A Comparative Study of Fairness Judgments with regard to Earnings in Korea and Japan[1]

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Abstract: This paper explores cross-national variations in individuals' ideas on what constitute just earnings for occupational groups in two Asian countries, Korea and Japan. A primary assumption of the study is that several structural factors in each of the two societies affect the difference between just earnings and actual earnings in the eyes of observers. A major objective of the study is to examine indices with which to assess the degrees of fairness judgments across different countries. Additionally, it is the authors' intention to explore factors which may possibly help to explain the variations identified by these indexes. To answer these questions, the paper relies on Japanese data sets, 1999 ISSP and the Korean set, 2003 Korean GSS. We ask three types of questions related to the subjects' evaluations of their earnings: (i) whether they thought they were underpaid, fairly paid, or overpaid; (ii) what they were actually paid (actual earnings); and (iii) what they should be paid (just earnings). Compared to the Japanese, the Koreans feel that they are under-rewarded. Moreover, the variations in just earnings for occupational groups are wider among the Koreans. The lower returns to schooling and experience in Korea suggest that these rates work as the mechanisms through which Koreans exhibit a stronger sense of injustice as measured by the justice indexes.

Key words: Justice theory, Justice evaluation, Korea, Japan, Occupational groups, Earnings, Comparative study

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I. Introduction

What do individuals regard as just earnings for different occupational groups? What are the principles guiding the formation of ideas on just earnings? Evidence can be found in the literature on occupations and earnings, supporting the conjecture that individuals' ideas on just earnings on the part of different occupational groups take into account the characteristics of the occupation, with attention to the ensuing range of earnings (Major and Deuax, 1982; Alwin, 1987; Jasso, 1989). Furthermore, it is widely known that the principles guiding them may differ according to the respondent's social status, and also across nations. Therefore, several structural factors seem to affect the differences between just earnings and actual earnings in the eyes of observers (Jasso, 1990; Alwin and Wegener, 1995; Swift st al., 1995; Jasso and Rossi, 1997).

In general, people make justice evaluations or judgments about a wide variety of rewards, including rewards for themselves and for others. One of the most important categories involved in the evaluation or judgment is type of occupation. Kelley and Evans' (1993) analysis offers a particularly important starting point for ideas on the nature of just earnings for eleven occupations across nine countries. Its probability samples were collected in 1989 as part of the International Social Survey Programme's (ISSP) social inequality module. The eleven occupations were bricklayers, doctors in general practice, bank clerks, owners of small shops, chairmen of large national corporations, skilled workers in factories, farm laborers, secretaries, city bus drivers, unskilled workers in factories, and cabinet ministers in federal government. They found evidence for an occupational hierarchy in all nine countries. However, they also reported disagreements across nations concerning earnings differentials and the overall range of just earnings. Therefore, while there was a consensus on the legitimacy of a hierarchy of earnings, opinions as to the extent to which inequalities are justified seemed to vary across nations.

Comparative studies are essential to distributive justice research, perhaps more than in most other fields of research. An analysis of a single society at a particular time can reveal the form of its distributive justice. However, in no other way can we be certain that what we observe to be regularities are not merely particularities, a product of some limited set of or historical, cultural or political circumstances. Moreover, possible explanations for the variations in or changes of distributive justice can hardly be derived from a single study. Thus, for the analysis of a macro-level phenomenon like distributive justice, comparative research is valuable because it forces us to revise our interpretations in order to account for differences and inconsistencies that could never be uncovered in a single piece of research (Melvin, 1989). Recently, scientific efforts have begun to be realized, making it possible to conduct comparative research in distributive justice (Kluegel et al., 1995; Wegener and Steinmann, 1995; Jasso and Wegener, 1999).

This paper provides a general description of just earnings and the principles guiding ideas on just earnings in two East Asian countries, Korea and Japan. East Asia is one of the fastest changing regions in the world. In such a region, the idea of justice or fairness is critical for the stability and the health of a society. A society cannot be well-ordered when the idea of fairness is not effectively regulated even if innovations for the good of its members are effectively designed (Rawls, 1971). Further, Korea and Japan provide interesting cases for a comparative study of social justice and social stratification. The rarity of the type of high-level and sustained post-war economic growth experienced by Korea and Japan has attracted the attention of many scholars who are interested in economic development and related issues. Justice evaluation is shaped by individual change as well as social change. Thus, there have been rich and varied developments and changes in justice evaluation in both countries, which is one reason why a comparative analysis of justice evaluation in Korea and Japan is intrinsically interesting. Many authors have also attempted to analyze the common components of cultures in the two countries, such as

Buddhism, Confucianism, and so on. Yet, having a common pattern of economic development and cultural heritages does not necessarily guarantee the existence of common phenomena of social stratification, such as justice evaluation (Wegener and Liebig, 1995). In fact, although both Korea and Japan are countries in which Buddhism and Confucianism have penetrated deeply and widely, there exists a debate relating to the similarities in the progress they have made. (Tomai and Lee, 2002). There are also on-going researches concerning the way in which Korea and Japan have achieved economic development and have faced macro changes, such as globalization (Sato and Arita, 2004).

