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Correlation between Worker Demographics and Worker Access to Firm-provided Family-friendly Policies in Japan

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Abstract

This paper identifies the workers who have access to family-friendly policies, and the correlation between these policies and worker demographics, using data from the Survey of Company Fringe Benefits. The study revealed that while women and low-income earners are more likely to use family-care-related policies, men and high-income earners are more likely to use policy (8) (flexible and/or discretionary working hours). Unlike Western countries, where occupation and income are significantly correlated with the use of these polices, the findings of this study indicate that human-capital-related variables are not correlated with the family-friendly policies, except for policy (8).

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1. Introduction

Post-industrialization development, expansion of the tertiary sector, and an ageing society with fewer children have together led to more women participating in the labour market in advanced nations. This has led to an increase in the effort required to maintain the work-life balance in the household. To deal with such issues, advanced countries have developed several policies, which are also reflective of their history, culture, and socioeconomic background. For instance, policies pertaining to childcare-related leaves are rather advanced in Europe, especially, in Northern Europe where papa-quota systems, long parental leaves, and financial guarantees have been introduced as these enhance fathers' participation in child rearing. In Japan, circumstances have thus far only allowed relatively limited policies. Consequently, in Japan, there is a wide gap between males and females in terms of the percentage of maternity/paternity leave takers (NWEC, 2009). Certainly, the proportion of all childbearing women who were in work and who took maternity leave increased from 5.1% during 1985-1989 to 13.8% during 2000-2004, the proportion of working women who did not take maternity leave decreased from 19.9% during 1985-1989 to 11.5% during 2000-2004. This implies that the increase in taking maternity leave came entirely from within the constant 25% or so of women in workforce since the mid-1980s, and that there was thus no consequent rise in regular employment (NIPSSR, 2006).

The last ten years have seen double-income households outnumbering single-income (male-dominated) ones, and single parent households increasing their share. This has motivated Japanese policy makers to develop a systematic work-life balance policy. However, in Japan, family responsibilities do not let women work overtime or for long hours. As such, women choose to work shorter hours, and find it difficult to reach their full career potential. Furthermore, men can make limited contributions toward these responsibilities; even they wish to contribute more. Without saying, protection mechanisms to enable women to continue working do exist in the law; however, there is a gap between the provisions made by the governments and by the firms.

The aim of this study is to identify the workers who have access to family-friendly policies, and the correlation between worker demographics and these policies in Japan. The rest of the paper is organised as follows. The next section reviews previous studies on family-friendly policies. Section 3 introduces the methods used for the analysis, and section 4 presents the results of the data analysis. The final section offers concluding remarks.

2. Literature review

The labour force participation rate of females in Japan has been described as the M-shaped curve because they leave the workplace for reasons of marriage and/or childbirth, and then return to the labour market as part-time after their children reach a certain age. This phenomenon has led research that examines the problems of family-friendly related issues. Certainly, family-friendly policies do not single out one gender. However, most related studies focus on females because most of the users are female. For example, Tomita (1994) emphasised the relatively high needs of females for maternity leave and flexible hours. The findings indicate that firms that provide such arrangements show not only a high proportion of female workers, but also high stability in their workforce. In turn, Shigeno and Ohkusa (1998) clarify that although maternity leave does not affect the individual's decision on whether or not to marry, it does promote stability. The results tally with many studies supporting the view that maternity leave fosters stability in female workers' circumstances (see also, Morita and Kaneko, 1998; Waldfogel *et al*., 1999). Apart from maternity leave, Kawaguchi (2002) clarifies that family-friendly and equal opportunity policies are complementary to each other. Sakazume (2002) also confirms that policies influence such factors as worker motivation and the female withdrawal rate from the labour force. However, concerning whether family-friendly policy raises the retention rate of females, Matsushige (2008) concludes that neither policy adoption nor actual use has much effect when focusing on firms that hire female university graduates in their early 20s. As shown in above, it can be said that the related research in Japan mainly have concentrated on the effects of maternity leave and family-friendly policy towards women's continuous work.

