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Study on wage determinants of employees in Korea and Japan

한국과 일본의 임금결정요인에 관한 연구

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이 논문을 국제학 석사학위논문으로 제출함

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Abstract

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Korea and Japan have gone through similar social and economic development stages. They share similar structural conditions such as industrialization based on labor intensive manufacturing, extensive agrarian reform since post-World War II, and universal and rapid expansion of education support such remarks. This paper uses Korea Labor Wage Panel Survey(KLIPS) and Japanese Life Course Panel Survey(JLPS) data to conduct empirical analysis on wage and its determinants. Two surveys were conducted by different institutes, but by aligning the survey standards, comparative analysis can be conducted. Findings show the impact of education year and company size on wages was found to be greater in Korea, while the impact of age, gender, employment type and occupation was greater in Japan. This finding highlights the evolving nature of wage determination in both countries and underscores the need for dynamic and adaptable labor market policies.

Keyword: wage inequality, Korea, Japan, comparative study, panel data
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Chapter I. Introduction

1.1. Significance of Research

One of the issues that draw most attention in contemporary society is issue related to wage. How to raise one's wage is a very important problem for individuals, and some even say that everything we do before we go out to society should have the purpose to get higher wage in the future. Importance of wage is not limited to our daily life. As wage determines one's available resource for economic activity, it has been subject of interest in all fields of research.

This paper tries to visualize the difference in determinants of wage inequality of Republic of Korea and Japan. This paper's first research question is as follows:

Is there a difference in impact of determinants of wage between Republic of Korea and Japan?

The reason that this paper seeks to investigate the difference in impact of determinants of wage inequality by country is because comparative study tends to provide more in-depth information on the inequality structure of a country (Ishida, 1993). Republic of Korea and Japan have gone through similar social and economic development stages. Structural conditions such as industrialization based on labor intensive manufacturing, extensive agrarian reform after the World War II, and universal / rapid expansion of education support such remarks (Arita, 2017). Also, according to Noh (2014), in both countries, 'inequality between regular worker and temporary worker' issue has emerged as a serious problem since 21st century. However, due to the limitations in data availability and comparability, empirical

studies subjecting both Korea and Japan on wage determinants have been done in rather passive way.

There exists plentiful previous research that focuses on the wage inequality, in both Korea and Japan. However, not many papers tried to conduct a comparative analysis using both Korea and Japan as a case. This is due to the scarcity of the dataset which has both Korea and Japan in their dataset. This paper tries to overcome such limitations by merging two different survey datasets which ask similar question in their survey.

After checking whether or not there is a difference in determinants, this paper will pursue on finding answers to following question:

How did the impact of determinants of wage change after shock?

The above question cannot be answered if the dataset is cross-sectional data. To conduct analysis on the long-term, the data must be panel data. For this reason, two different datasets used in this paper are both panel data, although there is a difference in length of panel in terms of year.

To summarize, the purpose of this paper is to find the reasons behind the wage difference in Republic of Korea and Japan, and their trends. In this research, statistical analysis shall be conducted to identify the condition of the wage issue mentioned above.

The significance of this research is as follows. First, it tries to conduct comparative analysis on Korea and Japan, targeting both countries for more in-depth analysis. Second, it uses long-term panel data in its analysis to see long-term trend of wage determinants. Third, it gives methodological guidelines to overcome data limitations, by giving detailed explanation on how we have merged data for the analysis.

1.2. Structure of Paper

This paper consists of 5 chapters. In chapter II, precedent studies on wage determinants in Korea and Japan will be covered, followed by limitations of those research. Wage determinants related research in Korea and Japan share similar characteristics in the independent variable they set up in their research. Main limitations in previous works derive from limitations in data.

Chapter III first explains hypothesis derived from presented research questions, followed by methodology and brief explanation of dataset. As one of the strengths of this paper is using two different sets of data and aligning them into equal categories to see statistical results comparatively, much effort is put in aligning two data. Details regarding each dataset, KLIPS and JLPS, will be covered in this chapter.

Chapter IV is the analysis of wage determinants. First, descriptive statistics, along with detailed explanation of determinants, will be covered. Next, analysis on wage determinants in Korea and Japan will be covered, followed by analysis on determinants after shock. Lastly, in the chapter V, above analysis will be summarized and implications regarding this analysis will be covered, followed by limitations of this research.

Chapter II. Studies on Wage Determinants

2.1. Studies on Wage Determinants in Republic of Korea

In this section, series of work conducted mostly by Korean researchers on studies of wage determinants in Korea will be introduced. Korean researchers tend to focus on the causes or impacts of wage inequality. Many of the research focused on in what degree does the wage inequality is shown in Korean labor market and what reasons lie behind such distribution. First, we will explore what kind of work has been conducted by researchers and try to confirm their limitations.

Paper by Jong (1995) introduces series of works in field of income inequality in Republic of Korea from 1970s to 1990s. Based on previous studies, he selected out 6 group factors, gender, age (working experience), education year, type of occupation, industry, and company size, as determinants of labor wage. He tried to see the changes in income inequality in Korea from 1970s to 1990s, within and between groups. His work showes that except for company size, in all other cases, the wage inequality between the groups was alleviated.

Korean researchers actively engaged in wage inequality studies after Republic of Korea was hit by Asian Financial Crisis in 1997. Substantial rise in wage inequality was seen after the crisis, as Kwang (2001) found, followed with substantial increase in between-group inequality. She argues that *"...the worker households in Korea are undergoing distinct process of wage stratification parallel with the concentration of wage, especially after the economic crisis."* Further study by Kim and Han (2007) also agrees on the rising inequality after the crisis. Their analysis also reveals that in terms of employees, most of the increase in total

inequality was attributed to an increase in the wage gap not between classes but between firms.

Since the economic crisis, many scholars in Korea have focused on the issue of poverty. Hwang (2001) tries to analyze the poverty dynamics of Korean society after the Asian Financial Crisis by using the relative poverty rate and the absolute poverty rate. According to his results, the size of the absolute poor decreased as the time went by after the crisis, but the widened gap in wage distribution after the crisis did not recover. Koo (2005) tries to figure out the dynamics of poverty by conducting a life-table analysis. He conducted a life table analysis to figure out the poverty exit rate in Korea and tried to investigate the primary cause of the poverty persistency. Similar work was done by Park and Kim (2007), and Lee (2011)[1]. The introduced works share similarity in the variables they use to conduct analysis.

The interests in wage inequality drew attention from economists as well, as Korea went through Global Economic Crisis in 2007[2]. Using macroeconomic index as independent variables, Choi et al. (2018) found that increase in investments would decrease the wage inequality and that share of elderly population, which has been accelerating in Korea during the last two decades, is one of the important factors in widening the gap of wage inequality.

