion of women's

employment by the welfare state does not thus serve to change the existing gender inequality in labor markets, but rather strengthen women's care roles, which was provided by a woman in a family (Yaish and Stier 2009; Mandel and Semyonov 2006).

The discussion above has primarily focused on the concept that the institutional and structural conditions at a state level place certain limitations on women's possibilities of promotions and consequently generate gender inequality in occupational attainment. Conversely, the institutional and structural conditions addressed thus far may impact upon individual preferences and choices, and lead women to accept gender inequality in family responsibilities. The intersection between macro-level institutions and individual actions reproduces gender inequality in family responsibilities. For instance, the active care provision for infants and preschool children by the welfare state encourages women to return to work after childbirth. However, as the family policies of the welfare state do not cover all housework and childcare responsibilities, women who feel they are responsible for housework and childcare are unable to focus exclusively on their work as would be required to secure a promotion to a managerial position. The care provision for infants and preschool children by the welfare state therefore may encourage women not only to attain higher status or earn more wages but also to take women's roles for family responsibilities while they work. This tendency may be particularly prominent in the societies where it is typical for women to work part-time and the societies in which women's employment in the public sector is common. For women who are less proactive in their career aspirations and do not have ambitions of promotions to managerial positions, preferring to prioritize combining work and family life, employment in the public sector and part-time employment are highly attractive options. Women who do not actively seek promotions to managerial positions select themselves into a labor market sector in which they are able to combine work and family life, thereby further enforcing the "welfare state paradox" that seeks to support women's employment (Yaish and Stier 2009; Dämmrich and Blossfeld 2017; Mandel and Semyonov 2006).

IV. Trends in the proportion of women in managerial positions in each country since 2000

In this section, based on the discussion in the previous sections, we provide an overview of the trends in the proportion of women in managerial positions in each country since 2000 by using the International Labour Organization (ILO) database (Figure 1).¹ The proportion of women in managerial positions refers to the number of women in managerial positions among the total number of men and women in managerial positions. Here "managerial positions" refers to positions that fall under Major Group 1 ("Managers") of the International Standard Classification of Occupations (ISCO-08 or ISCO-88). Figure 1 presents data from those countries recorded on the ILO database that are OECD member countries, with only the major countries highlighted. As the figure shows, while the proportion of women in managerial positions is on the increase overall, the level of increase differs significantly from country to country, apparently influenced by the institutional factors in each country.

In countries with LMEs, such as the US (USA), Canada (CAN), Australia (AUS) and the UK (GBR), the proportion of women in managerial positions are relatively high. The proportion of women in managerial positions as of 2000 was 36% in the US, 36% in Canada, 30% in Australia, and 35% in the UK. These percentages further increased to 41% in the US and 37% in Australia in 2019, showing a continuing shrinkage of gender inequality in managerial positions in recent years. As noted in Section II, both organizations and workers in these LME countries regard the development of general skills as critical and important. As schools provide opportunities for enhancing this type of skills, gender inequality in access to education and training is relatively low. In such cases, personnel evaluations concerning promotions to managerial positions would naturally place greater importance on not only the accumulation of human capital in internal labor markets, but also general skills acquired through external labor markets and educational institutions. Therefore, it is considered that the institutional barriers hampering women's promotions to managerial positions are lower in

LME countries, given that career interruptions or skills development patterns specific to women are less disadvantageous in those countries.

On the other hand, the social democratic CME countries, which have generally succeeded in ensuring high levels of women's labor market participation (the Nordic welfare states), do not necessarily have an extremely high proportion of women in managerial positions in comparison with LME countries. The proportions of women in managerial positions in 2000 in Sweden (SWE) and Denmark (DNK) were 31% and 24%, respectively. They are lower than those of the LME countries for that time. In Finland (FIN) and Norway (NOR), the proportions of women in managerial positions in 2000 were also lower than LME countries (27% and 25%, respectively). This shows that, as argued in previous research, while the social democratic countries in the early 2000s had achieved gender equality in the labor market overall, there was a paradoxical rise in gender inequality in high-status positions. However, in the subsequent 20 years or so, the proportions of women in managerial positions in the three countries excluding Denmark rose by around 10 percentage points. This indicates, at least according to such macro statistics, that the welfare state paradox was being eradicated in more recent years (in 2019, the proportions of women in managerial positions were 40% in Sweden, 27% in Denmark, 37% in Finland, and 35% in Norway).

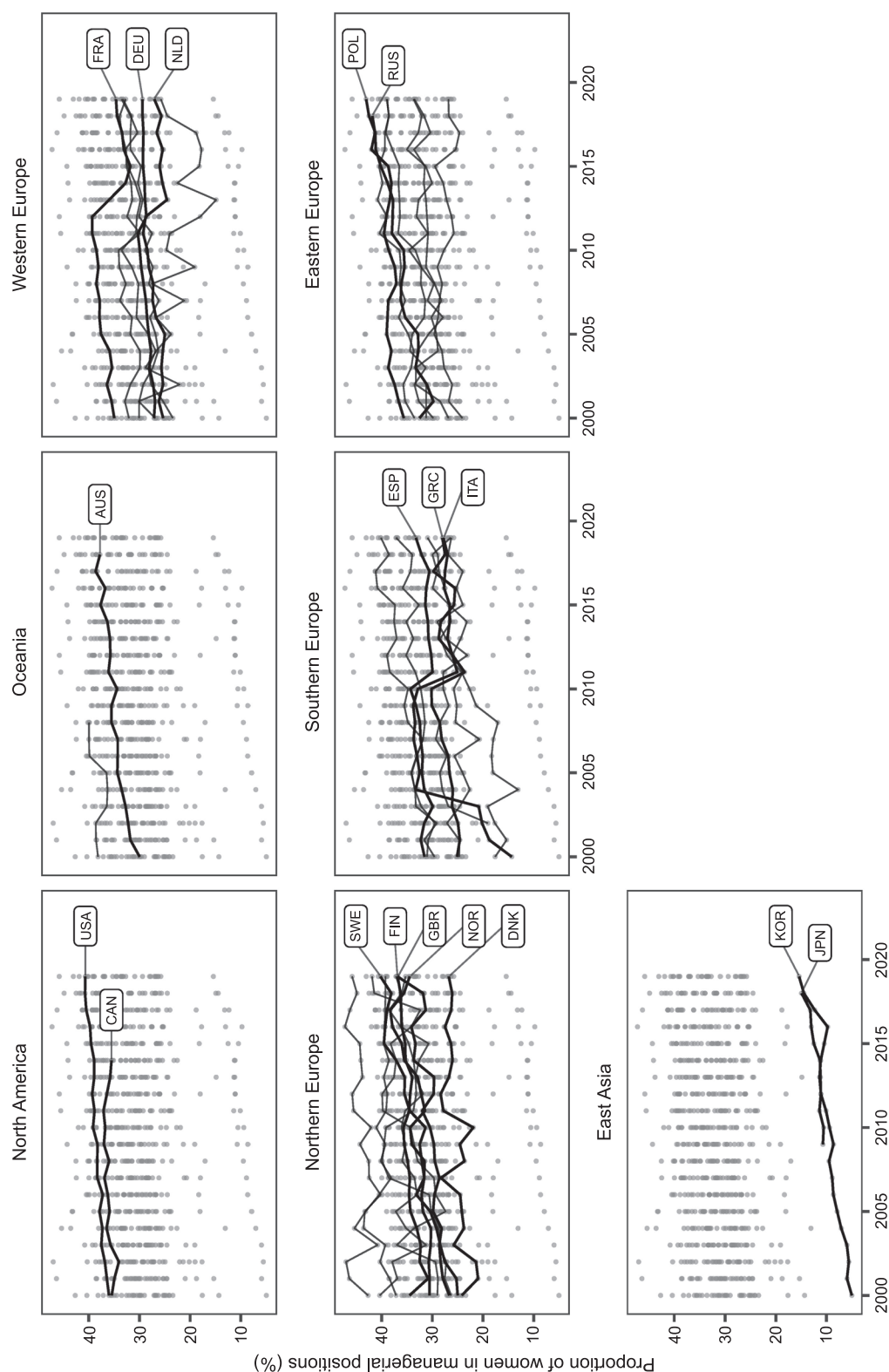
Although each has its own unique institutional regime, the Western European countries such as France (FRA), Germany (DEU), and the Netherlands (NLD) are, as conservative CMEs, broadly characterized by the development of strategic coordination at a smaller scale than a state level (Estévez-Abe, Iversen and Soskice 2001). However, due to the unexpected changes in the trends in these three countries around 2013, which slightly diminish the data's reliability as macro statistics, here we focus exclusively on the trends in Germany, which showed this smallest change.² The proportion of women in managerial positions in Germany increased slightly from 27% in 2000 to 30% in 2011, and declining slightly to 29% in 2012, remained stagnant up until 2019. Comparing Germany with the Nordic countries, which also belong to the CME regimes, there were no significant differences in the early 2000s, but in the subsequent period the trends in Germany diverged, as the rise in the proportion of women in managerial positions remained stagnant. It is reasonable that in the conservative CME countries the disadvantages arising for women due to institutional factors—namely, the emphasis on long-term employment relationships and the accumulation of firm- or industry-specific human capital—have not been eradicated even in recent years.

Kathleen Thelen provides valuable insights in her discussion of the polarization of the trends in the proportion of women in managerial positions in the CME countries (Thelen 2012). Thelen is critical of the dichotomous conceptualization, such as LMEs and CMEs, regarding how the government responds to the employer's practices on personnel management and training. Instead, she advocates the "varieties of liberalization" approach, which highlights the fact that CME regimes have developed differing responses to the pressure of liberalization in the postwar period.

The Nordic countries, where the state plays a key role in the development of strategic coordination, adopt the approach of "flexibilization," which involves promoting liberalization without decreasing the levels of social security and other welfare provision for individuals. For instance, Danish workers change jobs more frequently than Japanese workers because small- and medium-sized enterprises (SMEs) in Denmark hire many workers. Firm-based internal labor markets tend to emerge across large-sized firms, and SMEs usually rely on external labor markets to seek workers with necessary skills. Therefore, policy measures to increase the level of employment protection would not be suited to the greater labor market flexibility in Denmark.

People who become unemployed due to shifts in industrial structure or the firm bankruptcy therefore receive unemployment benefits to protect their livelihoods and are provided by the state with vocational training to support skills development. In adopting such policy measures, Denmark seeks to ensure that labor market flexibility and social security are mutually complementary (Viebrock and Clasen 2009; Estévez-Abe, Iversen and Soskice 2001).

On the other hand, Germany and other continental CME countries adopt the approach of dualization,



Note: Only values for OECD member countries shown. The trends of major countries are highlighted. Country abbreviations are based on the ISO 3166 country codes, and regional divisions are based on UN region codes (<https://github.com/luke/ISO-3166-Countries-with-Regional-Codes>). Here "managerial positions" refers to those professional roles that fall under Major Group 1 ("Managers") of the International Standard Classification of Occupations (ISCO-08 or ISCO-88).
Source: International Labour Organization. "SDG indicator 5.5.2 - Proportion of women in managerial positions (%) Annual." ILOSTAT database, <https://ilostat.ilo.org/data/>. Retrieved on September 3, 2020.