Outside Japan, there have been numerous studies on the necessity, use, and adoption of family-friendly policies. For example, Capto (2000) analysed the US data cohort of young women since 1968 and showed that minorities in low-paying jobs are less likely to have access to family-friendly policies. Golden (2008) used the Current Population Survey (CPS) and indicated that woman and African-Americans have less access to flexible work arrangements while fathers and mothers with pre-school-age children have more access. On the other hand, using data from the 1998 Workplace Employee Relation Survey (WERS98), Hoque and Noon (2004) pointed out that implementing formal policies does lead to actual, effective practices in unionised, public, and/or large workplaces. According to Hoque and Noon, associate employees and managers/senior administrators have more access to family-friendly practices.

However, it should be noted that there are differences between Western countries and

Japan in terms of how fringe benefits are offered. For instance, Inoki (1995) explained that in Western countries, fringe benefits are offered on the basis of occupation, employment title, and employment grade. In Japan, on the other hand, uniform benefits are provided across the workforce. As such, in Japan, the profit rate of childcare is higher for low-income earners as compared to high-income earners, since the cost for the employer is uniform. Evans (2001) noted that in Australia, Japan, the UK, and the US, there is a common factor in that public sector and/or large firms are more likely to implement family-friendly policies. Referring Sato (2000), Evans (2001) pointed out the following aspects of family-friendly policies in Japan: large firms provide uniform fringe benefits across their workforce; companies in the electricity, gas, water, financial, and insurance sectors have better family-friendly policies, while those in the construction, mining, and manufacturing sectors have limited family-friendly policies; concepts such as job sharing and term-time have not been introduced in Japan; only a small number of males take advantage of the family-friendly policies; managers and other such workers in higher positions do not take advantage of these policies because they think that doing so would be inappropriate.

By understanding the similarities and differences in the family-friendly policies of Japan and Western countries, the present study identifies the workers who have access to family-friendly policies, and the correlation between worker demographics and firm-provided family-friendly policies in Japan.

3. Methods: Data and analysis

3.1 Data

The data set used in the current study is the Survey of Company Fringe Benefits provided by the Life Insurance Culture Centre in 2002 (Social Science Japan data archive). This is the eighth of these surveys, which have been conducted since 1980. The samples are chosen from an area within Tokyo Metropolitan District and in cities with a population of 500,000 or more, and designated five or more regular employees of private companies (a worker with day-to-day responsibility for fringe benefits or personnel). The samples consist of 2,014 companies, 1,802 regular employees and 300 non-regular employees. In this paper, the data of 2,014 companies and 1,802 regular employees are used. An advantage of using this data is the richness of fringe benefits and family-friendly policies-related data. However, the sample number, especially the policy use sample is limited. Also, it cannot match company and worker data.

3.2 Analysis

The present study analyses the data as follows. To highlight the workers (whose data is taken from the employee dataset) that have access to the eight types of family-friendly policies, first, the relationship between demographic characteristics and actual adoption of these policies is analysed. We use the correlation coefficient to assess this relationship (Table 3). The significance of the above correlation coefficient is verified using the *t*-test (Table 5). We also ascertain the firms' tendencies with regard to the introduction and augmentation (of existing) family-friendly policies. Because the employee dataset does not include data pertaining to industry and number of employees, the company dataset is used to obtain the correlation coefficients between the firms offering the eight types of family-friendly policies and the number of employees (Table 6), and between the firms offering the eight types of family-friendly policies and industry (Table 7). Further, the correlation coefficient between the availability of the eight types of family-friendly policies and demographic characteristics is estimated using the employee dataset (Table 9).

4. Results

4.1 Worker access

Table 1 shows the means and standard deviations of the variables used from the employees dataset. The male to female is 6.5:3.5 (male 65%); the percentage of workers below the average age of 39 is 54.6%. Further, last year, the percentage of workers with incomes less than the average monthly wage (including taxes and bonuses) of 389,666 yen is 51.4%. The average tenure is 11.3 years. The occupations are classified into five categories: managerial (18.2%), clerical (53.9%), sales (13.9%), skilled (7.6%), and professional (6.5%). The percentage of workers who held bachelor's or master's degree is 43.5%; the percentage of workers who are married is 55.8%. Further, 12.9% of the workers have pre-school children, and 16.7% are members of trade unions. The second section of Table 1 describes the variables used from the company data. In terms of size, 80% of the firms have less than 100 employees. The main industries are manufacturing (29.2%) and services (25.1%).

