# Intragenerational Mobility between the Regular and Non-Regular Employment Sectors in Japan:

From the Viewpoint of the Theory of Mobility Regime\*

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#### Abstract

This paper studied intragenerational mobility between the regular and non-regular employment sectors in Japan by analyzing the dataset of the 2015 SSM Survey from the viewpoint of the theory of mobility regime. The Japanese mobility regime consists of Japanese employment practices, Japanese welfare-employment the regime, the male-single-breadwinner model. This regime places male regular workers at the core of the labor market while pushing female non-regular workers to its periphery, and suppresses job turnover. However, it is thought that globalization, the shift to a service industry, and neoliberal labor policies have weakened the regime. From these theoretical perspectives, I analyzed the job histories of this study's respondents by using discrete-time logit models while selecting for gender. The main findings of the analysis are as follows: (1) The Japanese mobility regime is still strong and influential. As predicted, male regular workers at the core of the labor market (i.e., those working at large firms and in the public sector) are less likely to transition to the non-regular employment sector than their counterparts at the market's periphery (i.e., those working at small and mid-sized firms). However, this study unexpectedly discovered that female regular workers at the core of the labor market are also less likely to move to the non-regular employment sector than their counterparts at the market's periphery. (2) The prevailing regime is changing, but not necessarily weakening. Movement from regular to non-regular employment is more likely to occur at the time of this study than it has been historically, while movement from non-regular to regular employment is less likely. An exploration of the social mechanisms that are creating this asymmetrical change could lead to a more detailed analysis of the Japanese mobility regime, and could also provide a substantive contribution to the advancement of the theory of mobility regime.

Keywords: The Japanese mobility regime, Non-regular workers, Event history analysis

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<sup>\*</sup> This research was supported by JSPS KAKENHI Grant Numbers JP 25000001, 15H03405, and 16K13406. I thank the 2015 SSM Survey Project members for their productive comments.

#### 1. Non-regular workers in Japan and the Theory of Mobility Regime

Attention is often brought to the deteriorating situation of non-regular workers in contemporary Japan. Wages for these workers are much lower, their job security is worse, and their social security benefits are less than that of their counterparts in the regular employment sector. From an international perspective, these workers share common features with workers in precarious situations in other advanced industrial countries (cf. Campbell and Price 2016), but the difficulty of becoming a regular worker is exceptionally high in Japan. For example, Sato (2013) calculated the local odds ratio of mobility between regular and non-regular workers using the 2009 Labor Force Survey, which was conducted by the Statistics Bureau of the Ministry of Internal Affairs and Communications. According to this research, the ratio is 6.17, which means that the odds of getting a regular job for individuals who were regular workers in the previous year is 6.17 times higher than the odds for those who were non-regular workers during the same period. This is evidence that the mobility barrier between the non-regular and regular employment sectors is very high in Japan. Other scholars have also reported the significance of this mobility barrier (Genda 2008).

Why is this mobility barrier so high and persistent? I argue that applying the theory of mobility regime as proposed by Diprete (2002) to the study of the Japanese labor market will aid in answering this question. The crux of my argument asserts that intragenerational mobility is not an independently arising phenomenon. Rather, this type of mobility occurs in the institutional arrangements of the labor market and the general conventions of society. Thus, different institutional arrangements result in different patterns of intragenerational mobility, which explains, for example, the lower job turnover rate in Japan as compared to that in the U.S. (this is later explained in detail).

I assume that the Japanese employment practice, the Japanese welfare-employment regime, and the male-single-breadwinner model are the institutional arrangements that affect intragenerational mobility in Japan. Based on observations of Japanese factories, Abbeglen (1958) proposed that the Japanese employment practice consists of the long-term employment practice, the seniority-based wage scheme, and company unions. The first two components suppress job changes because of the following mechanism: If an employee leaves a company and obtains employment at another company, their seniority does not transfer. It then becomes probable that this employee's wages will decline. Since employees expect this to occur, they are less likely to seek new employment. The third component (i.e., company unions) excludes non-regular workers. Only regular workers have been qualified as

union members. This practice of exclusion has partially contributed to the construction of the barrier preventing non-regular employees from seeking regular employment.