Figure 1. Trends in the proportion of women in managerial positions in OECD countries (2000 onward)

within the state dividing the relevant fields into typical CME fields (the development of firm-specific skills on the assumption of strong employment protection) and the LME fields (a lack of employment protection, and difficulty accessing skills development by companies). While such dualization may take on various forms, it typically manifests as the strategy of attempting to generate the flexibility in the labor market required for capitalism and market mechanisms by maintaining strong employment protection for regular employees in exchange for considerably increase in non-regular workers which are highly flexible employment arrangements (Thelen 2012). Such an approach can be prominently observed not only in continental CME countries, but also in Japan.

The labor market in Japan has become broadly polarized between regular employment, which is based on strong employment security guaranteed by enterprises, and non-regular employment, with less employment security and limited opportunities for skills development (Sato 2009). This polarization between regular and non-regular employment overlaps with gender inequality, and has manifested itself as prominent gender gaps, such as a markedly high percentage of women in non-regular employment in comparison with men. Once mothers of infants and preschool children leave the regular employment sector to become homemakers or raise their children, they face difficulty returning to the regular employment sector and are incorporated into the non-regular employment sector. While part-time workers and other non-regular employees may find it easy to combine work and family life, these workers scarcely obtain opportunities for skill development by companies, thereby posing obstacles for them in pursuing a professional career and in transitioning into a higher-status position or being promoted to a managerial position (Yamaguchi 2017). Figure 1 also shows that the proportions of women in managerial positions in Japan and South Korea are distinctively low, even in comparison with Nordic countries and continental European countries which have relatively lower proportions of women in managerial positions than liberal countries. Despite a gradual increase in recent years, the proportion of women in managerial positions in Japan was 15% in 2018—not even close to the 29% in Germany. The polarization between CME-style regular employment and LME-style non-regular employment, which Japan has adopted as its strategy to generate flexibility in employment, overlaps with overall gender inequality in labor markets. The female concentration into non-regular employment also generates a lower share of women in managerial positions.

In conventional welfare state theory and varieties of capitalism theory, Southern European countries are often treated as the residual category. While the proportions of women in managerial positions in Greece (GRC) and Spain (ESP) have seen an unexpected change from 2010 to 2011, their overall trends are similar to those of Western European and Northern European countries. For instance, the proportion of women in managerial positions in Greece has risen slightly from 25% in 2000 to 28% in 2019, and this pattern is highly similar to that of Germany. Likewise, while the proportion of women in managerial positions in Spain for the same period rose by only one percentage point, for 2000 the value was 32%, a higher percentage than those of the major CME countries, and in 2019 was also the same level as Germany and other continental CME countries. Moreover, the proportion of women in managerial positions in Italy (ITA) was rather low at 14% in 2000, but had risen to 28%, the same level as Germany, in 2019, and, excluding the changes from 2003 to 2004 and from 2010 to 2011, has been increasing at a comparable pace to those of Northern and Western European countries. These Southern European countries have typically been categorized as the familiaristic welfare regime that expect women to play a prominent role in providing care for other family members (Andersen 1999; 2016). Such circumstances suppress the employment rates of women, and the proportions of women in managerial positions are typically expected to be at low levels as well. However, in recent years the gap between the continental European countries and the Southern European countries is diminishing, and it is necessary to further investigate what kinds of changes are being brought about in employment and family policies and companies' employment practices.³

V. Gender inequality in promotions to managerial positions in Japan

1. Promotions to managerial positions for men: Application of the status attainment model

Based on the previous discussion, we investigate gender inequality in promotions to managerial positions in Japan, using the 2015 SSM Survey. Takenoshita (2018b) applied the status attainment model to explore the heterogeneous nature of the process of promotions to managerial positions for men. The analysis was conducted separately by firm size, because of the large disparity in work conditions between large- and small-sized firms in Japan. In addition, we focus on the role of university education in shaping promotion chances in a greater detail because we see the continued educational expansion in higher education which may increase its heterogeneity in labor market outcomes. To do so, we divide the university graduates into those the graduates of prestigious universities and those of other universities.

Through the statistical analyses, we found that family background and educational attainment played significant roles in shaping the transition into a managerial position in the large firm sector. Those whose father was a professional or a manager were more likely to become a manager in the large-sized firm than those whose father was a farmer.

We see the significant disparity in becoming a manager in large-sized firms between those whose father was a professional or a manager and those whose father was a farmer. Meanwhile, an opportunity in access to managerial positions in SMEs (small and medium sized enterprises) did not differ by class of origin, after controlling for educational attainment.

Turning to the impact of educational attainment, while in large firms there was a significant disparity among university graduates in terms of the tendency toward promotions to managerial positions between those who graduated from prestigious universities and those who graduated from other universities, such a pattern was not observed in the case of SMEs. Looking also at the connections between careers in the labor market and promotions to managerial positions, while in large-sized enterprises a pattern was observed that vividly reflected internal promotions through education and training within the organization, in the case of SMEs there was no indication that not entering employment with an enterprise directly after graduation or changing employers in mid-career presents a disadvantage in promotions to managerial positions. This indicates that men employed by large-sized enterprises are subject to unequal treatment due to social class of origin and educational attainment in terms of access to stable employment security for which there is an emphasis on the development of firm-specific skills and access to employment opportunities at CME-type large-sized enterprises. In the case of SMEs, the considerable mobility in the labor market is notably observed, given factors such as the lack of disadvantages that changing employers presents with regard to promotions to managerial positions, and the high dependency on external labor markets for procuring human resources. And there is little inequality in promotions to managerial positions that stems from social class of origin or educational attainment.

2. Decomposition of gender gap in the process of promotions: Application of event history analysis combined with DFL decomposition method

Takenoshita (2018a) goes on to explore the gender inequality in the process of promotions to managerial positions. This analysis was conducted by combining event history analysis,⁴ an approach frequently adopted in the analysis of careers, with the Dinardo-Fortin-Lemieux (DFL) decomposition (DiNardo, Fortin and Lemieux 1996; Fortin, Firpo and Lemieux 2011; Lemieux 2006).

(1) Detailed procedures of the statistical analyses

More specifically, these approaches were applied to investigate whether the gender gap in promotions to managerial positions arises as a result of the differences between men and women in the distribution of independent variables (composition effects), or the differences between men and women in the coefficients, that is the effects exerted by the independent variables upon the dependent variables (coefficient effects).

$$\log \frac{p_{it}}{1-p_{it}} = b_0 + \sum_k x_{kit} \quad (1)$$

Equation 1 indicates the discrete-time logit model, one of the most well-known methods in event history analysis. p_{it} denotes the hazard rate in which an event occurs at a given time t across individuals, as denoted by i . To capture whether the gender inequality in managerial positions is attributable to the gender differences in the distribution of independent variables, we conducted the discrete-time logit model separately by gender, and estimated the gender gap in the hazard rates of transition into managerial positions among male and female samples, based on the Equation 2.

$$\delta = P(y = 1 | g = 0) - P(y = 1 | g = 1) \quad (2)$$

This equation contains the two terms: the female average hazard rate and the male average hazard rate. If $\delta > 0$, men have significant advantages in transition into managerial positions. When calculating δ , we used the counterfactual weights in which men and women have the same distribution of independent variables. We can estimate the counterfactual weights by using the logit model for the probability of women relative to men. This logit model includes several independent variables for predicting this outcome. Based on this model, we estimated the probability that an individual i is women, P_i , which is also used to estimate the counterfactual weight as Equation 3.

$$\omega_i = \frac{1-p_i}{p_i} \quad (3)$$

We calculated the difference in δ s between the model with counterfactual weights used (δ_ω) and that without using these weights (δ_0) in Equation 4. If δ_ω declined substantially relative to δ_0 , we can conclude that gender inequality in transition into managerial positions is attributable to gender inequality in the distribution of independent variables.

$$\gamma = \frac{\delta_0 - \delta_\omega}{\delta_0} \quad (4)$$

Conversely, we also used the method of doubly robust estimator to identify the contribution of the coefficient effects to shaping gender inequality in managerial positions, as shown below (Morgan and Winship 2015).

$$\log \frac{p_{it}}{1-p_{it}} = b_0 + b_1 Z + b_2 X + b_3 ZX \quad (5)$$

In this equation, X represents gender, and Z denotes a given covariate whose effect is assumed to differ between men and women. We estimate these coefficients with the counterfactual weights added to this logit model.

For these statistical analyses, we used the data derived from the 2015 SSM survey. This data has some strength in capturing the trajectories of life courses across individuals. A unit of observations is a spell rather than individuals. We started observing individuals who began working after completion of full-time schooling and explored whether or not they shifted to managerial positions until they reached 64 years of age. The number of individuals used in this study was 5,627, and the number of spells finally became 101,594.

(2) Hypotheses

The analysis addresses the following four hypotheses. Firstly, gender inequality in managerial positions arises due to differences in distribution of educational attainment between men and women (H1). That is, women are at a disadvantage when it comes to promotions to managerial positions due to their lower educational backgrounds in comparison with men. Secondly, gender inequality in managerial positions arises because more women experience non-regular employment or leave the labor market (H2). These two hypotheses are tested, using the DFL decomposition technique as specified above.

Thirdly, the gender inequality in managerial positions is attributable to the differences in the effect of

educational attainment on promotion chances (H3). As Takenoshita (2018b) argued, there are discrepancies in the opportunities for promotions to managerial positions among male university graduates—namely, those who graduated from prestigious universities had greater opportunity to enjoy more favorable conditions for promotions to managerial positions than those who graduated from other universities. In contrast, in the case of women, even those who graduated from prestigious universities may not have a significantly higher likelihood of promotions to managerial positions in comparison with those who graduated from other universities or those with different educational backgrounds. As discussed above, employers do not regard female workers as core workers regardless of their educational background and exclude women from the opportunities to develop firm-specific skills because women tend to quit a job due to their greater family responsibilities.

Finally, gender inequality in promotion chances arises because of the difference between men and women in the effect of firm size on promotions (H4). It is conceivable that male workers in large-sized firms have more opportunities for promotions because large-sized organizations are able to guarantee stable employment and opportunities for skill development, and because they tend to have more managerial posts given the greater scale of their organizations. However, in large-sized firms in Japan, some women, even regular workers, have been hired as clerical workers in a non-career track. This type of job assignment is specific to female workers in Japan. As jobs in a non-career track are assigned more routine tasks not requiring some experience and training, women in this type of track face difficulties accessing the OJT opportunities necessary for promotions to managerial positions (Konno 2000). It is therefore anticipated that large-sized organizations see considerable gender gaps in promotions given their strong tendency to establish different forms of employment for men and women. In contrast, SMEs, due to their small scale, are less likely to differentiate or divide workers into several employment categories, such that a worker may be expected to carry out various tasks. It is therefore difficult for such enterprises to assign routine tasks to female employees. The labor market for SMEs is thus characterized by high mobility, and such enterprises rely to a certain extent on the external labor market to obtain human resources and assign roles, such as hiring workers seeking to change employers from outside of the organization. The gap in likelihood of promotions for women between large-sized and small-sized firms is therefore smaller than its male counterpart.