As seen in Table 2, the definitions, means and standard deviations of the eight types of family-friendly policies are given by employee and company dataset. Note that while 35% of the workers actually apply for policy (5) (paid leaves on hourly or half-day basis), not even 10% of the workers take advantage of the other policies. On the other

hand, the relatively high policy adoption: 41.6% for policy (5), 21.2% for policy (4) (sick leaves), and 21.1% for policy (7) (short-time working for childcare and elder care) are confirmed.

Table 3 presents the significant correlations between demographic characteristics and the actual use of family-friendly policies. Age is negatively correlated with policy (4) and positively correlated with policy (7). Masculinity (gender) is positively correlated with policies (6) (flexible work timings) and (8) (flextime and/or discretionary working hours), but negatively with policies (5) and (7). Tenure is positively correlated with policies (4) and (8). Low income is positively correlated with policy (7), but negative on (8). Holding a bachelor's or master's degree is negatively correlated with policy (7) and positively correlated with policy (8). The marriage dummy is positively correlated with policy (6). The presence of pre-school-age children is positively correlated with policies (1) (more than one year childcare leave), (6), and (7). Trade union membership is positively correlated with policies (2) (more than a three-month elder care leaves), (5), (7), and (8). It should be noted, however, that low income is positively correlated with policy (7), while holding a bachelor's or master's degree is negatively correlated with policy (7). In contrast, low income is negatively correlated with policy (8), while holding a bachelor's or master's degree is positively correlated with policy (8). Finally, the following points were observed with regard to the occupation. Clerical jobs are negatively correlated with policies (4) and (6), and positively correlated with policy (5). Skilled jobs are negatively correlated with policy (5). Professional jobs are positively correlated with policies (6) and (8). However, no statistically significant correlations are found for managerial and sales jobs.

Table 4 shows that over 90% of the workers engaged in managerial and sales jobs are male, and that a relatively higher concentration of females is found in clerical jobs. Moreover, the second section of Table 4 presents the distribution of low-income workers by occupation. As expected, the gender wage gap is the lowest in managerial jobs and the highest in clerical jobs. Further, incomes in professional jobs are not as high as those in managerial jobs, but are about the same as those in sales jobs.

In addition, Table 5 shows the results of the *t*-tests that verify the significance of the abovementioned correlation coefficients. We can confirm that the degrees of significance are exactly the same as in the results of Table 3.

4.2 Provision of family-friendly policies by firms

Table 6 presents the correlation coefficients between the family-friendly policies

provided by the firms and number of employees (workplace size) using company dataset. Workplaces with 5 to 29 employees are all significantly negatively correlated with all the policies except for policy (6). Workplaces with 30 to 99 employees are significantly positively correlated with policies (1) and (5). Workplaces with 100 to 299 employees are positively correlated with all the policies; note, however, that the correlation can be both significant and not significant. Further, policies (1), (2), (5), (7), and (8) are significant. Unsurprisingly, workplaces with over 300 employees show the largest positive correlation with all the policies. The above results support the contention that larger firms offer generous family-friendly policies.

Table 7 presents the correlation coefficients between industry and the eight types of family-friendly policies. The more obvious case is that of the services sector, which is significantly positively correlated with all the policies except for policy (6). In contrast, the construction sector is significantly negatively correlated with all the policies except for policies (1) and (6). The financial sector is significantly positively correlated with policies (3) (family care leaves), (4), and (5). The retail sector is significantly negatively correlated with policies (1), (5), and (7). Further, the provision of such family-friendly policies varies with industry.