The theory of welfare-employment regime assumes that society secures the livelihood of its members through welfare and employment, and that the balance between welfare and employment varies from society and society (Esping-Andersen 1990; Imai 2011). Imai (2011) points out that the salient feature of the Japanese welfare-employment regime is "welfare through employment." This means that companies provide their employees with welfare packages. For example, companies cover half of their employees' pension and health insurance premiums. Furthermore, some companies provide their employees with housing. One caveat should be mentioned, however. These ample welfare packages are usually reserved for regular employees; companies do not typically offer them to non-regular employees. Because of this difference in labor cost between regular and non-regular employees, companies tend to replace regular employees with non-regular employees if possible. This practice has contributed to an increase in the proportion of non-regular workers in contemporary Japan.

The family male-single-breadwinner model reinforces the Japanese employment practice in the labor market, and vice versa. Male regular employees show their loyalty to companies by working long hours and accepting company transfers in exchange for regular employment status and ample welfare packages. However, it would be difficult for these employees to maintain such loyalty without the help of an at-home domestic partner. That is, at-home partners perform most of the household chores, and tend to be housewives or part-time workers to secure sufficient time for homemaking. This sexual division of labor has increased the share of female non-regular workers in the labor market, most of whom are married women.

The reviewed features of the Japanese mobility regime can thus far be summarized as a regime that places male regular workers at the core of the labor market, pushes female non-regular workers to the periphery of the market, and suppresses job turnover. This regime was strong and influential during Japan's period of high economic growth (1955-1973), but has recently weakened.

Globalization, a shift in the industrial structure from heavy to service-oriented practice, and neoliberal labor policies are major factors that have weakened the Japanese mobility regime. Globalization has increased the opportunity cost for companies adhering to the Japanese employment practice. Through such adherence, these companies would lose the opportunity to find a better labor force at a cheaper cost outside Japan. The shift to a service industry has increased the share of non-regular

workers who are not protected by labor unions. Neoliberal labor policies have also contributed to increases in both flexibility in the labor market and, eventually, in the proportion of non-regular workers. For example, the Temporary Dispatching Work Law was enacted in 1986. This law involves a series of revisions that have led to an increase in the number of dispatched workers, which is a type of non-regular employment (Imai 2011).

These changes have made the labor market more flexible, but they have not affected all of its segments. Rather, regular workers at large firms and in the public sector are still protected by the Japanese employment practice. By contrast, non-regular workers at the periphery of the labor market are experiencing increased flexibility. Sato (2010) called this situation "the coexistence of stability and increasing flexibility." This coexistence also makes it difficult for non-regular workers to move to the regular employment sector.

#### 2. Hypotheses

As pointed out in the previous section, the core of the labor market is still intact, while flexibility is increasing at the periphery. Male workers at large firms and in the public sector are at the market's core (Nomura 1994), while female workers, workers at small and mid-sized firms, and non-regular workers are concentrated at the periphery. Thus, I focused on gender and firm size to derive hypotheses on intragenerational mobility between the regular and non-regular employment sectors.

Furthermore, distinct time periods should be considered in this type of study because, as abovementioned, the Japanese mobility regime has weakened over time. Thus, I will use four time periods in this study. Those are the high economic growth period (1955-1973), the slow economic growth period after the oil crises (1974-1984), the bubble economy period (1985-1991), and the post-bubble economy period (1992-2015). The main components of the Japanese mobility regime are the Japanese employment practice, the Japanese welfare-employment regime, and the male-single-breadwinner-model. It is commonly accepted that this regime was established during the high economic growth period (Brinton 1993). Since then, the regime is thought to have weakened. Thus, I will use the high economic growth period as the reference point for the statistical analysis in Section 4.

#### 2-1. Hypotheses on Intragenerational Mobility from Regular to Non-regular Employment

Regarding mobility between the regular and non-regular employment sectors, I propose two competing hypotheses on the effects of firm size, and two additional competing hypotheses on the effects of time period.

**Hypothesis 1-1**: Male regular workers at large firms and in the public sector are less likely to become non-regular workers than their counterparts at small and mid-sized firms. By contrast, the probability of a female regular worker becoming a non-regular worker is not affected by firm size.

This hypothesis was derived from the abovementioned difference between the core and the periphery of the Japanese labor market. Male regular employees at the market's core are still protected by the Japanese employment practice, while their counterparts at the periphery are not. This leads to the difference in probability of becoming a non-regular worker between regular workers at large firms and in the public sector and those at small and mid-sized firms. By contrast, female workers are placed at the market's periphery regardless of firm size. Thus, there is no difference in the probability of becoming a non-regular worker among female regular workers.

**Hypothesis 1-2**: Female regular workers at large firms and in the public sector are less likely to become non-regular workers than their counterparts at small and mid-sized firms. By contrast, the probability of a male regular worker becoming a non-regular worker is not affected by firm size.