(3) Results of the statistical analyses

We found the following results when testing the hypotheses specified above. Table 1 presents the results of the composition effects as formulated above. An average hazard rate of male workers to become managers is roughly six times larger than its female counterpart when we did not apply any counterfactual weights to the data set. In Model 1, we used the counterfactual weights so that we could make the distribution of family background almost the same between men and women. The δ in Model 1 shows that there was almost no change in gender disparity in promotion chances. Even after adding educational attainment to Model 1, we saw the negligible difference in δ between Model 2 and Model 1. It means that gender gap in promotions cannot be attributed to the difference in the distribution of educational attainment between men and women.

To test the second hypothesis, we added the labor market positions to the model of the DFL decomposition. The results of Model 3 indicated that less than 10 percent of gender gap in promotions is attributable to the

Table 1. The result estimated by the DFL decomposition method

	Women	Men	δ	$\gamma \times 100$
Samples	0.0022	0.0145	0.0122	
Model 1	0.0022	0.0145	0.0122	-0.09
Model 2	0.0023	0.0145	0.0122	0.48
Model 3	0.0034	0.0145	0.0111	9.38
Model 4	0.0034	0.0145	0.0111	9.10

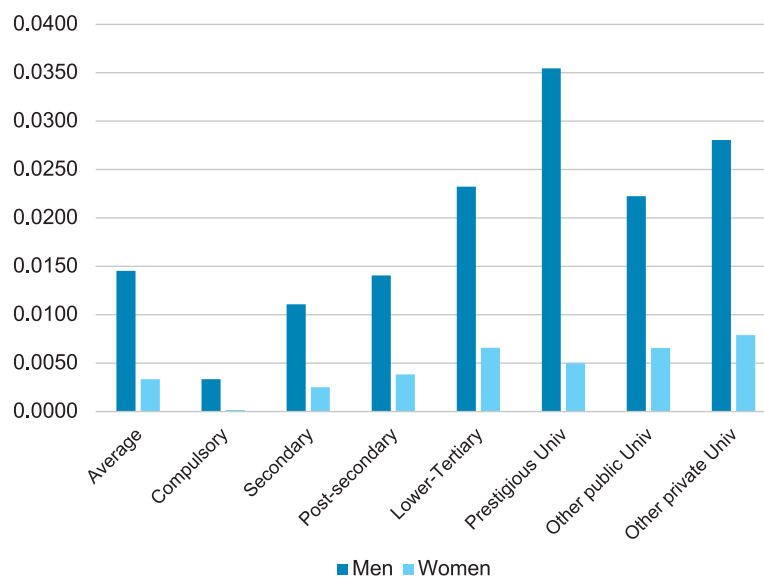


Figure 2. Predicted hazard rates of transition into managerial positions (by gender and educational background)

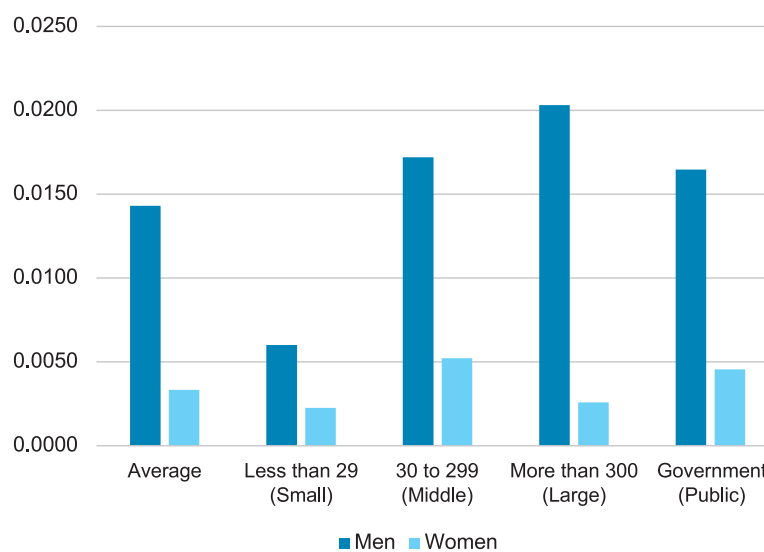


Figure 3. Predicted hazard rates of transition into managerial positions (by gender and firm size)

difference in the distribution of labor market positions. This result seems consistent with the prediction of H2. Finally, when we added family situations to the DFL decomposition model, we did not find any substantial change in gender disparity in promotions.

When comparing the distribution of labor market positions between men and women, 27 percent of cases among women are in non-standard employment, whereas only 6 percent of cases among men are in this employment category. The distribution of experience of unemployment or inactivity in a labor force shows the similar trend. 38 percent of cases among women has experience of unemployment or inactivity over their life course, while only 6 percent of cases among men has this experience. The result suggests that the female concentration into the precarious status in the labor market explains less than 10 percent of gender inequality

in promotions.

Next, we look at the results about the gender disparity in the effects of education and firm size on promotion chances, which were estimated by the doubly robust estimator. We found that the effects of education and firm size on promotion significantly differed between men and women. Figure 2 presents the predicted hazard rate of promotions for men and women by an educational level, based on the results from a discrete-time logit model. This result also applied the counterfactual situation in which women had the same distribution of educational attainment as men did. As for men, the graduates of prestigious universities had significantly greater advantages in promotions than graduates of other universities. But, as for women, we did not find any significant difference in promotions between graduates of secondary schooling and those of prestigious universities. It is also noted that the promotion opportunity among female university graduates was absolutely lower than male graduates of secondary schooling. Hence, female graduates of selective institutions did not have significant advantages in promotions as compared to men with the same educational level.

We also found the similar patterns of the association between firm size and promotions by gender (Figure 3). Male workers in the large firm sector were more likely to become promoted than those in the small firm sector. Meanwhile, there was no significant difference in promotion chances between female workers in the large-sized firms and those in the small-sized firms. In other words, female workers in a large firm did not gain a significant advantage in promotions as male workers did.

The results of female disadvantage in promotions in Japan are overall consistent with our previous discussion in this paper concerning how the formation of gender inequality depends on the institutional settings of labor market. The Japanese labor market has provided its core workers with stable employment and opportunities for developing firm-specific skills. Employment policies implemented by the Japanese government have also played a complementary role in maintaining this skill development system. However, the practice of long-term employment at a certain enterprise and the expectations toward such workers have excluded women who are responsible for housework and raising children from access to the skill development provided by organizations. It has consequently become difficult for women to secure higher-status positions—that is, promotions to managerial positions—within enterprises. This trend is prominent across the female workers in the large-sized firms, in which some female workers are distinctively employed on a non-career track. The results of our analyses support such arguments.

VI. Conclusions

This paper has investigated gender inequality in promotion chances from the institutional perspective, based on the cross-national comparison. We focus specifically on the role of human capital development and welfare state policies. We utilized macro-level statistical data from the ILO to create an overview of the differences across several industrialized countries, including Japan. Finally, we drew on the empirical results to explore the roles of institutions in gender inequality in promotions to managerial positions in Japan, using the individual data set.

This paper also addressed the significant influence of institutional factors in each country on the trends in the proportions of women in managerial positions. Of those institutional aspects, skill development systems, labor market coordination between employers and employees, family policies by welfare states, and the pattern of liberalization in recent years are particularly relevant. However, not all of the international trends in the proportions of women in managerial positions can be explained with the institutional perspectives as formulated in this article. Although we did not address other topics in detail in this paper, several countries that are classified as the same type of institutional regime display their different trends. For instance, Denmark and Sweden, the UK and the US, Germany and France, among others, are classified as belonging to the same typology of the welfare regime, but these countries differ on various other aspects. The changes and trends in the Southern European countries in recent years are also an indication that the conventional arguments are not

sufficiently all-encompassing explanations of gender inequality in promotions to managerial positions. Future research to review the theoretical framework needs to take into account institutional aspects other than those of Western and Northern European or Anglo-Saxon countries.

The majority of cross-national comparative research of gaps, inequality, labor, employment and other such topics to date has generally sought to establish theories by drawing on examples from English-speaking countries such as the US and the UK, continental European countries such as Germany and France, and Nordic countries such as Sweden. In the future, it will be necessary to further explore the different theoretical perspectives, from which we can develop different concepts or insights when we focus on Japan and other Asian countries.

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Notes

1. Refer to the additional online materials for more detailed comparison of the trends in each country. <https://www.jil.go.jp/institute/zassi/backnumber/2020/12/hosoku.html>.
2. In France, the proportion of women in managerial positions rose from 35% in 2000 to 39% in 2012 but experienced a non-incremental decline to 33% in 2014, and was subsequently 35% in 2019. The proportion of women in managerial positions in the Netherlands rose slightly from 25% in 2000 to 29% in 2012, experienced a slight non-incremental decline to 25% in 2013 and was subsequently 27% in 2019.
3. From the perspective of international comparison, it is also necessary to address former socialist Eastern European countries, which are classified as periphery countries, in exploring gender inequality in the labor market in light of institutional theory. See Nölke and Vliegenthart (2009) and Lane and Myant (2007) for unique observations on Eastern European countries.
4. In order to capture the career movements across individuals, the units of observation were job spells rather than individuals. I constructed person-year files using complete work histories. On the basis of such data, coefficients were estimated using the discrete-time logit model.

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TAKENOSHITA Hirohisa

Professor, Keio University.



TAGAMI Kota

Researcher, The Japan Institute for Labour Policy and Training. Doctoral program in Keio University (at the time of writing).

<https://www.jil.go.jp/english/profile/tagami.html>



Cooperation for Problem-Solving: The History of Quality Circles in Japan

OGAWA Shinichi

This article aims to review the history of small group activities (quality circles, QCs) at Japanese enterprises, thereby identifying factors that have enabled small group activities to be sustained in Japan for a long period of time. In this article the term “small group activities,” or “quality circles” (QCs) refers to continuous activities by groups composed of a small number of members belonging to the same workplace, with the goal of solving problems in operations. QCs, originated from quality control among manufacturing industry in Japan in the early 1960s under the name “QC Circles.” They became widespread from the latter half of the 1960s, and also attracted attention abroad in the 1980s, when they experienced their heyday. Despite a decline in their implementation rate from the 1990s on, quite a few enterprises continue to employ QCs as of 2020. QCs are not simply circles (small groups) of people working together, but are implemented using standardized and simplified problem-solving tools and procedures that render problem-solving process visible, promoting information sharing among rank-and-file members and enabling them to refer to case studies of good practices at other enterprises and in other industries. There are several means for improvement of propagation and promotion of QCs at a nationwide level, such as specialized journals and books, training programs in competencies required for QCs provided by enterprises and promotional organizations, and in-house and external conferences for presentations. Not only promotional organizations but also cooperation among enterprises through branches in various regions of Japan have contributed to popularization, information exchange, and development of new methods. It can be said that a wide variety of mechanisms have been used to sustain QCs.