Table 8, which clarifies this, shows the percentage of companies in each industry where less than 25% of the workforce is female. As the figures indicate, more than 50% of the companies in the mining, construction, manufacturing, wholesale trade, and transportation and telecommunications sectors have less than 25% of women in their workforces. The corresponding figure for the retail, financial, and services sectors is less than 50%, while that for the real estate and electricity, gas, water, thermal supply sectors is exactly 50%. From the above results, it could be said that, more or less, industries provide family-friendly policies on the basis of the share of female workers in the workforce.

Finally, Table 9 indicates the correlation coefficients between the eight types of available family-friendly policies and demographic characteristics (data taken from the employee dataset). Particularly noteworthy is the fact that both income and trade union membership are significantly correlated with all the policies. Tenure is positively correlated with all the policies; note that the correlation is not significant for policies (5) and (6). Occupation-wise correlation is observed, but this is not as much as the correlation for income and trade union membership, which can be considered as proxies of larger workplaces. In fact, Table 10 indicates that larger workplaces have higher union recognition rates, as well as incomes are higher in larger workplaces. These results indirectly support that larger firms provide better family-friendly policies.

5. Conclusion

In conclusion, the purpose of this study was to identify the workers with access to family-friendly policies, and the correlation between these policies and worker demographics by analysing Japanese cross-sectional data, which is referred to as the Survey of Company Fringe Benefits. Women, low-income earners, those who do not have a bachelor's degree, and parents of pre-school-age children have more access to childcare and elderly-care policies. Men, high-income earners, holding a bachelor's or master's degree, and those with long tenures are more likely to use policy (8). Further, trade union members have more access to policies (2), (5), (7), and (8). The provision of family-friendly policies by firms is also analysed. That larger workplaces provide better family-friendly policies is confirmed by the large, significantly positive correlations for income and trade union membership (proxies for large workplaces). Better policies are found in the service industry as well; this can be attributed to the share of female workers in the workforce and/or job-related variables (such as work shift timings). Unlike Western countries, where occupation and income are significantly correlated with the use of family-friendly policies, the results of the current study indicate that human-capital-related variables are not correlated with the family-friendly policies, except for policy (8).

In Japan, while low-income earners enjoy access to childcare and elderly-care policies, actual usage rate of these policies is extremely low. However, their profit rates are higher, as, in Japan, uniform benefits are provided across the workforce. Further analysis is needed to clarify incidence of these family-friendly policies.

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Table 1 Descriptive statistics (demographic characteristics, workplace size, industry, and others)

Demographic characteristics (Employee Data: n=1,802)		*Sample Mean*	*Standard Deviation*
	Male	0.6498	0.48
	Age (younger than age 39 years)	0.5455	0.50
	Monthly wages (less than 389,666 yen)*	0.5144	0.50
	Tenure	11.3046	9.00
	Managerial	0.1822	0.39
	Clerical	0.5385	0.50
	Sales	0.1388	0.35
	Skilled	0.0760	0.27
	Professional	0.0645	0.25
	Degree (4 years college or more)	0.4345	0.50
	Married	0.5583	0.50
	Pre-school-year child	0.1293	0.34
	Membership of trade union	0.1667	0.37
Workplace size(Company Data: n=2,014)			
	5-29 employees	0.3684	0.48
	30-99 employees	0.4404	0.50
	100-299 employees	0.1341	0.34
	300 employees or more	0.0571	0.23
Industry (Company Data: n=2,014)			
	Mining	0.0010	0.03
	Construction	0.1375	0.34
	Manufacturing	0.2915	0.45
	Wholesale trade	0.1504	0.36
	Retail trade	0.0804	0.27
	Financing and insurance	0.0055	0.07
	Real Estate	0.0109	0.10
	Transportation and telecommunications	0.0700	0.26
	Electricity, gas, water, thermal supply	0.0020	0.04
	Services	0.2507	0.43
Others (Company Data: n=2,014)			
	Female share of employment less than 25%	0.5988	0.49
	Union recognition	0.1485	0.36
	35 years full-time male annual income less than 4.9million yen	0.3560	0.48

Note = * Workers with incomes less than the average monthly wage (including taxes and bonuses)