Some studies focus on factors other than introduced prevalent factor. Kim and Jeong (2003) also regard region as an important factor affecting wage difference. According to their analysis, in year of 1995, "half of wage inequality was attributable

[1] Lee (2011) tried to figure out whether the dominant factor of poverty is individualized factor or stratified factor.

[2] Although some analysis using (existing) Gini coefficients showed decline in the coefficient after Global Economic Crisis, Choi et al. (2018) points out that current Gini coefficients may have neglected the marginal effects from different wage sources.

to the difference in comes between the Seoul Metropolitan Area and the rest of the nation, and two-thirds of the wage inequality within regions was attributable to the level of wage inequality between subregions of the Seoul Metropolitan Area." This indicates that whether or not a person lives in Seoul or not affects one's wage significantly. Park (2021) analyzes the relationships between monetary policy and wage inequality in Korea. Their findings show that in Korea, impact of monetary policy on wage inequality is rather limited in terms of magnitude, and that other various economic factors, such as economic structure, labor market, education systems, tax, and welfare may be the main drivers of wage inequality.

2.2. Studies on Wage Determinants in Japan

Since the Japan's economic bubble collapsed in early 1990s and entered the 'Lost Decade' era, research focusing on the issue of inequality have been published (e.g., 'social disparity' argument, kakusa shakai ron in Japanese). The Ichioku Sou-churyu Shakai, a shared idea that all Japanese are middle-class, has proven to be invalid; long economic recession and relentless problems seen in health care services made Japan no longer a safe society[3].

Tachibanaki (2006) shows empirical evidence on the extent of both inequality in wage distribution and of poverty rates; he discusses the cause of increases in both these variables, and the implication of such trends. His results show that wage distribution inequality has been increasing in Japan, and that its level is one of the highest among advanced countries. His following research, collaborative

[3] There are discussions whether or not to define 70s and 80s of Japan as 'Sou-Churyu Shakai'. As Chiavacci (2008) points out, empirical research and comparative studies, such as Sawyer (1976) and Ishizaki (1983), questions whether Japan was really an exceptionally equal society.

work with Urakawa (2008), also shows that Japan's poverty trend is on the rise, resulting from increasing number of single households since mid 1990s.

It is believed that Japan still has long way to go for recovery from 'Lost Decades', but as Blind and Mandach (2015) points out, Japanese labor market may not have been under depression but expanded opportunities and wages for employees. Using government data (Labour Force Survey by Statistics Bureau of Japan) between 1988 and 2010, their findings show that total of 8.5 million new jobs were created and employment ratio during that time actually increased. Second, workers' wage increased and especially that of female workers increased, and wage gap between regular and non-regular workers narrowed between 1988 and 2010. They argue that increase in non-regular workers during the time was actually due to increase in labor demand by employers, not due to unstable market conditions.

Arita (2017) conducted a comparative analysis using the 2005 Social Stratification and Social Mobility Survey (SSM) data to analyze the inequality structure of employees in Korea / Japan / Taiwan. The SSM survey is a large-scale social survey conducted in Japan, every 10 years from 1955. In particular, in 2005, the survey was conducted for not only in Japan but also for Korea and Taiwan. For his research, individual wage and subjective status evaluation were used as dependent variables. Occupation, employment status, employment type, corporate size, age, education level, and gender were used as independent variables. Results showed that in Korea, 'personal' factors were dominant factor affecting one's wage, whereas in Japan, 'work-related' factors were dominant ones. This shows that in Korea, personal attributes have a great influence on determining one's wage or subjective status evaluation, whereas in Japan, work-related attributes have a great influence on determining one's wage or subjective status evaluation.

2.3. Limitations of Precedent Research

Looking back at studies conducted in Korea, most of research tends to focus on short-term research, such as before and after the economic crisis, using cross-sectional data. Such method may clearly show the difference before and after the shock, but we cannot see the long-term trend in study of wage determinants. Also, many studies focus on poverty entrance and exit or inequality, but less analysis is done on the determinant of wage itself.

Some Japanese research focused on long-term analysis. However, due to data limitation, they used macro-level rather than micro-level data in their analysis, which makes it harder to identify real causal relationship between variables.

Interesting thing about research conducted in Korea and Japan is that the characteristics of variables used are very similar, and the direction (+/-) of the coefficient is also in align. Although Japan shares many similar features with Korea – increasing number of single households and growing number of elderly, labor intensive manufacturing, extensive agrarian reform, Confucianism and so on – the comparative study using two countries on wage and its determinants were rather neglected by researchers. More in depth studies on wage determinants using data from both two countries is required, for as Ishida (1993) stated, by comparing two Asian countries which have gone through similar social and economic development stages, we can clarify the inequality structure in both countries more precisely.

Chapter III. Methodology and Data

3.1. Research Question

Insighted from precedent research above, this paper aims to clarify answers to research questions of following:

1. ***Is there a difference in impact of determinants of wage between Republic of Korea and Japan?***
2. ***How did the impact of determinants of wage change after shock?***

3.2. Methodology and Data (KLIPS, JLPS)

This paper uses two sets of data both from Korea and Japan, merging them into one set before conducting research. Two data used are Korean Labor & Wage Panel Study (hereafter KLIPS) and Japanese Life Course Panel Survey (hereafter JLPS). KLIPS is a longitudinal panel survey conducted every year, which begun in 1998 with a representative sample of Korean households and individuals living in urban areas. It surveys economic activities, wage, expenditures, education, and other personal information of the individual. The survey is conducted separately by households and individuals. JLPS is also a longitudinal panel survey that is conducted every year. The survey is separately conducted for youths, middle-aged, and high school graduates, using similar but different questionnaire. Although Korean and Japanese surveys were conducted by different associations, by aligning the survey standards and cleansing the data, comparative analysis can be conducted to give implication for above research questions. The targeted samples are only the 'employees who are currently working'.

Table 1 below is the variables used for this paper's research. As KLIPS and JLPS used similar but different scales in surveying, some data transformation will be conducted to have identical standards for research. KLIPS has data from 1998 to 2020, whereas JLPS has data from 2008 to 2017. Due to differences in year, results of analysis should be interpreted cautiously.

Table 1. Variables used in research.