- I. Introduction
- II. What are QCs?
- III. Growth, decline, and evolution of QCs
- IV. Candid feature articles on QCs in specialized journals
- V. QCs and new quality improvement programs
- VI. Mechanisms underpinning QCs
- VII. Conclusion

I. Introduction

This article aims to review the history of small group activities (quality circles, QCs) at Japanese enterprises, thereby identifying factors that have enabled small group activities to be sustained in Japan for a long period of time. In this article, the term “small group activities,” or “quality circles” (QCs) refers to continuous activities by groups composed of a small number of members belonging to the same workplace, with the goal of solving problems in duties. It encompasses the activities known as QC (Quality Control) Circles, Zero Defects (ZD) programs (see note 5), and self-management activities. Therefore, the focus of this paper is not on small groups in general (Homans [1992] 2018), but specifically on small group activities in the above sense, regardless of its formality.

QCs, which emerged in Japan in 1962, gained widespread popularity mainly among manufacturing workplaces, and drew attention both in Japan and overseas in the 1970s and the 1980s, as did other aspects of Japanese-style management. During this era, economic conditions in Japan were among the best in developed countries, and the international competitiveness of Japanese products was high. Undergirding this international competitiveness were Japanese production systems (Fujimoto 2003; Nakamura 1996) as embodied by the Toyota Production System and Japanese management as represented by the “three sacred treasures” (lifetime employment, seniority-based wage increases and promotions, and in-house labor unions), and QCs involving skilled workers on-site also drew attention.

QCs drew attention, for one thing, because the high quality of Japanese products was thought to be achieved by “building in quality” through these QCs (Udagawa et al. 1995). Another, partly because they were seen as carrying out measures through integration of planning and execution, which diametrically opposed to the dominant labor management paradigm in Western countries at that time (separation of planning from execution), in which skilled workers on-site concentrated on manufacturing operations while work method formulation and improvement was entrusted to in-house specialists (Nitta 1977).¹

It has been pointed out that QCs have not only direct effects on improvement of operations, but also indirect effects such as improvements in interpersonal relations, problem recognition and competency in operations, leadership ability, and sense of accomplishment (Nitta 1988, 29–80). At the time alienation of the labor force because of monotonous work, such as separation of planning and execution, was regarded as a social issue in various countries, and solutions were being sought. QCs, in which skilled workers on-site are involved in solving operational problems, were also regarded as a case in overcoming alienation of the labor force (The Ohara Institute for Social Research, Hosei University 1986).

Thus, while QCs are understood as one of the mechanisms underlying Japanese production systems and the high skill of workers, there are also skeptical views of their effectiveness. These skeptical views are related in part to the positioning of QCs as an activity in which skilled workers work “voluntarily” outside of routine operations.

One view holds that the high skill level of skilled workers is realized through routine operations, rather than QCs (Koike 1991, 67–68), and another that crucial improvements are made not by skilled workers but by specialist technicians and supervisors addressing routine operations (Nomura 1993, 121–127). In addition, there are observation reports on the reduction of QCs to mere formalities (Ihara 2003, 64–88; Ōno 2003, 120–126), and that QCs are used to promote meritocratic intensification of labor among skilled workers in the name of “autonomous” activities (Kumazawa 1980a, 1980b).

Even if we accept these skeptical views, they do not explain why QCs have been deployed in Japan for so long and are still implemented at many enterprises to be implemented even in 2020. Therefore, in this paper, we look back on the history of QCs in Japan and examine the reasons for their longevity, from the vantage point of the mechanisms underpinning these QCs.

II. What are QCs?

QCs, in the sense described in the previous section, originated with QC Circle activities recommended by the Union of Japanese Scientists and Engineers (JUSE) in 1962. “QC” in “QC Circle” is an acronym for “quality control,” and as this suggests, QCs are rooted in that field. Statistical quality control based on the methods of statistical science were introduced into Japan in earnest after World War II. Since then JUSE, together with several other organizations, has promoted the adoption of quality control through various approaches such as training and publications.

As the use of quality control methods progressed at manufacturing sites, site supervisors called for publication of easily understandable magazines in addition to specialized journals for engineers.² In response to this, publication of the monthly magazine *Gemba to QC* (*gemba* meaning “site”) commenced in 1962. QC Circles were conceived as supervisor-led sessions where skilled workers studied quality control using the magazine (Nonaka 1990). The magazine was later renamed *FQC* and then *QC Circle*, and as of 2020 continues to be published as a specialized journal covering QCs, with a monthly circulation of 16,000. Also, JUSE established a QC Circle Headquarters and launched a QC Circle Headquarters Registration System at various companies. This registration system transitioned to an online system in 2006.

QCs are positioned as one element of Total Quality Control (TQC) or Company-Wide Quality Control (CWQC) involving all employees in all divisions, which has been widespread in Japan since the 1960s (Ishikawa 1984; Kogure 1988). In the 1980s, influenced by Japanese TQC, the term TQM (Total Quality Management) came to be used in the United States. TQM extends the scope of management beyond quality of products and services to areas of management quality such as customer satisfaction and employee satisfaction. In Japan, the term TQM has been commonly used in place of TQC since the 1990s (TQM Committee 1998).

Kaizen is a Japanese word referring to continuous, step-by-step improvements that solve operational problems (Imai 1988). While QCs are counted as one *kaizen* approach, they are not synonymous with *kaizen*, which is a broader term encompassing the 3S (*seiri, seiton, seiso* – sometimes translated as “Sort, Set in order, Shine”) and 5S (*seiri, seiton, seiso, seiketsu, shitsuke* – 3S with the addition of “Standardize” and “Sustain”) and other improvements carried out individually by personnel in charge.

III. Growth, decline, and evolution of QCs

1. Implementation rates of QCs as seen in the “Survey on Labour-Management Communications”

QCs were widely adopted in the late 1960s, and in the 1980s they were the subject of international attention, making it appear that they were in their heyday. Table 1 shows the implementation status of QCs at business establishments from 1972 to 2004 by size of enterprise, based on the Ministry of Health, Labour and Welfare (formerly the Ministry of Labour) “Survey on Labour-Management Communications.” Simple one-to-one comparisons cannot be made across time as a whole because the category of sizes of enterprises surveyed differ. However, changes in implementation status can be tracked for sizes of enterprises that can be compared from 1977 onward.

First, it is notable that “5,000 or more” (83.7%) and “1,000–4,999” (74.8%) had the highest implementation rates in 1984, while the highest implementation rates in 1989 were for “300–999” (53.6%) and “100–299” (49.2%). It is evident that QCs in Japan were most actively implemented in the 1980s. This situation, in which QCs reached their peak in the 1980s, applies not only to Japan but also overseas (Cole 1999).

W. Edward Deming, who was among those who introduced quality control to postwar Japan and was the namesake of the Deming Prize, became widely known in the United States when the NBC (National Broadcasting Company) TV program “If Japan Can, Why Can't We?” was aired in 1979.³

In the 1990s and after, the popularity of QCs had passed its peak and the implementation rate declined. Due to the impact of Japan's long-term recession, praise for Japanese-style management seen overseas as well as

domestically in the 1980s waned in the 1990s, and this was accompanied by a trend toward rethinking Japanese-style management, with which the decline in the implementation rate of QCs is evidently aligned.⁴ However, in Table 1 it can be seen that quite a few business establishments were still implementing QCs as of 2004. The implementation rates for that year were: “5,000 or more” at 42.8%, “1,000–4,999” at 55.9%, “300–999” at 35.2%, “100–299” at 33.7%, “50–99” at 25.7%, and “30–49 people” at 10.9%.

As with other practices characteristic of Japanese-style management, the larger the enterprise, the higher the implementation rate of QCs in any survey year. After 2004 the question about implementation rate of QCs was removed from the “Survey on Labour-Management Communications,” so it is not possible to obtain clear data for these years. Nevertheless, as of this writing in 2020, many enterprises are still implementing QCs.

2. Changes in QCs at enterprises: Toshiba Yanagi-cho Factory as a case study

Next, based on my paper (Ogawa 2005), I will look at the change in QCs over the same period as Table 1 as seen in an enterprise case study. The case in question is that of QCs at the Toshiba Yanagi-cho Factory. Toshiba is among the enterprises that introduced quality control activities soon after World War II. The Yanagi-cho Factory primarily produced power meters and household appliances, but it later changed its name and then closed in 2005. This one factory is symbolic of the rise and fall of the entire Japanese electrical equipment and appliance industry.

The factory introduced ZD (Zero Defect) activities⁵ in 1965 as a means of introducing improvement proposals, and then launched “Wide ZD Activities” focusing on small group activities in 1970. The name was changed to “WZD Activities” in 1975, and these activities continued until QCs as defined in this paper were eliminated throughout Toshiba in 1998. Since 1998, Six Sigma (explained later in this paper), a quality improvement program originating in the US, was introduced as part of the company’s management reform efforts.

Table 2 summarizes changes in the number of types of methods used per presenting circle in the Conference Proceedings of in-house presentations at the factory on Wide ZD Activities and WZD Activities. In QCs, simple and standardized tools and procedures are used to solve problems. The average number of methods used per presenting circle was calculated at intervals of approximately five years (or four years, only in the case of 1995–98). By examining increases or decreases, it is possible to measure how widespread given methods were at the level of circles at the site. In addition, by calculating the coefficient of variation (= standard deviation / average), it becomes possible to understand how much standardized the guidance on the

Table 1. Implementation status of QCs at business establishments (by size of enterprise)

(Unit: %)

Year	Total for all enterprise sizes	1,000 employees or more		300–999 employees		100–299 employees	50–99 employees	30–49 employees
		5,000 employees or more	1,000–4,999 employees	500–999 employees	300–499 employees			
1972	39.7		69.4	55.4	43.5	35.8	—	—
1977	40.4	58.2	48.8		38.4	31.0	—	—
1984	60.2	83.7	74.8		53.0	49.0	—	—
1989	52.1	76.0	64.2		53.6	49.2	39.9	—
1994	47.9	69.6	60.8		51.4	41.3	39.3	—
1999	39.5	63.3	53.4		44.5	42.4	30.8	20.4
2004	30.9	42.8	55.9		35.2	33.7	25.7	10.9

Source: Ministry of Health, Labour and Welfare (prior to 1999, Ministry of Labour) annual “Survey on Labour-Management Communications.”

Note: “—” indicates categories outside the scope of the survey.