Table 2 Descriptive statistics (Family-friendly policies)

Family-friendly policies (Employee Data: n=1,802)		*Sample Mean*	*Standard Deviation*
Actual take-up	(1) More than one year childcare leave policy	0.0050	0.07
	(2) More than a three-month elder care leave policy	0.0006	0.02
	(3) Family care leave policy	0.0017	0.04
	(4) Sick leave policy (other than paid holidays)	0.0422	0.20
	(5) Paid leaves on hourly or half-day basis	0.3502	0.48
	(6) Shifting start time and finish time policy	0.0610	0.24
	(7) Short-time work for childcare and elder care leave policy	0.0067	0.08
	(8) Flextime and/or discretionary working hours policy	0.0638	0.24
Available policies	(1) More than one year childcare leave policy	0.1737	0.38
	(2) More than a three-month elder care leave policy	0.1543	0.36
	(3) Family care leave policy	0.0882	0.28
	(4) Sick leave policy (other than paid holidays)	0.2469	0.43
	(5) Paid leaves on hourly or half-day basis	0.4939	0.50
	(6) Shifting start time and finish time policy	0.1593	0.37
	(7) Short-time work for childcare and elder care leave policy	0.1770	0.38
	(8) Flextime and/or discretionary working hours policy	0.1465	0.35
Family-friendly policies (Company Data: n=2,014)		*Sample Mean*	*Standard Deviation*
Adopted policies	(1) More than one year childcare leave policy	0.1351	0.34
	(2) More than a three-month elder care leave policy	0.1390	0.35
	(3) Family care leave policy	0.0695	0.25
	(4) Sick leave policy (other than paid holidays)	0.2115	0.41
	(5) Paid leaves on hourly or half-day basis	0.4161	0.49
	(6) Shifting start time and finish time policy	0.1589	0.37
	(7) Short-time work for childcare and elder care leave policy	0.2105	0.41
	(8) Flextime and/or discretionary working hours policy	0.1226	0.33

Table 3 Correlation coefficients between demographic characteristics and policy takers (Employee Data)

Demographic characteristics	Policy 1	Policy 2	Policy 3	Policy 4	Policy 5	Policy 6	Policy 7	Policy 8
Age (younger than age 39 years)	0.0330	0.0215	-0.0174	-0.0580 **	0.0392	0.0372	0.0610 ***	0.0103
Male	-0.0305	-0.0321	0.0014	0.0035	-0.0733 ***	0.0657 ***	-0.0543 **	0.0774 ***
Tenure	0.0068	-0.0026	0.0277	0.0625 ***	0.0064	0.0172	0.0022	0.0818 ***
Monthly wages (less than 389,666 yen)	0.0216	0.0229	-0.0148	-0.0282	-0.0293	-0.0398	0.0522 **	-0.1007 ***
Degree (4 years college or more)	-0.0146	-0.0208	0.0193	-0.0385	0.0375	-0.0139	-0.0548 **	0.0671 ***
Married	0.0313	-0.0265	0.0089	0.0143	-0.0241	0.0681 ***	0.0316	0.0402
Pre-school-year child	0.0665 ***	-0.0091	-0.0157	-0.0397	-0.0332	0.0675 ***	0.0905 ***	0.0415
Membership of trade union	0.0325	0.0540 **	-0.0187	-0.0245	0.1190 ***	0.0451	0.0751 ***	0.1939 ***
Managerial	0.0075	-0.0113	0.0162	0.0374	-0.0463	0.0081	-0.0392	0.0338
Clerical	-0.0136	0.0221	-0.0448	-0.0502 **	0.0817 ***	-0.0532 **	0.0213	-0.0436
Sales	-0.0058	-0.0096	-0.0166	0.0037	-0.0071	-0.0068	-0.0133	-0.0239
Skilled	0.0397	-0.0069	0.0402	0.0236	-0.0680 **	0.0430	0.0284	-0.0221
Professional	-0.0189	-0.0063	0.0453	0.0125	-0.0098	0.0583 **	0.0064	0.0928 ***

Note: *** and ** indicate significance at the 1% and 5% level, respectively.