This hypothesis is the reverse of Hypothesis 1-1, and is derived from the strength of the Japanese mobility regime. That is, the regime is so strong that even male regular workers at small and mid-sized firms are under its influence. Therefore, there is no difference in the probability of becoming a non-regular worker among male regular workers. If the regime is very strong, it might also cover female regular workers if they work for large firms or in the public sector, which would lower the probability of their becoming non-regular workers.

The next two hypotheses are about the effect of time periods.

Hypothesis 2-1: The probability of a male regular worker becoming a non-regular worker increased during the post-bubble economy period, but the

status of female regular workers is not affected by time periods.

This hypothesis was derived from the same mechanism as that of Hypothesis 1-1. The Japanese mobility regime that has protected male regular workers has weakened. This occurred most significantly during the post-bubble economy period. Thus, these workers were more likely to become non-regular workers during this period than previously.

**Hypothesis 2-2**: The probability of a female regular worker becoming a non-regular worker increased during the post-bubble economy period, but the status of male regular workers is not affected by time periods.

This hypothesis was derived from the same mechanism as that of Hypothesis 1-2. Male regular workers have been protected by the Japanese mobility regime at each time period, while female regular workers, who are at the periphery of the labor market, are affected by the increasing flexibility that began to occur during the post-bubble economy period.

# 2-2. Hypotheses on Intragenerational Mobility from Non-regular to Regular Employment

I propose three hypotheses on intragenerational mobility from the non-regular to the regular employment sector based on the theory of the Japanese mobility regime.

**Hypothesis 3**: The probability of becoming a regular worker for both male and female non-regular workers is not affected by firm size.

"Being non-regular workers" is a sort of social status in Japan (cf. Arita 2016). Thus, non-regular workers are placed at the market's periphery regardless of if they are men or women or the size of their firm.

**Hypothesis 4**: The probability of becoming a regular worker for both male and female non-regular workers decreases when firm size increases.

While Hypothesis 3 is about the size of workers' current firms, this hypothesis is about the entry barrier. It is more difficult for non-regular workers to enter large firms or the public sector as regular workers during their mid-careers than it is to enter small and

mid-sized firms. This is because most of the large firms and the public sector are still under the strong influence of the Japanese mobility regime. Therefore, the entry barrier to these areas is higher than it is at small and mid-sized firms.

**Hypothesis 5**: The probability of becoming a regular worker for both male and female non-regular workers increased more significantly during the post-bubble economy period than previously.

As abovementioned, it is thought that the Japanese mobility regime weakened during the post-bubble economy period while the labor market became more flexible. Thus, it is possible that non-regular workers found it easier to obtain regular jobs during this period than previously.

#### 3. Data and Methods

I used the dataset from the 2015 Social Stratification and Social Mobility National Survey (hereafter, the 2015 SSM Survey) to examine the empirical validity of this study's hypotheses. <sup>1</sup> The 2015 SSM Survey was conducted using nationwide representative samples in Japan. The samples were from individuals between 20 and 79 years of age. There were 7,817 respondents, and the response rate was 50.1%.

The dataset from the survey contains the job histories of respondents, which can be used for my analysis of intragenerational mobility between the regular and non-regular employment sectors. Information on job history was contained in a wide-type data format, so I converted it to a long-type data format so that discrete-time logit models could be applied.<sup>2</sup> I focused on job histories from before respondents became 55 years of age to avoid the effects of mandatory retirement.

I analyzed the job histories of men and women separately because their positions are segregated in the labor market. Two dependent variables were used in the models. Those are the hazard probability of moving from the regular to non-regular employment sector, and moving from the non-regular to the regular employment sector. An event is defined as the mobility from regular to non-regular employment, or that from non-regular to regular employment.

Four independent variables were used to examine the hypotheses. Those are the

I thank the 2015 SSM Survey Management Committee for allowing me to use the SSM data.

<sup>&</sup>lt;sup>2</sup> I thank Tokio Yasuda of Kansai University for providing the 2015 SSM Survey Project members with an SPSS syntax for converting the data. I also referred to Mugiyama (2006) to create the long-type data for analysis.

duration time as the baseline hazard function, firm size at t-1, firm size at t, and time period.<sup>3</sup> Duration time was measured by the interval of time (in years) that had passed since a respondent entered a job. Duration time was converted to dummy variables expressing each year in logit models. Firm size was measured by the number of employees in the firm. Firm size at t was used to examine Hypothesis 4.