Table 2. Changes in the number of types of methods used per presenting circle at in-house presentations at factories (1970–98)

Fiscal year	70–74	75–79	80–84	85–89	90–94	95–98	70–98
N	25	32	54	56	54	48	269
Average	0.40	0.53	1.54	2.50	4.11	4.00	2.47
Standard deviation	0.69	0.83	1.37	1.48	1.47	1.35	1.92
Coefficient of variation	1.732	1.560	0.892	0.591	0.359	0.339	0.779

Source: Prepared by the author based on the *WZD Conference Proceedings* for each edition of the Toshiba Yanagi-cho Factory Wide ZD Presentation Conferences.

Notes: 1. Presentation Conferences for which the contents of presentations are unknown are excluded from the data.
 2. The methods covered are the Seven QC Tools (cause-and-effect diagram, Pareto chart, graphical tools [excluding line graphs], histograms, line graphs, check sheets, scatter diagrams, control charts), the New Seven QC Tools (relation diagram, tree diagram, matrix data analysis, process decision program charts), radar charts, Taguchi methods, and FMEA/FTA.
 3. The values of average and standard deviation in the table are rounded off, and the values of coefficient of variation are calculated based on the original values of average and standard deviation, not on their values rounded off in the table. Therefore, the values of coefficient of variation do not match with those calculated based on average and standard deviation in the table.

method utilization for the factory as a whole was. There are 13 methods covered.

The average number of types of methods used continued to increase from fiscal year 1970–74 (0.40 types) to fiscal year 1990–94 (4.11 types). Although the number of types during 1995–98 (4.00 types) fell slightly from the preceding 1990–94 period, it is valid to say that the average continued to increase from fiscal year 1970 to 1998. Therefore, the data shows that at the Yanagi-cho Factory, the use and understanding of methods permeated to the level of circles, that is, to the employees on-site who were members of circles.

The coefficient of variation of the number of types of methods used consistently decreased from fiscal year 1970–74 (1.732) to fiscal year 1995–98 (0.339). This suggests that at the factory, guidance on use of these methods provided to on-site employees who are circle members became increasingly standardized. In other words, it can be said that the framework of guidance was strengthened, such as through development of education and training systems for the entire factory, rather than leaving responsibility for activities to circles or to their direct supervisors.

Targets of improvement covered by the factory's QCs become more multifaceted year by year, though those topics are not detailed in this paper. QCs originated with quality control, and "ZD" is short for Zero Defects, indicating that in the early 1970s the target area of improvement was primarily defect reduction. While defect reduction has remained a central theme since the latter half of the 1970s, a significant percentage of circles making presentations dealt with themes of man-hours reduction, productivity improvement, skill education, cost reduction, and standardization. This illustrates the ways in which QCs had expanded beyond quality control to a wide range of activities aimed at *kaizen* for duties by the 1980s.

In the 1990s, an increasing number of circles aimed to establish and standardize management in routine operations, rather than carrying out problem-solving only within the scope of QCs' target areas. By formulating operational standards sheets and operational instructions sheets, and using checklists, efforts to prevent recurrence of problems targeted for improvement were procedurally incorporated into these target areas. In the late 1980s only about 10% of the circles making presentations implemented such initiatives, but in the 1990s about 90% of presenting circles began carrying them out.

The chronological change in QCs described above suggests a gradual shift from activities that emphasize QCs' role in boosting employees' awareness of areas requiring improvements and their motivation, to activities that emphasize contributing to the performance of routine operations based on management policies. It is

difficult to improve performance of routine operations just by solving problems through autonomous activities based on circle members' knowledge and experience. In fact in the 1990s, QCs were often implemented with the support of engineers at the Yanagi-cho Factory.

3. Efforts by promotional organizations from the 2000s onward

In the 2000s, QC Circle Headquarters, an organization promoting QCs, began to reconsider the ways in which QCs should be conducted in Japan, with declines in the implementation rate and the change and diversification of activities. This section examines this reconsideration in the form of a summary of my earlier paper (Ogawa 2011). In 2002, QC Circle Headquarters announced the “Evolved QC Circle (e-QCC) Vision.”⁶ This vision had two main points: one was to position QCs as activities integrated with operations, and the other was to promote QCs at workplaces other than manufacturing sites and in industries other than the manufacturing industry, without being constrained by the conventional frameworks of the past. These two points had already been set forth by QC Circle Headquarters in their future dissemination and management policy for QCs, based on the actual conditions of activities at enterprises and business locations.

The “autonomy” of QCs was often the focus of critical examination by skeptics, and there was a trend toward positioning QCs not as “autonomous” activities by circle members but as activities integrated with duties, as seen in the case study of Toshiba Yanagi-cho Factory in the preceding section. It can be said that in the 1990s, when the heyday of QCs had passed, QCs began to quietly evolve into activities integrated with duties, rather than being expected to be “autonomously” conducted by circle members. In terms of improving sales and customer satisfaction, as in sales departments, it is necessary to involve managers in activities. Thus, this naturally made QCs directly linked to the management structure.

The move toward deploying QCs beyond manufacturing sites and the manufacturing industry was already seen in the 1980s, when QCs were at their peak. In terms of background that relates to the expansion to non-manufacturing workplaces and non-manufacturing industries in the early 2000s, I should mention not only changes in industry and occupational structure, but also recognition that the direct application of the methodology of manufacturing sites to other departments and industries during the heyday of QCs did not go well. At various QC conferences, administrative, sales, and service departments held presentation competitions and reviewed presentations separately from manufacturing sites.

The conventional form of QCs was implementation in a single workplace on a continuous basis, as defined in this paper. The e-QCC Vision was disseminated in light of the fact that small group activities were also carrying out problem-solving activities across multiple workplaces and in non-continuous forms. There are actually four types of group problem-solving activities: in addition to the standard “single workplace and continuous,” there are also “multiple workplaces and continuous,” “single workplace and discontinuous,” and “multiple workplaces and discontinuous.” Specifically, at some hospitals, circles are organized thematically, and there are cases where members experience activities in other circles even if activities are discontinuous.

IV. Candid feature articles on QCs in specialized journals

1. “Revive, the QC Circle”

Under these circumstances, *QC Circle*, the specialized journal of QCs, published a special feature called “Revive, the QC Circle” in 2004. This feature disclosed names of enterprises, business locations, and candidly discussed the hiatus and difficulties that hit QCs from the 1990s onward, also, the reduction of their activities to mere formalities in the 1980s during what was ostensibly the heyday of QCs, and the adverse effects thereof and efforts to overcome them. In those articles, statements indicate that the seeds of declining implementation rates of QCs from the 1990s onward were already germinating in the 1970s and 1980s. This section excerpts the contents of this special feature, again summarizing my previous paper (Ogawa 2011).

The “Revive, the QC Circle” article embodied the stance of promotional organizations such as JUSE and

QC Circle Headquarters, as well as enterprises that had been implementing QCs since the 1990s, toward facing the current situation and pursuing reforms. It also illustrated how members of the *QC Circle* editorial board and the enterprises and business locations interviewed remained strongly attached to QCs. The following excerpts are representative descriptions from the article, classified as (i) reduction of QCs to formalities, (ii) enterprises' reconsideration of QCs, and (iii) quality issues and QCs.

2. Reduction of QCs to formalities

The phenomenon of QCs being reduced to formalities or “getting stuck in a rut” did not begin in the 1990s. As mentioned above, the following statements suggests that there have been many workplaces where QCs had become ghosts of their former selves even in the 1970s and 1980s, when QCs were the focus of much attention.

(About the workplace in 1988) I started out studying the basics of QC Circle activities, and since then I have been involved in these activities over the long term. However, the attitude around the factory at the time was basically something like “This is just one of those things we have to do, right?” This partly reflects the fact that everyone at the factory was quite busy, but I also think there were not many managers or supervisors who approached these activities proactively. (Inoue 2004a, 50)

At the time (the 1970s), most company workplaces were still controlled by strict hierarchical relationships. However, when I joined the QC Circle at this company, I was told that I was free to speak my opinion. It was a novel and rewarding experience, trying to make improvements while holding discussions without regard to position.... However (because enthusiasm for QC Circles subsequently declined), if I went to presentation conferences even at that time, although of course there were people who really gave it their all, close to half of the presentations felt quite contrived. Like people were making presentations for presentations' sake. (Inoue 2004b, 45)

(Although I was consulted in 2000 to play a leading role of the 2003 district manager company of the QC Circle Tokai branch Aichi district), if I become a leader of the district manager company, the responsibility is great, and I am supposed to make QC in-house activities suitable for it. However, what I felt when I saw the company-wide presentation conference the previous year was, even though it seemed to be doing what it ought to have been done on the surface, that the contents were quite hollow. I had the impression that most of the presentations were for presentations' sake, and they did not convey much enthusiasm. In such a situation, I wondered if the district manager company would work. (Inoue 2004d, 49)

Small group activities originally valued autonomy, and it had worked well for a while. However, at some point people started taking these autonomous activities for granted and leaving everything up to workers on site. Although the activities continued but reduced to mere formality, I feel that their content became impoverished and they gradually turned into ghosts of what they had once been (in the late 1990s). (Inoue 2004f, 48)

3. Enterprises' reconsideration of QCs

As already discussed, as the long-term recession starting in the 1990s took hold, the theoretical underpinnings of Japanese-style management were increasingly reconsidered including QCs. From the statements quoted below, it is evident that enterprises were re-examining the way QCs should operate, or replacing them with other management improvement programs. On the other hand, it seems that people closely tied to manufacturing sites, such as those in charge of in-house promotion of QCs or in charge of manufacturing divisions, were perplexed by these developments. Also, we see feedback from employees on-

site trying to protect the continuation of activities against changes in enterprises' policies toward QCs.

(In the 1990s) Japan was in an era of economic stagnation and low growth, and I believe this gave many enterprises momentum to re-examine how QC Circle activities ought to operate. This was the case at our company as well, where the management proposed that activities should be updated somewhat. (Inoue 2004c, 49)

The manufacturing division manager's thinking was clear (with regard to the company-wide policy of switching to introduction of other management improvement programs). He firmly told us that he would continue with small group activities for quality control as before because they played an important role in the field of manufacturing, increasing motivation to improve the work, training effectiveness, and job satisfaction. I completely agreed, and there were no differences of opinion among employees on site. (Inoue 2004e, 51)

With the top-down introduction of (other management improvement programs), small group activities also came to be led by the management, and the sense of them as voluntary activities was diminished. The essential features and appeal of small group activities were originally that they gave people a sense of accomplishment through free exchange of opinions within the group and engaging in activities together based around a common theme, but that has been weakened. Recently, young people tend to avoid being very deeply involved with organizations and colleagues. As the number of dispatched workers and so on in the workplace is increasing, generating more active communication is a major challenge. (Inoue 2004h, 51)

4. Quality issues and QCs

In the late 1990s and early 2000s, a series of scandals relating to quality issues caused an uproar in Japanese society. As a result, as of 2004 QCs were being repositioned as activities to prevent quality problems before they occur. Skeptical views on the effectiveness of QCs are found not only in the labor studies literature, but also in practice in the field. However, we can also find commentary that reaffirms QCs' contribution to the prevention of quality issues, and a paradigm shift that caused management to turn its attention to QCs once again.