Table 4 Occupation by gender and monthly wages less than 389,666 yen (%)

	Managerial	Clerical	Sales	Skilled	Professional
Male	94	43	91	88	77
Female	6	57	9	12	23
Monthly wages less than 389,666 yen	12	65	47	58	49

Table 5 *t*-tests for family-friendly policy takers: Demographic characteristics (Employee Data)

Demographic characteristics		Policy 1	Policy 2	Policy 3	Policy 4	Policy 5	Policy 6	Policy 7	Policy 8
Age (younger than age 39 years)									
	Yes	-1.40	-0.91	0.74	2.46 ***	-1.67	-1.58	-2.59 ***	-0.44
	No								
Male									
	Yes	-1.30	-1.36	0.06	0.14	-3.14 ***	2.79 ***	-2.31 **	3.29 ***
	No								
Tenure									
	Yes	0.16	-0.85	-0.30	2.20 **	-0.17	1.20	-0.01	3.52 ***
	No								
Monthly wages (less than 389,666 yen)									
	Yes	-0.92	-0.97	0.63	1.20	1.25	1.69	-2.22 **	4.29 ***
	No								
Degree (4 years college or more)									
	Yes	0.61	0.88	-0.81	1.62	-1.58	0.59	2.31 **	-2.83 ***
	No								
Married									
	Yes	-1.33	1.12	-0.38	-0.61	1.02	-2.90 ***	-1.34	-1.71
	No								
Pre-school-year child									
	Yes	-2.83 ***	0.39	0.67	1.69	1.41	-2.87 ***	-3.85 ***	-1.76
	No								
Membership of trade union									
	Yes	-1.35	-2.24 **	0.78	1.02	-4.96 ***	-1.87	-3.12 ***	-8.18 ***
	No								
Managerial									
	Yes	-0.31	0.47	-0.68	-1.57	1.94	-0.34	1.64	-1.42
	No								
Clerical									
	Yes	0.57	-0.93	1.87	2.10 **	-3.43 ***	2.23 **	-0.89	1.83
	No								
Sales									
	Yes	0.24	0.40	0.70	-0.15	0.30	0.28	0.56	1.00
	No								
Skilled									
	Yes	-1.66	0.29	-1.68	-0.99	2.85 ***	-1.80	-1.19	0.92
	No								
Professional									
	Yes	0.79	0.26	-1.90	-0.52	0.41	-2.44 ***	-0.27	-3.90 ***
	No								

Note: *** and ** indicate significance at the 1% and 5% level, respectively.

Table 6 Correlation coefficients between workplace size and firm adopted policies (Company Data)

Workplace size	Policy 1	Policy 2	Policy 3	Policy 4	Policy 5	Policy 6	Policy 7	Policy 8
5-29 employees	-0.1663 ***	-0.2206 ***	-0.0792 ***	-0.0654 ***	-0.1561 ***	-0.0279	-0.2480 **	-0.1287 ***
30-99 employees	0.0474 **	0.0309	0.0013	-0.0089	0.0567 **	-0.0190	0.0006	-0.0024
100-299 employees	0.0705 ***	0.1199 ***	0.0242	0.0317	0.0611 ***	0.0124	0.1864 ***	0.0750 ***
300 employees or more	0.1407 ***	0.2166 ***	0.1263 ***	0.1083 ***	0.1135 ***	0.0804 ***	0.2403 ***	0.1624 ***

Note: *** and ** indicate significance at the 1% and 5% level, respectively.