Data	
Korea	KLIPS
Japan	JLPS-Y, JLPS-M
Dependent Variable	Logged wagerate_real (hourly wage(real), baseyear: 2020, unit converted to KRW)
Independent Variables	
Gender (GENDER)	Female(0), Male(1)
Age (AGE)	International Age
Education year (EDUYR)	Education Year
Employment Type (EMPREG)	Non-regular(0), Regular(1)
Occupation (JOB)	Agriculture & elementary(0), Craft workers and plant & machine related(1), Sales(2), Service(3), Clerical(4), Professional & Technicians(5), Managerial(6)
Company Size (CSIZE)	micro (1~9)(0), semi-micro (10~29)(1), small (30~99)(2), medium (100~299)(3), large (300~999)(4), mega (1000+)(5)
Age Squared (AGESQR)	AGE times AGE

For dependent variable, wage will be used as an objective index for inequality. Logged real wagerate, which is hourly real wage with a base year of 2020 will be used to resolve skewness. As JLPS's wage is shown in *yen* and KLIPS's as *won*, it was unified into *won* unit[4]. According to Brooks (2018), pure and rigorous definition of income is seemingly impossible, and that even for a government, 12

[4] For exchange rate, data from Korean Statistical Information Service was used (https://kosis.kr/index/index.do)

different income definitions are used for various purposes. Although we agree with the idea that is the money we receive from our labor or investments, in what degree we should categorize wage may still be difficult, as issue of tax, policy, law also relies on how to define income (Brooks, 2018; 254). Therefore, rather than focusing on 'income', this paper will only focus on 'wage' of employees.

For independent variables, gender, age, education year, employment type, occupation type, and company size were used. These variables were insighted from Arita(2017) and Korean researchers who used KLIPS in their analysis. Arita(2017) argued that *"...labor markets in East Asia are mostly divided along gender lines, (and therefore it is) perhaps more appropriate to study the effect of the gender variable by analyzing each gender separately."* However, in this paper, gender will be treated as an independent variable as we focus on comparison between Korean and Japan employees.

Education year is also one of the important factors that determine wage. Particularly in Korea, the university entrance rate is 68%, the highest among OECD countries (as of 2019). Japan also has a high university enrollment rate, close to 60%. Education needs to be paid more attention because it has a great influence on what kind of job one will have in the future. As KLIPS data on education consists of 9 levels from 1) preschool to 9) graduate school, and JLPS data consists of 6 levels from 1) under middle school to 6) graduate school, for this research we've newly generated continuous variable, education year, derived from each individual's year of graduation and year of dropouts. We also considered the number of years of education when individual returned to school.

As mentioned above, for employment, only non-regular and regular workers were included in the analysis. In the 21st century, the issue of inequality

between regular workers and non-regular workers has been in the spotlight since the concept of ‘interns’ in Korea and ‘dispatch (haken)’ in Japan was established. Therefore, the difference in wage between the cases of non-regular workers and regular workers is assumed to be significantly large. In addition, Arita (2017b) argues that different characteristics are observed for following four cases: maintaining regular workers, moving from regular to non-regular workers, moving from non-regular workers to regular workers, and moving to non-regular workers. This shows the problem of 'inequality between regular and non-regular workers' in Japan has a very complex nature. In this study, the transition between regular and non-regular workers is not addressed and will be left as a future task.

Occupation is also considered in this analysis. In general, those in managerial positions and professionals are expected to earn high wages. On the other hand, those who serve in simple elementary occupations are expected to earn low wages and have higher risk of losing jobs. Public servants, as well as those who serve in military, were excluded from this study because they are considered to have distinctive characteristics different from other occupations.

Also, company size may affect wage, as we have witnessed from the cases in Korea and Japan where people cram to enter big companies like Samsung or Toyota, and they get paid more than those who enter relatively small companies.

Additionally, people’s age square is considered in this analysis. The amount of wages that increases with age is not linear; it is usually an inverted U curve. Therefore, age squared was added as a control variable.

According to Lee (2011), all of the determinants of wage above are stratification factors. He argues that in addition to stratification factors, individualization factors, such as whether an individual has experienced job loss,

marital status, and whether an individual is leaving outside of parent's house, should be considered in analyzing determinants of wage inequality. Lee's findings showed that the individuation factor did not overwhelm the stratification factor in the poverty risk level. In this study, individualization factors will not be included in reference to Lee's results.

Empirical Framework of this research using variables introduced above is as following:

$$Ln\_wagerate_{it} = \beta_0 + \beta_1 GENDER_i + \beta_2 AGE_{it} + \beta_3 EDUYR_{it} + \beta_4 EMPREG_{it} + \beta_5 JOB_{it} + \beta_6 CSIZE_{it} + \beta_7 ASQ_{it} + \varepsilon_{it}$$

Chapter VI. Analysis of Wage Determinants: Korea & Japan

4.1. Descriptive Statistics

Table 2 shows descriptive statistics for countinous variables used for analysis; real wagerate, age and education year.

Table 2. Descriptive statistics for continuous variables used in analysis

Variable	Group	N	Mean	Std. Dev.	Min	Max
Wagerate_real (Base: 2020) (Unit: KRW)	ALL	118,131	14,087.1	11,194.4	176	754,026.5
	ROK	98,911	13,440.4	10,658.1	176	754,026.5
	ROK Low	32,971	5,971.5	1,601.5	176	8482.7
	ROK Mid.	32,970	11,104.9	1,605.5	8,482.8	14,190.4
	ROK High	32,970	23,244.8	13,352.2	14,190.8	754,026.5
	JPN	19,220	17,415.2	13,130.2	679.6	443,348.5
	JPN Low	6,407	9,743.3	1,812.5	679.6	12,431.3
	JPN Mid.	6,407	15,139.2	1,676.1	12,431.4	18,252.5
	JPN High	6,406	27,364.7	18,658.8	18,260	443,348.5
*Ln*_wagerate	ALL	118,131	9.365	0.604	5.171	13.533
	ROK	98,911	9.312	0.613	5.171	13.533
	JPN	19,220	9.640	0.467	6.522	13.002
AGE	ALL	118,131	41.108	11.600	15	90
	ROK	98,911	41.697	12.299	15	90
	JPN	19,220	38.076	6.134	22	51
EDUYR	ALL	118,131	12.801	2.980	0	23
	ROK	98,911	12.850	3.173	0	23
	JPN	19,220	12.545	1.636	9	23

REAL WAGERATE(logged)

For dependent variable, this paper uses logged real wagerate. To see real value of wage, wage was converted to real wage from nominal wage(Base year: 2020). Also, as Korea and Japan use different currency in their economy, for simultaneous analysis, this paper converted Japanese *yen* to Korean *won*, using exchange rate obtained from Korean Statistical Information Service, KOSIS. The

mean value of real wagerate in total is 14,087, and Japan tend to have higher mean wagerate of around 3,000 won compared to Korea. However, overall disparity in low, middle, and high income was relatively similar in both countries. For more accurate analysis, in regression we use logged real wagerate to resolve skewness.