(When in-house QC presentation conferences have not been held) As a manufacturing division manager, I myself did not think that the cancellation of the QC program would have such an impact. However, product quality issues increased, and I had to go and apologize in person to customers several times. That made me start rethinking things. (Inoue 2004b, 46)

In places where employees gather, such as for New Year's greetings, a newly appointed president often stresses that "quality is first, and we cannot compete in the market without it." The significance of quality has become more apparent than ever before, and as a result, employees' awareness of it has grown. Without a doubt, it has been a driving force in our efforts to implement small group activities. (Inoue 2004g, 53)

V. QCs and new quality improvement programs

In the 1990s, new programs relating to quality control and QCs were introduced in Japan, as overseas. Two examples already mentioned are TQM and Six Sigma. Below, I briefly outline three programs: the ISO9000 Series, Six Sigma, and TPM (Total Productive Maintenance).

The ISO9000 series was established in 1987 as one of the International Organization for Standardization (ISO) standards. The core standard of the series is ISO9001, which requires enterprises and business locations

to keep written records of quality assurance-related matters. Therefore, it should be noted that ISO9001 does not specify particular methods for quality control. The number of enterprises and business locations acquiring ISO9000 series certification has increased in Japan since the 1990s. ISO 9001:2015, a 2015 revision, is also designated as JISQ9001:2015 under the Japanese Industrial Standards (JIS) system (Japanese Standards Association 2016).

Like TQM, Six Sigma is a management improvement program influenced by Japanese quality control practices and devised in the United States. Also like TQM, Six Sigma aims to improve not only the quality of products and services, but also the quality of all aspects of management. The “sigma” in Six Sigma refers to the Greek letter σ , the symbol for standard deviation, and signifies aiming for extremely low defect rates (Harry and Schroeder 2000). Six Sigma is not restricted to activities carried out in a single workplace on a continuous basis, like QCs defined in this paper, and encompasses discontinuous activities across multiple workplaces, such as projects and task forces.

TPM is a program of equipment maintenance activities with all employees’ participation, which originated in Japan, specifically at Nihon Denso (today known simply as Denso) in 1971. Thus, while TPM is not a new management improvement program, it is regarded as one that both competes with and complements QCs as defined in this paper. TPM shares common points primarily in the Japanese manufacturing industry, and in stress of employee participation and circles; it is similar to Japanese TQC, TQM, and QCs. However, TPM does not emphasize members’ “autonomy,” and activities are implemented as part of routine operations. Also, TPM basically promotes activities by forming circles at various levels within the organizational hierarchy, such as the company-wide level, business location level, and the divisions, department, section, and group levels (Japan Institute of Plant Maintenance 2018).

In 2012, QC Circle Headquarters changed the official term “QC Circle activities” to “QC Circle activities (small group improvement activities)” in order to comprehensively express the various forms of group activities described above (QC Circle Headquarters 2012, 49). The Japanese Society for Quality Control (JSQC) also uses the term in the title of its *Guidelines for small group improvement activities* (JSQC 2015), private-sector standards established in 2015 (Murakawa 2018).

VI. Mechanisms underpinning QCs

1. Standardized and simplified tools and procedures

As described above, QCs are not simply small numbers of people gathering to engage in activities, but involve utilizing standardized and simplified tools and procedures, aiming to “render visible” the problem-solving process. The Seven QC Tools and the New Seven QC Tools are collections of simple methods packaged together as a group (Ogawa 2000). The original Seven QC Tools consist of (i) cause and effect diagrams, (ii) Pareto charts, (iii) graphical tools, (iv) check sheets, (v) histograms, (vi) scatter diagrams and (vii) control charts (Hosotani 1988), but stratification, an approach to the analysis of data by group, may also be included here. Of the Seven QC Tools, the six methods other than (i) are simple statistical methods.

The Seven QC Tools were in virtually their current form by the late 1960s. The New Seven QC Tools, proposed in March 1977, consist of (i) affinity diagram,⁷ (ii) relation diagram, (iii) tree diagram, (iv) matrix diagram, (v) arrow diagram,⁸ (vi) process decision program chart, and (vii) matrix data analysis.⁹ With the exception of (vii), a statistical method, these are approaches to organization of linguistic data (Nayatani 1988).

Meanwhile, “QC Stories” is a standardized practice for problem-solving procedures and techniques used at each stage of the procedure (Yatsu 1988). Standardization of procedures makes it possible to improve the efficiency of problem-solving activities, the quality of presentations on activities, and the attainment of concrete ends. In addition to the problem-solving type of QC Story, the task-achieving, measure-implementing, and “preventing problems beforehand” types are also proposed models for QC Stories. Through these tools and procedures, information can be shared among members of QCs, and good practices at other enterprises and in

other industries can be referenced.

2. Media, training, and presentation conferences

Widespread promotion and greater understanding of QCs through publications such as the specialized journal *QC Circle* and manuals is encouraged. Training in the required knowledge for QCs is carried out within enterprises and business locations, using these publications or original educational materials, while promotional organizations also provide training and carry out quality control certification and QCs guidance certification programs for QCs guidance. In addition, the activities are being ameliorated nationwide through presentations on QCs inside and outside companies.

3. Regional inter-enterprise cooperation

The QC Circle Headquarters has branch offices (9 chapters) in various parts of Japan, and some branch offices have district offices as subordinate organizations.¹⁰ Through the branch and district offices, enterprises and business locations in the area volunteer to cooperate in dissemination and promotion of QCs. While administrative mechanisms and content of projects differ depending on the branch or district, the most major event for any branch or district is the hosting a presentation competition. Circles that have implemented outstanding activities are selected from local enterprises and business locations, and asked to make presentations at the competition. From among these, particularly excellent circles are selected to participate in national or further competitions.

Branches and districts are run mainly by secretaries appointed by enterprises and business locations. Duties of the branch or district are handled as a part of the operations of the enterprise to which the secretary belongs. In addition to presentation competitions, various conferences are planned including training for secretaries, QC training for other enterprises, business location tours, workshop-style presentations, study sessions for QC management involving development of new methods, and briefing sessions for managers. Through the planning and administration of these conferences, personnel in charge of QCs at enterprises are provided with opportunities to exchange information (Ogawa 2012). In addition, the editorial board of the journal *QC Circle* is appointed with consideration for balance among branches. Inter-enterprise cooperation is promoted within regional units, making it possible to deploy QCs throughout Japan.

VII. Conclusion

While the implementation rate of QCs in Japan declined after their 1980s heyday, activities were still underway at the time of writing this in 2020. It should also be noted that QCs have not followed a consistent trajectory since they first emerged. Even during their peak period, some enterprises found QCs problematic, while others strengthened their implementation efforts. Since this peak period ended, both implementing enterprises and promotional organizations have continued flexibly responding to changes in industrial and occupational structures, facing the rise of new management improvement programs.

The reasons QCs have been maintained in Japan for such a long time would be that their operational practices have constantly evolved, and that they have been supported by versatile mechanisms. Additionally, QCs do not consist simply of members gathering to engage in activities, but have been underpinned by standardized and simplified tools and procedures, a range of media, training, and presentation competitions, and cooperation among enterprises in regions. Also, the relevant parties at enterprises have recognized that the issues labor researchers have criticized should be overcome. The constant emergence and overcoming of issues have made it possible to sustain QCs as they evolve over the long term.

The word “cooperation,” the Japanese translation of which is *kyodo* (lit. “working together”), features prominently in *The Functions of the Executive* (Bernard [1938] 1968). Looking back over the history of QCs and the mechanisms that underpin them, QCs’ functions and their activities are sustained through frameworks

for cooperation at multiple levels across multiple enterprises, not only at the micro-level of group activities in the workplace, but also at the meso-level of regions and the macro-level of Japan as a whole.

This paper is based on an article commissioned by the editorial committee of *The Japanese Journal of Labour Studies* for the special feature “Cooperation for Problem-Solving: The History of Quality Circles in Japan” in its July 2020 issue (vol.62, no.720) with additions and amendments in line with the gist of *Japan Labor Issues*.

Notes

1. What is described in this paper as “integration of planning and execution” is expressed in Nitta (1977) as “non-separation of conception from execution.”
2. A previous paper of mine (Ogawa 2000) interprets the process of QCs’ emergence from the quality control field in Japan as that of formulating layered education and training of quality control.
3. This TV program introduced Japanese QCs from the perspective of workers’ participation in management. The program has been posted and is viewable on the YouTube channel of The Deming Institute, an organization that aims to disseminate Deming’s management philosophy. Accessed April 20, 2020 at https://www.youtube.com/watch?v=vcG_Pmt_Ny4, which was aired on June 24, 1980, NBC White Paper.
4. The April 2011 issue of the *Japanese Journal of Labour Studies* ran a special feature entitled “What happened to that debate?” including an article on “QC Circle activities” written by a quality control expert (Nakajo 2011). The feature is emblematic of the decline in interest in QCs in Japan’s labor research field.
5. ZD activities originated from a management improvement program launched by US defense contractors in 1962. They were first introduced in Japan by NEC Corporation, which had already introduced small group activities, and subsequently they were popularized and promoted by the Japan Management Association. See the JMA Consultants Inc. n.d. “ZD (Zero Defects).” Accessed April 20, 2020. <https://www.jmac.co.jp/glossary/2016/09/tpm-zd.html>.
6. The Union of Japanese Scientists and Engineers. n.d. “e-QCC advocated by QC Circle Headquarters.” Accessed April 20, 2020. <https://www.juse.or.jp/business/qc/attachment/eQCC.pdf>.
7. Also widely known as the K-J method.
8. Also widely known as PERT (Program Evaluation and Review Technique).
9. Also widely known as principal component analysis.
10. As of 2020, there are 9 chapters and 36 district offices in Japan. See the Union of Japanese Scientists and Engineers. n.d. “QC Circle Activities (Circle-Based Improvement Activities).” Accessed April 21, 2020. <https://www.juse.or.jp/business/qc/01.html>.

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OGAWA Shinichi

Professor, Graduate School of International
Social Sciences, Yokohama National University.



I. Main Labor Economic Indicators

1. Economy

The Japanese economy shows movements of picking up recently as the severe situation due to the Novel Coronavirus is gradually easing. Concerning short-term prospects, the economy is expected to show movements of picking up, supported by the effects of the policies and improvement in overseas economies while economic and social activities move toward normalization. However, full attention should be given to the further increase in downside risks due to supply-side constraints and raw material prices. Also attention should be given to the effects of the Novel Coronavirus including variant on the Japanese and overseas economies and fluctuations in the financial and capital markets. (*Monthly Economic Report*,¹ December 2021).