Table 7 Correlation coefficients between industry and firm adopted policies (Company Data)

Industry	Policy 1	Policy 2	Policy 3	Policy 4	Policy 5	Policy 6	Policy 7	Policy 8
Mining	0.0337	0.0329	-0.0086	-0.0163	-0.0266	-0.0137	0.0224	0.0363
Construction	-0.0397	-0.0730 ***	-0.0808 ***	-0.0480 **	-0.0739 ***	-0.0158	-0.0718 ***	-0.0482 **
Manufacturing	-0.0361	-0.0146	-0.0206	-0.0379	0.0748 ***	-0.0038	0.0386	-0.0233
Wholesale trade	-0.0119	-0.0085	-0.0058	0.0371	0.0167	-0.0195	-0.0231	-0.0007
Retail trade	-0.0528 **	-0.0397	-0.0091	-0.0012	-0.1052 ***	-0.0137	-0.0497 **	0.0007
Financing and insurance	0.0299	0.0286	0.0592 ***	0.0441 **	0.0741 ***	0.0231	0.0278	0.0339
Real Estate	0.0284	0.0130	0.0464 **	0.0391	-0.0015	0.0066	0.0395	0.0044
Transportation and telecommunications	0.0225	0.0360	-0.0061	-0.0420	-0.0698 ***	-0.0021	-0.0510 **	-0.0017
Electricity, gas, water, thermal supply	-0.0176	0.0143	-0.0122	0.0588 ***	0.0076	0.0111	0.0043	-0.0167
Services	0.0865 ***	0.0722 ***	0.0806 ***	0.0510 **	0.0625 ***	0.0369	0.0806 ***	0.0561 **

Note: *** and ** indicate significance at the 1% and 5% level, respectively.

Table 8 Industry by female share of employment less than 25%

Industry	%
Mining	100
Construction	85
Manufacturing	62
Wholesale trade	52
Retail trade	43
Financing and insurance	18
Real Estate	50
Transportation and telecommunications	80
Electricity, gas, water, thermal supply	50
Services	49

Table 9 Correlation coefficients between demographic characteristics and available policies (Employee Data)

Demographic characteristics	Policy 1	Policy 2	Policy 3	Policy 4	Policy 5	Policy 6	Policy 7	Policy 8
Age (younger than age 39 years)	0.0096	-0.0298	-0.0265	-0.0278	0.0457	0.0135	0.0087	-0.0190
Male	-0.0596 **	0.0237	0.0192	-0.0059	-0.0380	0.0683 ***	-0.0131	0.0936 ***
Tenure	0.0820 ***	0.1101 ***	0.1128 ***	0.0907 ***	0.0027	0.0138	0.1043 ***	0.0843 ***
Monthly wages (less than 389,666 yen)	-0.0909 ***	-0.1322 ***	-0.1440 ***	-0.1028 ***	-0.0685 ***	-0.0869 ***	-0.1137 ***	-0.1564 ***
Degree (4 years college or more)	0.0319	0.0691 ***	0.0228	0.0108	0.0603 **	0.0045	0.0820 ***	0.1288 ***
Managerial	0.0085	0.0665 ***	0.0549 **	0.0587 **	0.0109	0.0224	0.0687 ***	0.0710 ***
Clerical	0.1363 ***	0.0849 ***	0.0321	-0.0085	0.0412	-0.0288	0.0829 ***	-0.0580 **
Sales	-0.1041 ***	-0.0926 ***	-0.0502 **	-0.0348	-0.0020	-0.0111	-0.0862 ***	0.0382
Skilled	-0.1021 ***	-0.0919 ***	-0.0670 ***	-0.0294	-0.0906 ***	0.0057	-0.0988 ***	-0.0644 ***
Professional	-0.0334	-0.0471 **	-0.0087	0.0057	-0.0004	0.0326	-0.0484 **	0.0220
Married	-0.0140	0.0551 **	0.0482 **	0.0455	-0.0265	0.0421	0.0319	0.0336
Pre-school-year child	-0.0152	0.0277	0.0259	0.0056	-0.0300	0.0040	0.0076	0.0274
Membership of trade union	0.1793 ***	0.2061 ***	0.1226 ***	0.1448 ***	0.1522 ***	0.0979 ***	0.1964 ***	0.2131 ***

Note: *** and ** indicate significance at the 1% and 5% level, respectively.

Table 10 Union recognition (*) and 35 years male annual income less than 4.9million yen (**)

Workplace size	(*)%	(**)%
5-29 employees	4	39
30-99 employees	13	36
100-299 employees	34	33
300 employees or more	55	18