AGE

Due to difference in dataset, age differs greatly between Korea and Japan. Korea has greater sample age range than that of Japan, as KLIPS does not hold any limitations to age in their survey (from 15 to 90). However, JLPS conducted survey by sample's age, they only focus on samples in their youths and middle-aged (from 22 to 51). In analyzing the datasets of Japan and Korea, it is important to acknowledge the presence of an age difference between the two. This difference can have significant implications when interpreting the data, as the Japanese dataset may not fully represent the entire population of Japan, unlike that of Korea. By recognizing this disparity, we can better understand and contextualize the findings from each dataset, ensuring a more accurate portrayal of the respective countries' demographics.

EDUYR

When it comes to the number of years of education, both Korea and Japan have a similar pattern. The maximum years of education in both countries is 23, and their mean of education years is over 12, highlighting the importance placed on education in two countries. The reason Korea has some 0 education year is due to elderly samples that did not benefit from mandatory education courses. This difference between Korea and Japan also may bias some of the results in our findings.

Table 3 below shows descriptive statistics for categorical variables used for analysis; gender, employment type, occupation, and company size.

Table 3. *Descriptive statistics for categorical variables used in analysis*

Variable		ALL	ROK	JPN
GENDER	Female	49,249(41.69%)	39,616(40.05%)	9,633(50.12%)
	Male	68,882(58.31%)	59,295(59.95%)	9,587(49.88%)
	Total	118,131(100%)	98,911(100%)	19,220(100%)
EMPREG	Non-regular worker	27,261(23.08%)	21,502(21.74%)	5,759(29.96%)
	Regular worker	90,870(76.92%)	77,409(78.26%)	13,461(70.04%)
	Total	118,131(100%)	98,911(100%)	19,220(100%)
JOB	Agri & elem.	12,416(10.51%)	12,279(12.41%)	137(0.71%)
	Craft, plant, machine	31,647(26.79%)	27,034(27.33%)	4,613(24.00%)
	Sales workers	8,837(7.48%)	6,279(6.35%)	2,558(13.31%)
	Service workers	9,558(8.09%)	8,135(8.22%)	1,423(7.40%)
	Clerical workers	25,584(21.66%)	20,090(20.31%)	5,494(28.58%)
	Pro. & technicians	28,151(23.83%)	23,509(23.77%)	4,642(24.15%)
	Managers	1,938(1.64%)	1,585(1.60%)	353(1.84%)
	Total	118,131(100%)	98,911(100%)	19,220(100%)
CSIZE	Micro (1~9)	33,856(28.66%)	31,410(31.76%)	2,446(12.73%)
	S.micro (10~29)	20,844(17.64%)	18,420(18.62%)	2,424(12.61%)
	Small (30~99)	20,441(17.30%)	16,737(16.92%)	3,704(19.27%)
	Med. (100~299)	13,037(11.04%)	10,004(10.11%)	3,033(15.78%)
	Large (300~999)	9,868(8.35%)	7,046(7.12%)	2,822(14.68%)
	Mega (over 1000)	20,085(17.00%)	15,294(15.46%)	4,791(24.93%)
	Total	118,131(100%)	98,911(100%)	19,220(100%)

GENDER

Descriptive statistics show that Japan has a more balanced distribution in gender, with roughly equal numbers of male and female employees, with a slightly higher proportion of female employees than their counterpart. In contrast, Korea has a less balanced distribution, with males making up almost 60% of the sample. In

comparing the gender distribution in the labor market between Japan and Korea, it is important to consider the age difference in the datasets. The data from Korea may be more representative of the entire Korean population, while the data from Japan may not fully capture the diversity of the Japanese workforce. This potential limitation should be considered when analyzing and interpreting the findings related to gender disparities in employment and career advancement.

EMPLOYMENT TYPE

Regular workers, also known as permanent employees, have job stability and enjoy various benefits such as health insurance, retirement plans, and paid leave. On the other hand, non-regular workers, including temporary and part-time employees, often face precarious employment conditions with limited benefits and job security. The disparity between regular and non-regular workers is a significant issue in both countries, impacting the overall labor market dynamics and the well-being of workers. In both Korea and Japan, employees who are hired as regular workers consist more than that of non-regular workers.

OCCUPATION

For occupation, it is divided into 7 categories: Agriculture & elementary, Craft workers and plant & machine related, Sales, Service, Clerical, Professional & Technicians, and Managerial positions. In both Korea and Japan, employees working in field of craft, plant and machine, employees working in clerical positions, and professionals & technicians consist most of the ratio in employees. One of biggest difference between Korea and Japan in above statistics is the ratio of agriculture & elementary workers. In contrast to Korea, Japan's sample consist less than 1% of

total occupations for agriculture and elementary workers. This also shows that JLPS data do not fully represent whole Japanese population, as those who work in field of agriculture in Japan consist of more than 1%, according to 2020 Census of Agriculture and Forestry in Japan.

COMPANY SIZE

In comparing company size distributions between Japan and Korea, it shows distinct differences. While Japan's employees are relatively equally distributed among various company sizes, with mega-size companies (1000+) having the highest ratio, in contrast, over 30% of Korean employees work in micro-sized companies. This discrepancy may highlight the contrasting structure of the two countries' corporate landscapes. In Japan, the dominance of mega-size companies suggests more safe and stagnated labor market for employees, whereas in Korea, the prevalence of micro-sized companies indicates a more fragmented and diverse labor opportunities for employees.

4.2. Analysis on Wage Determinants: Korea & Japan

Below Table 4 shows empirical results of the analysis to see difference in impact of determinants of wage between Republic of Korea and Japan. Columns (1) to (3) used pooled-OLS, while Columns (4) to (6) used random-effects model.

Table 4. Regression results to see difference in impact of determinants of wage between Republic of Korea and Japan.