The risk sets for analysis are defined as follows. In the analysis of mobility from regular to non-regular employment, a person enters the risk set when they become a regular worker. Then, if they become a non-regular worker, an event occurs. Otherwise, the data is judged as right-censored. In the analysis of mobility from non-regular to regular employment, a person enters the risk set when they become a non-regular worker. Then, if they become a regular worker, an event occurs. Otherwise, the data is judged as right-censored.

#### 4. Results

## 4-1. Intragenerational Mobility from the Regular to Non-Regular Employment Sector

Descriptive statistics are summarized in Table 1.

Table 1 Descriptive Statistics (Mobility from Regular to Non-Regular Employment)

	Observations	%
Event	2 5001 7440110	70
No	119.907	99.21
Yes	959	0.79
Total	120,866	100
Gender		
Male	76,812	63.55
Female	44,054	36.45
Total	120,866	100
Firm size at $t-1$		
1-99	42,974	37.01
100-999	28,249	24.33
1000>= or public sector	44,891	38.66
Total	116,114	100
Period		
High economic growth period	20,241	16.75
Slow economic growth period	23,472	19.42
Bubble economy period	19,057	15.77
Post-bubble economy period	58,096	48.07
Total	120,866	100
Duration of time after entering th	e regular employr	ment
Observations	Mean	Sd.
120,866	13.364	9.751

<sup>3</sup> The mobility from unemployment to non-regular worker to regular worker is also an important research topic. See Moriyama (2018) for a detailed analysis of this mobility.

Table 2 shows the results of five discrete-time logit models for males. Model 1 uses only dummy variables for duration time as the baseline hazard function. Coefficients for dummy variables are omitted in the table to save space. In Model 2, firm size at *t*-1 as an independent variable is added to Model 1, while Model 3 adds time period to Model 1. Model 4 uses both firm size at *t*-1 and period as independent variables. In Model 5, the jobs-to-applicants ratio is added to Model 4. This is a control variable to determine whether the effect of time period exists after controlling for economic situations in the labor market.

The effect of firm size at *t*-1 is clear in Model 5. As firm size increases, male regular workers are less likely to move to the non-regular employment sector. The coefficient for the post-bubble economy period is the largest among those for the time periods in Model 5.

Table 2 Discrete-Time Logit Models (Mobility from Male Regular to Non-Regular Employment)

	Mode	I 1	Mode	Model 2		1 3	Mode	1 4	Mode	15
	Odds ratio	Robust SE								
Constant	0.017 ***	0.012	0.022 ***	0.016	0.004 ***	0.003	0.006 ***	0.005	0.004 ***	0.003
Duration time	(omitted)									
Firm size at t-1										
1-99			ref.				ref.		ref.	
100-999			0.719 **	0.103			0.672 ***	0.097	0.668 ***	0.096
1000>= or public sector			0.292 ***	0.048			0.299 ***	0.049	0.298 ***	0.049
Period										
High economic growth period					ref.		ref.		ref.	
Slow economic growth period					1.748 **	0.433	1.808 **	0.448	2.076 ***	0.556
Bubble economy period					1.563	0.435	1.585 *	0.442	1.580	0.440
Post-bubble economy period					3.968 ***	0.829	3.888 ***	0.810	4.366 ***	0.996
Jobs-to-applicants ratio									1.519	0.395
# of observations	69,270		69,270		69,270		69,270		69,270	
# of samples	3,168		3,168		3,168		3,168		3,168	
Log pseudolikelihood	-1724.146		-1690.568		-1688.212		-1656.680		-1655.367	
Pseudo R <sup>2</sup>	0.048		0.067		0.068		0.086		0.086	

\*\*\* p<0,01, \*\* p<0.05, \*p<0.1

Table 3 shows the results of the same five discrete-time logit models for females. Similar results are shown in Model 5.

The results shown in Tables 2 and 3 mean that Hypotheses 1-1 and 1-2 are partially supported. Both male and female regular workers at large firms and in the public sector are less likely to become non-regular workers than their counterparts at small and mid-sized firms. By comparing the values of the coefficients for large firms and the public sector in Tables 2 and 3 (0.298 and 0.473, respectively), female regular workers could be more likely to become non-regular workers than their male counterparts. However, I believe that these results show the strength of the Japanese mobility regime.