2. Employment and unemployment

The number of employees in November decreased by 470 thousand over the previous year. The unemployment rate, seasonally adjusted, was 2.8%.² Active job openings-to-applicants ratio in November, seasonally adjusted, was 1.15.³ (Figure 1)

3. Wages and working hours

In November, total cash earnings increased by 0.8% year-on-year and real wages (total cash earnings) decreased by 0.8%. Total hours worked increased by 0.9% year-on-year, while scheduled hours worked increased by 0.6%.⁴ (Figure 2 and 6)

4. Consumer price index

In November, the consumer price index for all items increased by 0.6% year-on-year, the consumer price index for all items less fresh food increased by 0.5%, and the consumer price index for all items less fresh food and energy declined by 0.6%.⁵

5. Workers' household economy

In November, consumption expenditures by workers' households decreased by 0.4% year-on-year nominally and decreased by 1.1% in real terms.⁶

For details for the above, see JILPT *Main Labor Economic Indicators* at <https://www.jil.go.jp/english/estatis/eshuyo/index.html>

1. Cabinet Office, *Monthly Economic Report* analyzes trends in the Japanese and world economies and indicates the assessment by the Japanese government. Published once a month. <https://www5.cao.go.jp/keizai3/getsurei-e/index-e.html>

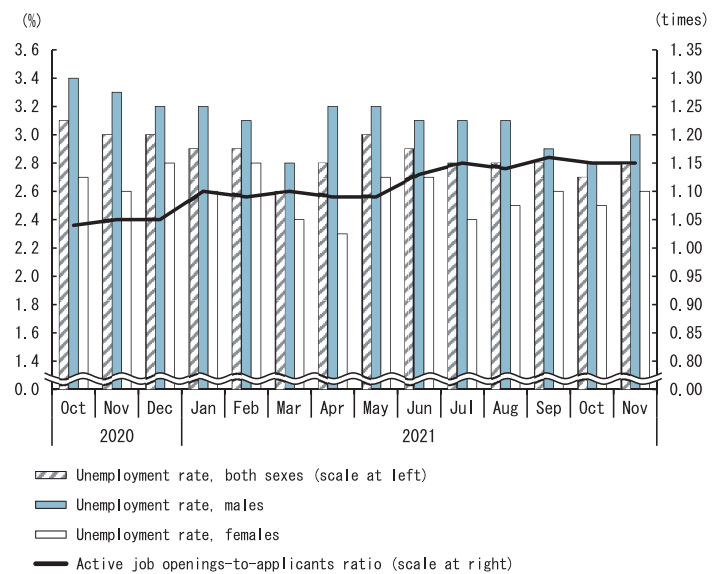
2. <https://www.stat.go.jp/english/data/roudou/results/month/index.html>

3. https://www.mhlw.go.jp/english/database/db-l/general_workers.html

4. For establishments with 5 or more employees. <https://www.mhlw.go.jp/english/database/db-l/monthly-labour.html>

5. <https://www.stat.go.jp/english/data/cpi/index.html>

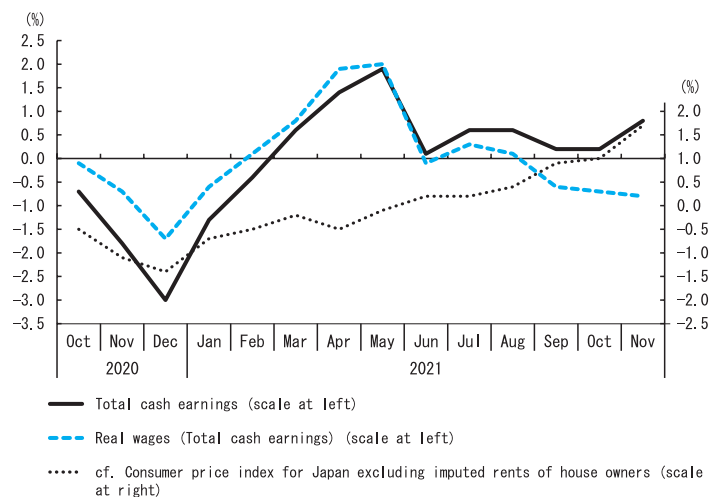
6. MIC, *Family Income and Expenditure Survey*. <https://www.stat.go.jp/english/data/kakei/index.html>



Source: Ministry of Internal Affairs and Communications (MIC), *Labour Force Survey*; Ministry of Health, Labour and Welfare (MHLW), *Employment Referrals for General Workers*.

Note: Active job openings-to-applicants ratio indicates the number of job openings per job applicant at public employment security. It shows the tightness of labor supply and demand.

Figure 1. Unemployment rate and active job openings-to-applicants ratio (seasonally adjusted)



Source: MHLW, *Monthly Labour Survey*; MIC, *Consumer Price Index*.

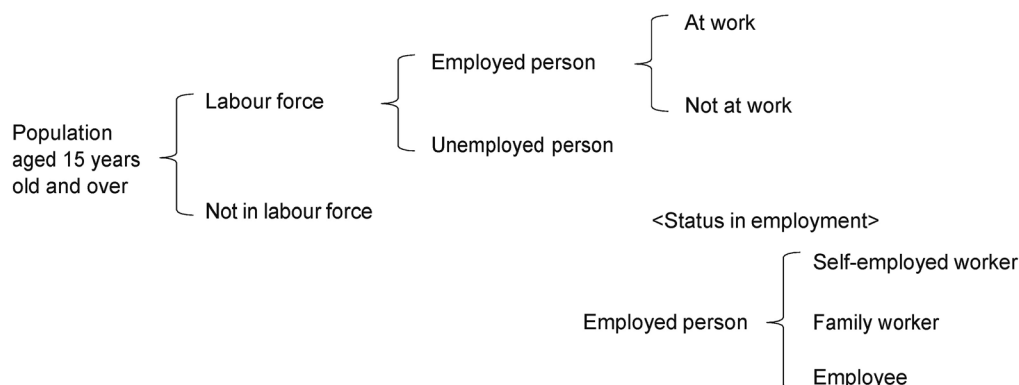
Figure 2. Total cash earnings / real wages annual percent change

II. Impacts of the COVID-19 pandemic on employment and unemployment

There are growing concerns that COVID-19's spread will have a significant impact on employment by retarding economic activity in Japan. The following outlines the recent trends shown in statistical indicators relating to employment. See JILPT website *Novel Coronavirus (COVID-19)* for the latest information (<https://www.jil.go.jp/english/special/covid-19/index.html>).

1. Employment and unemployment

(1) Definitions of *Labour Force Survey*



Source: Ministry of Internal Affairs and Communications (MIC), *Labour Force Survey*, Concepts and Definitions. <https://www.stat.go.jp/english/data/roudou/pdf/definite.pdf>

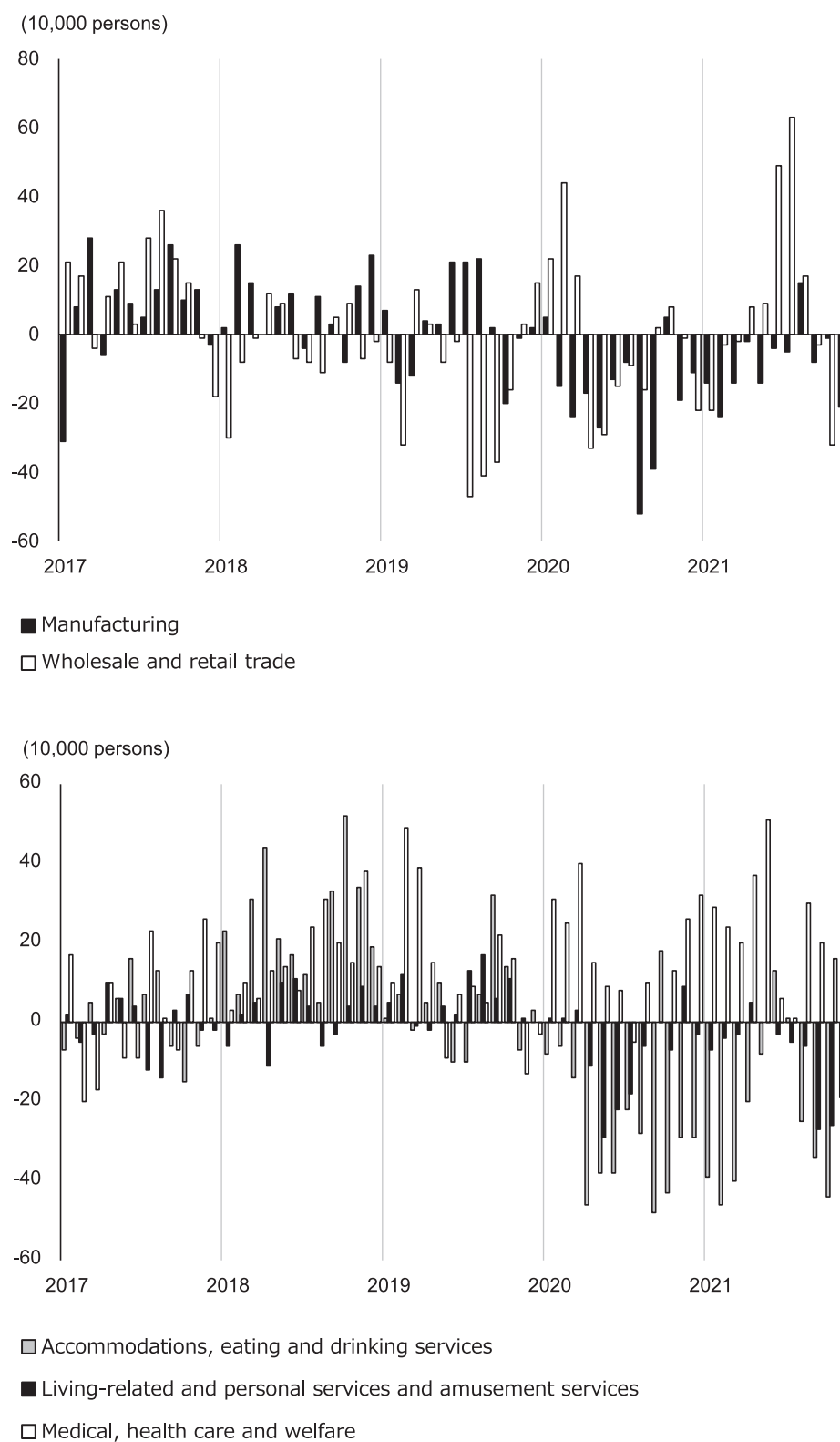
(2) Labor force

Table 1. Labor force

(10,000 persons)

Labor force				
	Total	Employed person		Unemployed person
			Not at work	
2018	6,830	6,664	169	166
2019	6,886	6,724	176	162
2020	6,868	6,676	256	191
November	6,902	6,707	176	195
December	6,860	6,666	202	194
2021 January	6,834	6,637	244	197
February	6,840	6,646	228	194
March	6,837	6,649	220	188
April	6,866	6,657	199	209
May	6,879	6,667	212	211
June	6,898	6,692	182	206
July	6,902	6,711	212	191
August	6,886	6,693	248	193
September	6,872	6,679	208	192
October	6,842	6,659	164	183
November	6,832	6,650	165	182