Dependent: *Ln*_wagerate_real	Pooled			RE		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	ROK	JPN	ALL	ROK	JPN
AGE	0.067***	0.062***	0.075***	0.073***	0.075***	0.078***
	(0.001)	(0.001)	(0.005)	(0.001)	(0.001)	(0.005)
EDUYR	0.050***	0.060***	0.021***	0.082***	0.092***	0.021***
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.003)
GENDER *(ref. Female)*						
Male	0.250***	0.263***	0.164***	0.193***	0.197***	0.221***
	(0.003)	(0.003)	(0.007)	(0.006)	(0.006)	(0.013)
EMPREG *(ref. Non-reg)*						
Regular	0.053***	0.061***	0.232***	0.078***	0.085***	0.100***
	(0.003)	(0.004)	(0.007)	(0.003)	(0.004)	(0.008)
JOB *(ref. Agri & Elem)*						
Craft & Machine	0.243***	0.225***	0.140***	0.16***	0.151***	0.156***
	(0.005)	(0.005)	(0.034)	(0.006)	(0.006)	(0.042)
Clerical	0.209***	0.127***	0.154***	0.155***	0.123***	0.182***
	(0.007)	(0.007)	(0.35)	(0.008)	(0.008)	(0.047)
Service	0.174***	0.138***	0.144***	0.086***	0.059***	0.201***
	(0.006)	(0.007)	(0.035)	(0.007)	(0.007)	(0.043)
Sales	0.418***	0.381***	0.267***	0.278***	0.269***	0.250***
	(0.006)	(0.006)	(0.035)	(0.007)	(0.007)	(0.043)
Professional	0.476***	0.429***	0.377***	0.305***	0.289***	0.334***
	(0.006)	(0.006)	(0.035)	(0.007)	(0.007)	(0.043)
Managerial	0.636***	0.582***	0.574***	0.362***	0.348***	0.405***
	(0.011)	(0.012)	(0.040)	(0.013)	(0.014)	(0.047)
CSize *(ref. Micro)*						
Semi-micro (10~29)	0.097***	0.079***	0.165	0.064***	0.058***	0.000
	(0.004)	(0.004)	(0.01)	(0.004)	(0.004)	(0.011)
Small (30~99)	0.155***	0.124***	0.0265**	0.101***	0.091***	0.011
	(0.004)	(0.004)	(0.01)	(0.004)	(0.004)	(0.012)
Medium (100~299)	0.206***	0.157***	0.08\75***	0.135***	0.118***	0.055***
	(0.005)	(0.005)	(0.01)	(0.005)	(0.005)	(0.012)
Large (300~999)	0.334***	0.283***	0.157***	0.177***	0.158***	0.084***
	(0.005)	(0.006)	(0.01)	(0.015)	(0.006)	(0.013)
Mega (1000~)	0.423***	0.403***	0.230***	0.224***	0.212***	0.125***
	(0.004)	(0.005)	(0.01)	(0.005)	(0.005)	(0.012)
AGEsqr	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Observations	118,131	98,911	19,220	118,131	98,911	19,220
R^2 *(RE: Overall)*	0.442	0.469	0.290	0.373	0.404	0.217

Standard errors are shown in parentheses. Level of statistical significance is indicated as following: *** *p<.01, ** p<.05, * p<.1*

Column (1) shows pooled-OLS regression result including both Korea and Japan samples. It can be found here that both age and education year has significant positive effect on logged real wagerate, and negative coefficient in age squared indicates diminishing returns to age. It is also noticeable that in terms of gender, males earn more wage than female, and that being a regular employee is associated with higher wage in Korea and Japan. Occupation affects one's wage greatly; result shows being in managerial position lets employee to earn 1.6 times more that their counterpart working in agriculture and elementary positions. Managerial position makes employee to earn most, followed by professional, sales, craft & machine, clerical, service, with agriculture & elementary earning least. Company size also influences one's wage, with larger company size making employees have higher wagerate. In Columns (2) and (3), sample to Korea and Japan is divided. Overall, variables of age, gender and employment type(regular or non-regular) have similar effects and significance, and with some difference in coefficient values in education year, occupation and company size.

Pooled-OLS model is a standard regression model that pools all the individuals in the panel dataset into a single regression. In other words, it treats all the entities as if they come from the same population and estimates a single set of coefficients for all the entities. The model ignores the potential heterogeneity and correlation between individual entities, assuming that the relationship between the dependent variable and the predictors is the same across all entities. On the other hand, random-effects model acknowledges the existence of entity-specific heterogeneity by allowing the intercepts to vary across individual entities. In this model, entity-specific effects are assumed to be random, and the model estimates both the within-entity variation and the between-entity variation. It accounts for the

unobserved time-invariant heterogeneity present in the data, which gives us more precise result when using panel dataset[5].

Columns (4), (5) and (6) used random-effects model for analysis. In Column (4), the coefficient for age is 0.073 with a significance level of $p < 0.001$. This means that, on average, a one-unit increase in age is associated with a 7.3% increase in real wagerate. This effect is statistically significant, suggesting that age is a significant predictor of wage in Japan and Korea combined. The coefficient for age squared is -0.001 with a significance level of $p < 0.001$. This suggests that a one-unit increase in the squared term of age is associated with a 0.1% decrease in the real wagerate. The negative coefficient indicates that the relationship between age and wages is non-linear, and the effect of age on wages diminishes as individuals grow older. Such result is consistent in Columns (5) and (6), indicating that in Korea and Japan, age has positive effect on wagerate with diminishing effect as one gets older.

In Column (4), the coefficient for education year is 0.082 with a significance level of $p < 0.001$. This indicates that, on average, a one-year increase in education is associated with an 8.2% increase in real wagerate. The effect of education is statistically significant, implying that higher levels of education are positively related to higher real wagerates. Interestingly, Columns (5) and (6) shows different results. In Korea, one year increase in education year brings 9.2% increase in wage, whereas in Japan, it only brings 2.1% increase. This shows that in Korea, employees' education is more crucial to their wage compared to Japan.

[5] Commonly, fixed-effect model is used to analyze panel data. However, in our analysis we also want to see effect of gender which is considered as time-invariant model, we will use random-effect model.

The coefficient for gender variable is 0.193 with a significance level of $p < 0.001$ in Column (4). This means that, being male is associated with a 19.3% increase real wagerate compared to females. The effect of gender is statistically significant, and consistent in Columns (5) and (6), indicating that males tend to have higher wages than females in both Korea and Japan. However, for Japan, the coefficient is 0.221, indicating that benefit of being male employee affects employees' wage slightly more than in Korea. This is similar for case of employment type; coefficients show that effect of regular employment is statistically significant, implying that individuals in regular employment tend to have higher wages than those in non-regular employment, but being regular worker affects one's wage more in Japan than in Korea.

Coefficients for various occupations (e.g., Craft & Machine, Clerical, Service, Sales, Professional, Managerial) represent the differences in logged real wagerate compared to the reference category(Agriculture & Elementary positions). For example, in Column (4), being in the "Sales" category is associated with a coefficient of 0.278 ($p < 0.001$), which suggests that individuals in sales positions, on average, 27.8% increase in the real wagerate compared to those in agriculture & elementary positions. What is also notable is that when we compare Column (5) and (6) except for sales, all coefficients in job variable is relatively higher in Column (6), which represents Japan. This shows that when comparing Korea and Japan, it is the Japanese labor market that has more influence on wages depending on what kind of job you have.

The coefficients for different company sizes (e.g., Semi-micro, Small, Medium, Large, Mega) represent the differences in logged real wagerate compared to the reference category(Micro-sized companies). For instance, working in Mega-

sized company which consists of employees more than 1000, is associated with a 22.4% increase in the real wagerate compared to those in micro-sized companies on average. This trend is similar for both countries, but in all company sizes, Column (5) has relatively bigger coefficient number than that of Column (6) counterparts. This shows that company size is more important for employees' wage in Korea than that of Japan. Also, for semi-micro size company and small size company in Japan, the coefficient is not statistically significant, indicating that there is little evidence that employees working in semi-micro size company and small size company in Japan earn more than those working in micro size company.