Table 3 Discrete-Time Logit Models (Mobility from Female Regular to Non-Regular Employment)

	Mode	I 1	Mod	el 2	Mode	1 3	Model	4	Model 5	
	Odds ratio	Robust SE	Odds ratio	Robust SI						
Constant	0.011 ***	0.011	0.014 ***	0.015	0.003 ***	0.003	0.005 ***	0.005	0.004 ***	0.004
Duration time	(omitted)									
Firm size at t-1										
1-99			ref.				ref.		ref.	
100-999			0.824 **	0.080			0.760 ***	0.075	0.759 ***	0.075
1000>= or public sector			0.471 ***	0.051			0.473 ***	0.052	0.473 ***	0.052
Period										
High economic growth period					ref.		ref.		ref.	
Slow economic growth period					1.484 **	0.257	1.520 **	0.264	1.601 ***	0.286
Bubble economy period					2.515 ***	0.420	2.580 ***	0.431	2.572 ***	0.430
Post-bubble economy period					3.358 ***	0.490	3.365 ***	0.492	3.514 ***	0.530
Jobs-to-applicants ratio									1.180	0.194
# of observations	37,098		37,098		37,098		37,098		37,098	
# of samples	3,354		3,354		3,354		3,354		3,354	
Log pseudolikelihood	-3070.202		-3042.264		-3014.640		-2987.567		-2987.088	
Pseudo R <sup>2</sup>	0.020		0.028		0.037		0.046		0.046	

\*\*\* p<0,01, \*\* p<0.05, \*p<0.1

The results in Tables 2 and 3 also show that Hypotheses 2-1 and 2-2 are partially supported. Both male and female regular workers were more likely to become non-regular workers during the post-bubble economy period than previously. This implies that the effects of globalization, the shift to a service industry, and neoliberal labor policies on the Japanese mobility regime are stronger than the expectations set forth in the hypotheses.

### 4-2. Intragenerational Mobility from the Non-Regular to Regular Employment Sector

Descriptive statistics are summarized in Table 4.

Table 4 Descriptive Statistics (Mobility from Non-Regular to Regular Employment)

	Observations	%
vent		
No	29,444	97.06
Yes	892	2.94
Total	30,336	100
Gender		
Male	5,560	18.33
Female	24,776	81.67
Total	30,336	100
Firm size at t-1		
1-99	14,249	55.25
100-999	5,002	19.4
1000>= or public sector	6,539	25.35
Total	25,790	100
Firm size at t		
1-99	13,998	55.17
100-999	5.014	19.76
1000>= or public sector	6,361	25.07
Total	25,373	100
Period		
High economic growth period	1,796	5.92
Slow economic growth period	3,455	11.39
Bubble economy period	3.828	12.62
Post-bubble economy period	21.257	70.07
Total	30,336	100
Ouration of time after entering the Observations	ne non-regular em Mean	nployment Sd.
	ividali	ou.

Table 5 shows the results of six discrete-time logit models for males. In Table 5, Models 1-5 are the same as Models 1-5 in Table 2 with the exception of the dependent variable, which is the hazard probability of non-regular workers becoming regular workers. Model 6 uses firm size at *t* instead of firm size at *t*-1 to examine Hypothesis 4.<sup>4</sup>

Model 5 in Table 5 shows that firm size at *t*-1 does not affect the hazard probability of becoming a regular worker, and that the probability became lower during the post-bubble economy period. Model 6 in this table also shows similar patterns.

**Table 5 Discrete-Time Logit Models (Mobility from Male Non-Regular to Regular Employment)** 

-		1	Mod										
0.1		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Odd	lds ratio	Robust SE	Odds ratio	Robust SE									
Constant	0.077 **	0.080	0.080 **	0.083	0.099 **	0.106	0.101 **	0.108	0.131 *	0.141	0.131 *	0.141	
Duration time (or	mitted)		(omitted)		(omitted)		(omitted)		(omitted)				
Firm size at t-1													
1-99			ref.				ref.		ref.				
100-999			0.841	0.139			0.871	0.145	0.880	0.146			
1000>= or public sector			0.977	0.139			1.012	0.148	1.007	0.147			
Firm size at t													
1-99											ref.		
100-999											1.102	0.203	
1000>= or public sector											0.963	0.163	
Period													
High economic growth period					ref.		ref.		ref.		ref.		
Slow economic growth period					0.768	0.159	0.774	0.161	0.716	0.154	0.700 *	0.150	
Bubble economy period					0.968	0.219	0.973	0.221	0.991	0.225	0.984	0.223	
Post-bubble economy period					0.726 **	0.118	0.733 *	0.122	0.693 **	0.117	0.679 **	0.116	
Jobs-to-applicants ratio									0.752	0.189	0.734	0.187	
# of observations	3,471		3,471		3,471		3,471		3,471		3,471		
# of samples	587		587		587		587		587		587		
Log pseudolikelihood -10	025.857		-1025.278		-1023.382		-1022.969		-1022.242		-1022.287		
Pseudo R <sup>2</sup>	0.041		0.042		0.044		0.044		0.045		0.045		
*** p<0,01, ** p<0.05, *p<0.1													