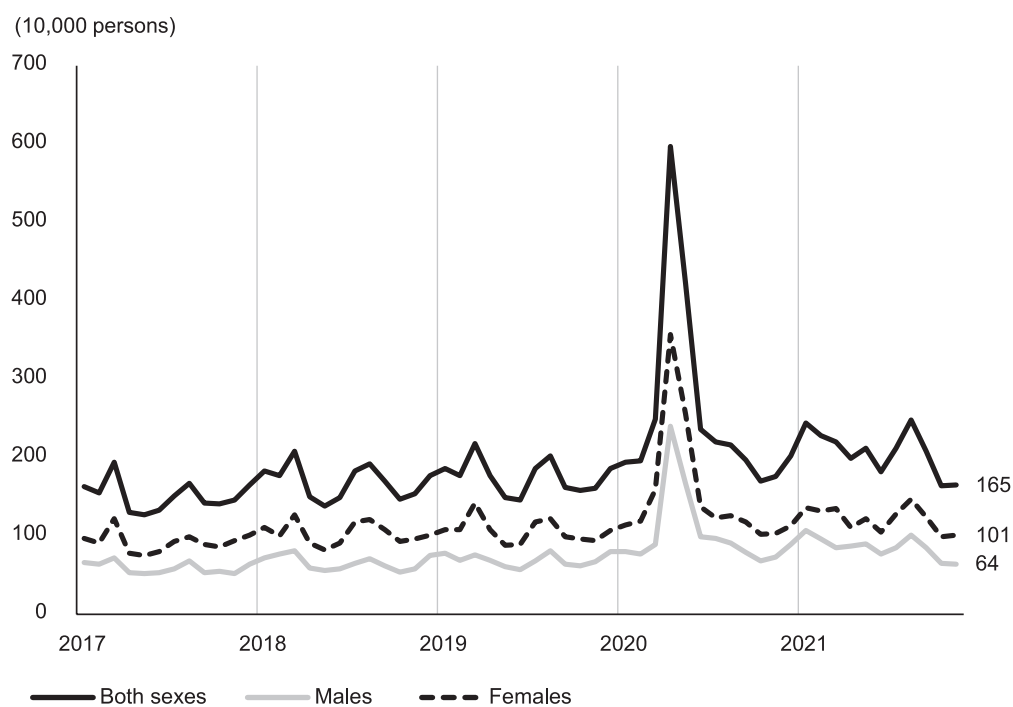
Source: Compiled by JILPT based on Ministry of Internal Affairs and Communications (MIC), *Labour Force Survey* (Basic Tabulation) (unadjusted values).



Source: Ministry of Internal Affairs and Communications (MIC), *Labour Force Survey* (Basic Tabulation).⁷

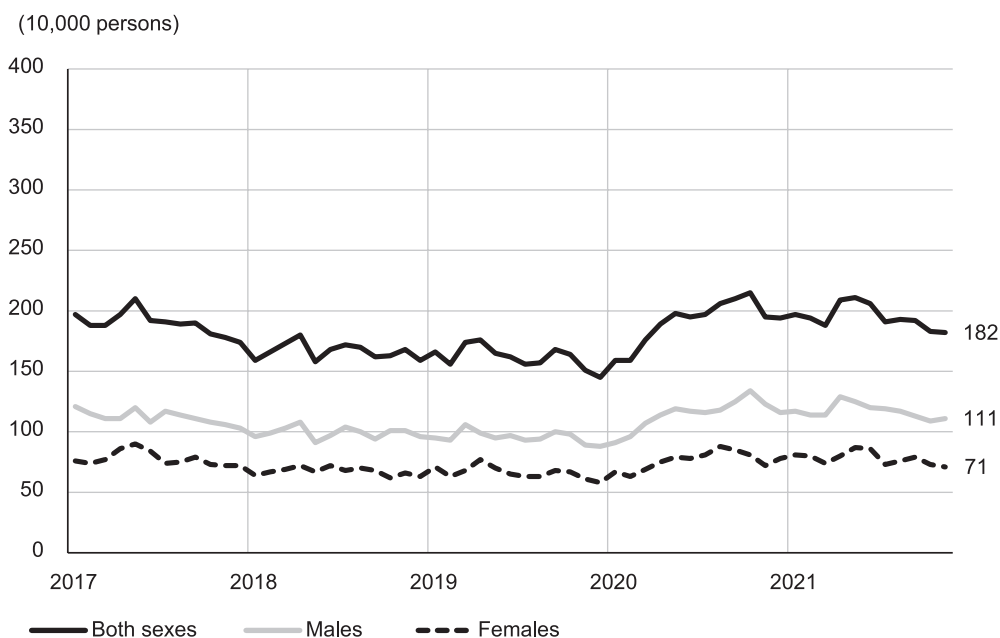
Figure 3. Number of employed persons by main industry (unadjusted values, year-on-year change) (January 2017 to November 2021)

7. For up-to-date information and further details, see <https://www.jil.go.jp/kokunai/statistics/covid-19/c01.html#c01-7> (in Japanese).



Source: MIC, Labour Force Survey (Basic Tabulation).⁸

Figure 4. Number of employed persons not at work (unadjusted values, by sex) (January 2017 to November 2021)



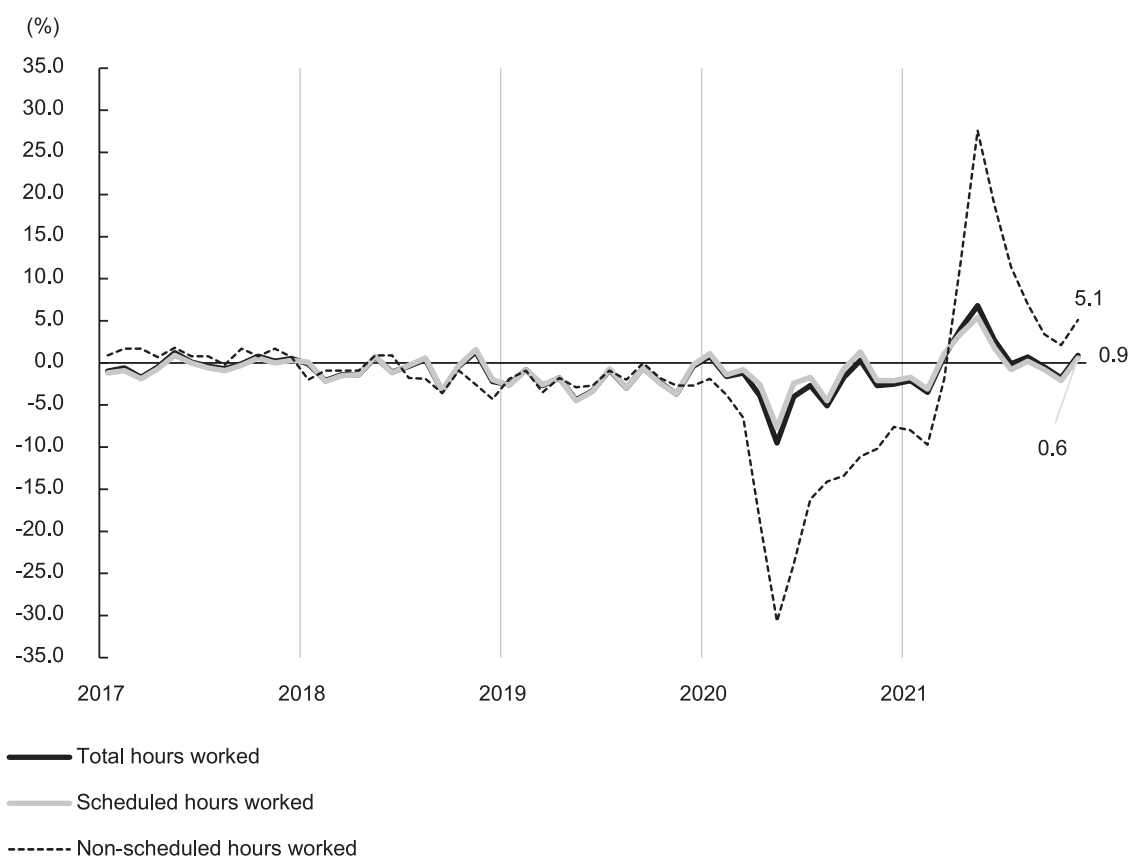
Source: MIC, Labour Force Survey (Basic Tabulation).⁹

Figure 5. Number of unemployed persons (unadjusted values, by sex) (January 2017 to November 2021)

8. For up-to-date information and further details, see <https://www.jil.go.jp/kokunai/statistics/covid-19/c23.html> (in Japanese).

9. For up-to-date information and further details, see <https://www.jil.go.jp/kokunai/statistics/covid-19/c03.html#c03-1> (in Japanese).

2. Working hours



Source: Compiled by JILPT based on MHLW, "Monthly Labour Survey."¹⁰

Notes: 1. Beginning in June 2019, values are based on a complete survey of "business establishments with 500 or more employees."

2. "Business establishments with 500 or more employees" for the Tokyo metropolitan area are re-aggregated beginning in 2012.

Figure 6. Total hours worked, scheduled hours worked, and non-scheduled hours worked (year-on-year change, total of full-time employees and part-time workers) (January 2017 to November 2021)

For the up-to-date information, see JILPT *Main Labor Economic Indicators* at <https://www.jil.go.jp/english/estatis/eshuyo/index.html>

10. MHLW, *Monthly Labour Survey*. <https://www.mhlw.go.jp/english/database/db-l/monthly-labour.html>. For up-to-date information and further details, see <https://www.jil.go.jp/kokunai/statistics/covid-19/c11.html#c11-1> (in Japanese).

***Japan Labor Issues* Featuring Significant Papers Back Number**

Special issues feature significant papers selected by the Editorial Board of *Japan Labor Issues* from various relevant papers originally published in Japanese with additions and amendments in line with the gist of this journal.

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IKEDA Shingou (JILPT)
- Selection and Training of Women Officers in Japanese Labor Unions: Focusing on Enterprise Unions
GOTO Kayo (Labour Research Council)

Vol.5, No.29, February-March 2021

<https://www.jil.go.jp/english/jli/backnumber/2021.html#no29>

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Araki Hiroko (Keio University)
Juan Nelson Martinez Dahbura (Data Scientist)

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- The Latent Structure of the Japanese Labor Market and the Type of Employment: Latent Class Analysis with Finite Mixture Model

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- Can "Owners" of Convenience Stores be "Workers" under the Japanese Labor Union Act?

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<https://www.jil.go.jp/english/jli/backnumber/2018.html#no05>

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- Fixed-Term Contract Employees and Intra-Firm Wage Gaps: Focusing on the Reasons Why Companies Use Them
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