4.3. Analysis on Change in Wage Determinants after Shock

Below Table 5 shows empirical results of the analysis to see difference in impact of determinants of wage between Republic of Korea and Japan after shock. Columns (1) and (2) used KLIPS data and Columns (3) and (4) used JLPS, all using random-effects model.

Table 5. Regression results to see difference in impact of determinants of wage between Republic of Korea and Japan after shock.

Dependent: *Ln*_wagerate_real	RE (ROK)		RE (JPN)	
	(1)	(2)	(3)	(4)
	Before GEC (1998 ~2007)	After GEC (2008~2020)	Before Earthquake (2008~2010)	After Earthquake (2011~2017)
AGE	0.087***	0.060***	0.051***	0.007
	(0.002)	(0.001)	(0.015)	(0.007)
EDUYR	0.068***	0.078***	0.018***	0.021***
	(0.002)	(0.001)	(0.005)	(0.004)
GENDER *(ref. Female)*				
Male	0.230***	0.230***	0.163***	0.242***
	(0.010)	(0.007)	(0.018)	(0.015)
EMPREG *(ref. Non-reg)*				
Regular	0.054***	0.105***	0.153***	0.105***
	(0.008)	(0.004)	(0.016))	(0.010)
JOB *(ref. Agri & Elem)*				
Craft & Machine	0.157***	0.151***	0.97	0.153***
	(0.012)	(0.007)	(0.080)	(0.050)
Clerical	0.149***	0.070***	0.79	0.199***
	(0.016)	(0.010)	(0.081)	(0.050)
Service	0.050***	0.048***	0.100	0.201***
	(0.015)	(0.008)	(0.083)	(0.051)
Sales	0.339***	0.232***	0.198**	0.271***
	(0.014)	(0.008)	(0.081)	(0.050)
Professional	0.388***	0.258***	0.306***	0.353***
	(0.014)	(0.008)	(0.081)	(0.050)
Managerial	0.511***	0.367***	0.390***	0.432***
	(0.030)	(0.016)	(0.092)	(0.055)
CSize *(ref. Micro)*				
Semi-micro (10~29)	0.045***	0.056***	0.032	-0.006
	(0.007)	(0.004)	(0.023)	(0.013)
Small (30~99)	0.065***	0.098***	0.026	0.011
	(0.008)	(0.005)	(0.022)	(0.014)
Medium (100~299)	0.095***	0.126***	0.080***	0.052***
	(0.010)	(0.005)	(0.023)	(0.015)
Large (300~999)	0.154***	0.169***	0.126***	0.079***
	(0.011)	(0.006)	(0.024)	(0.015)
Mega (1000~)	0.230***	0.212***	0.196***	0.119***
	(0.009)	(0.006)	(0.022)	(0.015)
AGEsqr	-0.001***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	32,104	66,807	5,419	13,801
R^2 *(RE: Overall)*	0.426	0.426	0.284	0.162

Standard errors are shown in parentheses. *** *p<.01*, ** *p<.05*, * *p<.1*

Columns (1) and (2) show random-effects model regression result of Korean employees before and after Global Economic Crisis. As analyzed in precedent research, Global Economic Crisis had a significant impact on the Korean economy. With a large number of small businesses comprising the corporate landscape, Korea was particularly vulnerable to the downturn. Many micro-sized companies faced financial difficulties, struggling to adapt to shrinking consumer demand and tightening credit conditions. As a result, there was a surge in bankruptcies and closures, causing widespread unemployment and economic instability.

In Column (1), the coefficient for age is 0.087 ($p < 0.01$), indicating that a one year increase in employee's age is significantly associated with a 8.7% increase in real wagerate, whereas in Column (2), the coefficient for age is 0.060 ($p < 0.01$), indicating that a one year increase in employee's age is significantly associated with a 6% increase in real wagerate. This shows that the effect of age in Korea after Global Economic Crisis has weakened, comparatively.

Coefficient of education year is 0.068 before GEC and 0.078 after GEC in Korea, both statistically significant. This indicates that impact of education variable on employee's wagerate has increased after GEC occurred. Same trend goes for employment type; coefficient of education year is 0.054 before GEC and 0.105 after GEC. This shows that employee's level of education and employment type of employee became more important in deciding one's wage after GEC.

The comparison of coefficients occupations in Column (1) and (2) reveals that the effects of being in occupations in Craft & Machine, Clerical, Service, Sales, Professional, and Managerial positions have weakened after Global Economic Crisis.

While all occupations listed above have statistically significant higher wagerate compared to their reference counterpart, the value of coefficients have dropped after GEC. On the other hand, effect of company size on employee's wagerate has increased overall, except for mega-sized company.

Columns (3) and (4) show the random-effects model regression results of Japanese employees before and after the Great East Japan Earthquake in 2011. This earthquake, also known as the Tōhoku earthquake, was a magnitude 9.0 earthquake that struck the northeastern coast of Japan on March 11, 2011. The earthquake triggered a massive tsunami, which devastated coastal areas and caused significant damage to infrastructure, including nuclear power plants. As our Japanese data starts from 2008, we will use this earthquake as a shock variable to see the change in Japanese employees' wage rate after the shock.

The coefficient for age before earthquake is 0.051 and statistically significant, indicating that a one-year increase in age is associated with a 5.1% increase in wagerate rate of Japanese employee. However, after earthquake, the coefficient is 0.007 and not statistically significant, indicating that there is little evidence that increase in age has positive effect on employee’s wage.

In comparing the coefficients of employment type between Column (3) and Column (4) in the context of Japan before / after the Earthquake, we observe a reduction in the magnitude of the effect on wage. In Column (3), being in regular employment is associated with a substantial 15.3% increase in wagerate, whereas in Column (4), the coefficient decreases to 0.105, indicating a relatively smaller wage increase. These differences suggest a potential attenuation of the relationship between regular employment and wage after the earthquake.

In comparing the coefficients of gender and education year between Column (3) and Column (4) in the context of Japan before / after the earthquake, noteworthy changes in the magnitude of their impacts on wage is apparent. In Column (3), gender variable shows a coefficient of 0.163, indicating that being male is associated with a 16.3% increase in wagerate compared to female counterparts. However, in Column (4), the coefficient of gender increases to 0.242, suggesting a larger wage increase for males relative to females after the earthquake. Similarly, for education year, the coefficient in Column (3) is 0.018, signifying that each additional year of education is associated with 1.8% increase in wagerate. In Column (4), the coefficient rises to 0.021, indicating a slightly stronger positive relationship between years of education and wage after the earthquake. These findings imply that the earthquake may have influenced the wage differentials based on gender and education level, potentially reflecting shifts in labor market dynamics or policy responses.