Table 6 shows the results of the same six discrete-time logit models for females. Model 5 in Table 6 shows that female non-regular workers at mid-sized firms at *t*-1 are more likely to become regular workers than their counterparts at small and large firms, while Model 6 shows that they are also more likely to become regular workers at mid-sized firms at *t* than their counterparts at small and large firms at *t*. Models 5 and 6 shows that female non-regular workers are less likely to become regular workers during any period after the high economic growth period.

The results in Tables 5 and 6 mean that Hypotheses 3 and 4 are only valid for male non-regular workers. Female non-regular workers at mid-sized firms in the labor market have more opportunities to become regular workers. The theory of the Japanese mobility regime assumed a significant separation between small/mid-sized firms and large firms/the public sector. However, the study of the mechanisms that produce mobility for female workers between mid-sized firms is an interesting future research topic.

<sup>&</sup>lt;sup>4</sup> Firm size at *t* and firm size at *t*-1 were not included in the model simultaneously because of multicollinearity.

Table 6 Discrete-Time Logit Models (Mobility from Female Non-Regular to Regular Employment)

	Model 1		Model	2	Model	3	Mode	1 4	Mode	15	Mode	16
	Odds ratio	Robust SE										
Constant	0.041 ***	0.029	0.038 ***	0.028	0.074 ***	0.055	0.071 ***	0.052	0.085 ***	0.065	0.089 ***	0.068
Duration time	(omitted)											
Firm size at t-1												
1-99			ref.				ref.		ref.			
100-999			1.206	0.149			1.250 *	0.156	1.253 *	0.157		
1000>= or public sector			1.051	0.124			1.071	0.127	1.071	0.127		
Firm size at t												
1-99											ref.	
100-999											1.304 **	0.170
1000>= or public sector											0.778 *	0.104
Period												
High economic growth period					ref.		ref.		ref.		ref.	
Slow economic growth period					0.585 **	0.127	0.575 **	0.125	0.539 ***	0.122	0.537 ***	0.121
Bubble economy period					0.491 ***	0.108	0.478 ***	0.106	0.479 ****	0.106	0.476 ****	0.106
Post-bubble economy period					0.563 ***	0.099	0.543 ***	0.097	0.516 ***	0.096	0.523 ***	0.098
Jobs-to-applicants ratio									0.834	0.171	0.832	0.171
# of observations	17,045		17,045		17,045		17,045		17,045		17,045	
# of samples	2,021		2,021		2,021		2,021		2,021		2,021	
Log pseudolikelihood	-1985.173		-1984.061		-1979.878		-1978.324		-1977.934		-1973.255	
Pseudo R <sup>2</sup>	0.023		0.024		0.026		0.027		0.027		0.029	
*** p<0,01, ** p<0.05, *p<0.1												

Hypothesis 5 was not supported. To the contrary, mobility from the non-regular to regular employment sector became difficult during the post-bubble economy period.

#### 5. Conclusions and Discussion

This study shows that the Japanese mobility regime still protects regular workers at large firms and in the public sector. It was assumed that only male regular workers were part of this regime, but the results of the discrete-time logit models show that female regular workers are also under its influence. In this sense, the regime is stronger than I expected.

Meanwhile, the regime is changing, but it is not necessarily weakening. Mobility from regular to non-regular employment was more likely to occur during the post-bubble economy period, while movement from non-regular to regular employment was less likely during the same period. Exploring the social mechanisms that created this asymmetric change would lead to a more detailed analysis of the Japanese mobility regime, and would also make a substantive contribution to the advancement of the theory of mobility regime.

Three tasks should be addressed in future research. First, as mentioned in Footnote 3, the effects of unemployment should be considered. Second, mobility from either regular to non-regular employment or non-regular to regular employment rarely occurs (see Tables 1 and 4). Thus, methods that properly deal with this issue should be introduced to the analysis (King and Zeng 2001). Third, although mobility between the regular and non-regular employment sectors rarely occurs, some workers experience this more often than others. To properly deal with the differences between these types of workers, multilevel modeling should be considered (Teachman 2011).

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