In analyzing the impact of the occupation, notable differences in its influence on wage is evident. In Column (3), the coefficients for several job categories were not statistically significant, indicating limited evidence of their impact on wage before earthquake. However, in Column (4), the coefficients for job categories display increased significance, suggesting that the occupation has a higher influence on wage after the earthquake. The earthquake may have prompted shifts in occupational demand and labor market dynamics, leading to a more pronounced effect of specific job categories on wages.

In exploring the impact of the company size variable in Columns (3) and (4), we can also see distinct differences in its influence on wage. Both Columns show that for semi-micro sized company and small company the coefficient value is not

statistically significant, however, coefficient of company size bigger than medium-sized company is higher before the Earthquake. These findings suggest that the impact of company size on wages changed after the earthquake, with larger company sizes having a stronger effect before the earthquake but showing a reduced influence after the earthquake.

4.4. Discussion

Firstly, this paper conducted analysis on impact of wage determinants in Republic of Korea and Japan using pooled-OLS and random-effects models. In the pooled-OLS model, both age and education year exhibit significant positive effects on logged real wagerate, with the squared term of age indicating diminishing returns to age. Moreover, being male and holding regular employment are associated with higher wagerate in both countries. Occupation also plays a crucial role, with managerial positions yielding the highest wages compared to agriculture and elementary positions. Larger company sizes are associated with higher wages as well.

The transition from the pooled-OLS model to the random-effects model introduces entity-specific heterogeneity, which considers the individual effects of each entity in the panel dataset. In both Korea and Japan, age remains positively related to real wagerate, and diminishing effect is evident as individuals grow older. Education year continues to have a positive impact on wages in both countries, with a more pronounced effect observed in Korea compared to Japan. The gender wage gap persists in both countries, favoring males, but the magnitude of the effect is slightly stronger in Japan. Occupations continue to significantly influence wages, with the impact varying across job categories. The Japanese labor market appears to

have more influence on wages depending on the type of occupation. Likewise, company size remains relevant for wage determination in both countries, with Korea exhibiting a stronger association between company size and wages compared to Japan.

Above findings challenge the notion of a clear-cut distinction in wage determinants between Republic of Korea and Japan. While precedent research by Arita suggested stronger impacts of enterprise and job characteristics in Japan and personal characteristics in Korea, this study shows that the effects are now more mixed. Education and company size have emerged as stronger wage determinants in Korea, whereas age, gender, employment type, and occupation play more significant role in shaping wages in Japan. These nuanced findings provide valuable insights into the evolving labor market dynamics in both countries and highlight the complexity of wage determination in Korea and Japan

Our second analysis reveals intriguing patterns in the wage determinants for Korean and Japanese employees both before and after significant shock. Specifically, the Global Economic Crisis had a notable impact on the Korean labor market. The coefficients for education year and employment type in post-GEC increased compared to pre-GEC in Korea, indicating that these personal characteristics became more influential in determining employee wages after the economic shock. Conversely, the coefficients for several occupations, such as Craft & Machine, Clerical, Service, Sales, Professional, and Managerial positions, weakened after the crisis, suggesting a potential restructuring in the job market during after GEC. The impact of company size on wages increased overall, except for mega-sized companies, which may reflect changing dynamics in the corporate landscape post-GEC.

In case of Japan, the Great East Japan Earthquake had a profound effect on wage determinants. Notably, the impact of age on wages became statistically insignificant after the earthquake, indicating that age may no longer have a positive effect on Japanese employee wages in the aftermath of the disaster. Furthermore, the coefficients for gender and education year increased after the earthquake, implying a stronger influence of these personal characteristics on wage differentials. The changes in these coefficients suggest that the earthquake might have been triggered from shifts in labor market dynamics.

Based on the analysis, the findings reveal interesting shifts in wage determinants for both Korean and Japanese employees after shock. Notably, the impact of personal characteristics such education year and gender has increased in both countries. This implies that higher levels of education and being male are now more strongly associated with higher wages in the post-shock period in both countries.

On the other hand, the impact of age as a wage determinant has decreased in both countries after the respective shocks. This indicates that age is becoming less influential in determining employee wages in the aftermath of the economic events. This could be due to changes in workforce dynamics, increased focus on skills and education, or other socio-economic factors.

The findings related to the variables such as employment type, occupation and company size are more nuanced. For employment type, in Korea being regular worker is more highly associated with higher wage after GEC, but in Japan being regular worker was more highly associated with higher wage before earthquake. The impact of occupation and company size shows a mixed direction in their influence on wages. This suggests that the relationship between job positions and wages, as

well as the effect of company size on wages, varies across different sectors and time periods. These changes could be a result of shifting labor market demands, industry-specific challenges, or unique policy responses in each country.

In summary, the analysis indicates that the impact of education year and gender on wages has strengthened in both Korea and Japan, while the effect of age has weakened. However, the relationship between employment type, occupation and company size with wages are more complex and displays mixed trends. These findings provide valuable insights into the changing dynamics of wage determinants in the aftermath of significant economic shocks in both countries. Policymakers and businesses in both countries may utilize this result to better understand and adapt to the evolving labor market conditions in order to promote fair and sustainable wage structures for employees.

Chapter VI. Conclusion

This paper aims to investigate potential differences in the impact of wage determinants between Korea and Japan, and to analyze how these determinants changed in both countries following significant shocks. The findings provide valuable insights into the complexities of wage determination in these two Asian economies. This paper's key findings are summarized as following:

Firstly, unlike precedent research that suggested a stronger impact of enterprise and job characteristics (employment type, occupation, and company size) on wages in Japan and a stronger impact of personal characteristics (age, education year) on wages in Korea, this study revealed that the impacts are now more mixed. Specifically, the impact of education year and company size on wages was found to be greater in Korea, while the impact of age, gender, employment type and occupation was greater in Japan. This highlights the evolving nature of wage determination in both countries and underscores the need for dynamic and adaptable labor market policies.

Secondly, the analysis reveals that the influence of education year and gender on wages has increased in both Korea and Japan. This underscores the growing importance of education and gender equality in shaping wage differentials in the labor market of both countries. Policymakers should take these trends into account when devising strategies to promote equitable and inclusive economic growth.

Thirdly, the impact of age on wages has decreased in both Korea and Japan

after the shocks. This suggests a shift in the valuation of age-related experience, possibly reflecting changing skill requirements or workforce dynamics in the post-shock period in both countries.

Fourth, the relationships between occupation and company size with wages showed mixed directions in the aftermath of the shocks. This highlights the intricate nature of wage determination, with the influence of job positions and company sizes varying across sectors and time periods. For employment type, in Korea being regular worker is more highly associated with higher wage after GEC, but in Japan being regular worker was more highly associated with higher wage before earthquake. Further research is warranted to delve deeper into the underlying factors driving these fluctuations.

Despite these valuable findings, it is crucial to acknowledge the limitations of this paper. Firstly, the Japanese data used in this study may not fully represent the entire population of Japan, as it comprises a mixture of youths and middle-aged individuals. This could limit the generalizability of the findings to other age groups.

Secondly, the relatively small sample size of the Japanese dataset compared to the Korean dataset may affect the statistical power and precision of the analysis.

Thirdly, due to limitations in the available data period, we relied on different shocks to explore the changes in the impact of wage determinants after shock. While these shocks offer valuable insights, a longer time series or a more comprehensive dataset enabling to use same shock could have provided a more robust analysis.

Lastly, this paper highlights the complexity of wage determination in Korea and Japan. However, it also points out the need for further analysis to understand why such changes in the determinants occurred. Future research could investigate

the underlying mechanisms and policy implications behind these shifts.

One of the unique aspects of this paper is the utilization of two distinct datasets from Korea and Japan, merged into one, to conduct the analysis over a more recent period. This approach allowed us to gain valuable insights into the wage determinants in these countries and their changes over time, offering a more comprehensive understanding of the labor market dynamics.

In conclusion, this research contributes valuable insights into the dynamics of wage determination in Korea and Japan, offering policymakers and businesses crucial information to address issues of wage inequality and foster sustainable economic growth. Despite the limitations, this study provides a foundation for further research, prompting future investigations into the intricacies of wage determination and labor market responses to economic shocks in the two countries.

Bibliography

Arita, Shin. (2017). A Comparative Analysis of Social Stratification in Japan, Korea and Taiwan. Tokyo University ISS Discusion Paper Series F-182.

Cheong, K. S. (2001). Economic crisis and wage inequality in Korea. Asian Economic Journal, 15(1), 39–60. https://doi.org/10.1111/1467-8381.00122

Feldkircher, M., & Kakamu, K. (2021). How does monetary policy affect wage inequality in Japan? evidence from Grouped Data. Empirical Economics.

Ishida, Hiroshi (1993). Social Mobility in Contemporary Japan: Educational Credentials, Class and the Labor Market in a Cross-National Perspective. London: MacMillan / Stanford: Stanford University Press.

Kim, E., & Jeong, Y. H. (2003). Decomposition of regional wage inequality in Korea. Review of Regional Studies. https://doi.org/10.52324/001c.8433

Kitao, S., & Yamada, T. (2019). Dimensions of inequality in Japan: Distributions of earnings, wage and wealth between 1984 and 2014. CAMA Working Paper, 36.

Lee, H.Y., Kim, J., & Cin, B.C. (2013). Empirical Analysis on the Determinants of Wage Inequality in Korea. International Journal of Advanced Science and Technology, 53

Moriguchi, C., & Saez, E. (2006). The evolution of wage concentration in Japan, 1886-2002: Evidence from wage tax statistics.

Ohtake, F. (2008). Inequality in Japan. Asian Economic Policy Review, 3(1), 87–109.

Park, J. (2021). Monetary policy and wage inequality in Korea. Journal of the Asia Pacific Economy, 26(4), 766–793.

Shin, K.Y. (2020). A new approach to social inequality: Inequality of wage and wealth in Republic of Korea. The Journal of Chinese Sociology, 7(1).

Tachibanaki, T., & Urakawa, K. (2008). Trends in poverty among low-wage workers in Japan since the nineties. Japan labor review, 5, 21-49.

Yue, H.Y. (2011). Wage inequality, economic growth and inflation: a study on Korea. International Journal of Economics and Research, 2(5), 14–21.

강신욱, 김현경. (2016). 국의 소득불평등과 빈곤율 변화의 요인별 기여도 분석 - 1999년과 2008년의 비교. 한국경제의 분석, 22(2), 1-43.

구인회. (2005). 빈곤의 동태적 분석: 빈곤지속기간과 그 결정요인. 한국사회복지학, 351-374

김영미, 한준 (2007). 금융위기 이후 한국 소득불평등구조의 변화. 한국사회학, 41(5), 35-63

노상헌. (2014). 일본의 빈곤 문제와 비정규직 노동. 노동리뷰, 68-81

박상우・김성환. 2007. (경제위기 이후 빈곤의 특성과 결정요인). 경제연구, 177-196

신 아리타 (2017). 패널조사와 국제비교 조사를 통해 본 일본사회의 불평등. Tokyo University ISS Discusion Paper Series F-183.

유경준. (2018). 한국의 소득불평등 현황과 쟁점. 한국경제의 분석, 24(3), 107-135.

이원진. (2011).개인화(individualization)인가 계층화(stratification)인가?

정이환.(2015).한국 임금불평등 구조의 특성.한국사회학,49(4),65-100.

정원오. (1995). 지난 20년간 임금불평등의 변화 추세. 사회복지연구, 6(1), 70–90.

최제민, 김성현, 박상연. (2018). 글로벌 금융위기 이후 한국의 소득불평등변화에 관한 연구. 경제학연구, 66(1), 115-142.

황덕순. 2001. 경제위기 이후의 빈곤에 대한 동태분석. 노동정책연구, 31-59.

국문 초록

한국과 일본의 임금 불평등에 관한 연구

본 논문은 두 개의 패널 데이터를 이용하여 한일 임금근로자의 임금 결정요인에 대하여 분석한다. 기존의 한국과 일본에서 연구된 임금 결정요인 분석에 근거하여, 임금에 영향을 미치는 대표적인 변수로 성별, 연령, 교육년수, 정규직여부, 직종, 기업사이즈를 선정하여 분석을 진행하였다. 본 논문은 한국 노동소득 패널 조사(KLIPS)와 일본 생활과정 패널조사 (JLPS) 라는 두개의 자료를 활용하여 실증분석을 실시하였다. 서로 다른 데이터를 가지고 분석을 진행하였으나, 동일한 기준으로 설문조사를 진행한 항목을 확인하여 기준을 맞추어 비교분석을 실시하였다. 분석 결과, 한국은 학력과 기업 규모가 임금에 미치는 영향이 더 큰 것으로 나타났고, 일본은 연령, 성별, 고용형태, 직업이 임금에 미치는 영향이 더 큰 것으로 나타났다. 이 결과는 한국과 일본 모두 임금의 결정요인이 복잡하게 변화하였으며, 이에 따라 역동적이고 적응력 있는 노동시장 정책이 필요함을 보여준다.

키워드 : 소득불평등, 한국, 일본, 비교연구, 패널분석