To address these questions, we develop a framework based on justice theory and make use of a method typical of this subject. The framework formalizes the relations between observers' ideas of justice and observer-specific principles of micro-justice across Korea and Japan. Currently the data from the two countries in East Asia are only available for comparative purposes. Thus a key question to be addressed in this research is whether respondents in Korea and Japan differ in their ideas on just earnings for occupational groups and in the principles of justice guiding those ideas. If they do not differ, it means that two countries are homogeneous in their perceptions of what constitutes just earnings and the principles of their perceptions in a global culture.

Ⅱ. Theoretical Framework

1. Justice Evaluation

Within the past several decades, interest in issues of distributive justice has primarily come from empirical research in social psychology (Berger et al., 1972; Arts et al., 1991). Yet these studies generally fail to specify the theoretical rationale for examining such discrepancies in terms of reward evaluation. Moreover, they fail to distinguish the effects of objective rewards from subjective rewards, which are reflected in the discrepancy concepts (Alwin, 1987; Jasso,

1986; Jasso, 1996).

Current literature in sociology and social psychology affords evidence that economic satisfaction is affected by two different elements. The first element is economic reward, which means objective material rewards (Atkinson, 1970; Duncan, 1975). The second element is expected reward, which provides psychological and subjective standards for the process of just evaluation. Several theories of distributive justice have formalized theoretical functions based on these two elements. In particular, they have argued that economic satisfaction is greater when subjective expectation is less than the actual reward (Homans, 1974).

This paper follows this tradition of measuring economic satisfaction by material rewards and psychological standards. In particular, it follows a sequence of studies by Jasso (1978; 1983), who proposed a model designed to estimate the effects of discrepancies between actual rewards and expected or just rewards. Furthermore, she identified four main elements in justice processes. First, individuals and societies form ideas of justice; in the distributive-retributive domain, these are ideas about what constitutes the just reward for specific rewardees. Second, these ideas of justice may be used to help shape actual situations; for example, ideas on just reward may play a part in earnings decision-making. Third, individuals judge the justice or injustice of actual situations; for example, they may judge that A is overpaid and B underpaid and/or that the pay structure in a society contains unjustifiable inequalities. Fourth, the justice evaluation generated as part of the third element becomes an important determinant of further behaviors, such as participating in a strike or making a contribution to a public interest group.

The core of Jasso's justice theory is the justice evaluation function, which models how an individual evaluates the justice of a situation (Jasso, 1978; Jasso, 1999). In justice distribution theory, the justice evaluation (J) is usually expressed as the logarithm of the ratio of the actual reward (A) to the just reward (C) as follows;

$$J=\theta \ln\left(\frac{A}{C}\right) \qquad \text{(equation 1)}$$

In this function, θ is called the signature constant. The sign of the signature constant indicates the direction of the evaluation, such that θ is positive for goods and negative for bads. The magnitude of the signature constant means articulateness, such that large means an expansive evaluation of a situation, while small θ means an understated evaluation. J itself means the following. When justice is evaluated as being perfect, $J=0$. When an individual evaluates that his/her situation is better than it should be, J is positive. When an individual judges that his/her situation is worse than it should be, J is negative. The natural logarithm operator (*ln*) in the function indicates that in the case of goods, under-rewarding affects the justice evaluation J more than an objectively equal amount of over-rewarding; and in the case of bads, under-punishing affects J more than an objectively equal amount of over-punishing. Yet this justice index has the disadvantage that a value of zero can indicate either that all justice evaluations are zero (perfect zero) or that negative and positive justice evaluations exactly offset each other. For this reason, another type of justice index is sometimes used. The second justice index is defined as the arithmetic mean of the absolute values of the justice evaluation.

$$J=\theta \left| \ln\frac{A}{C} \right| \qquad \text{(equation 2)}$$

The justice evaluation and the justice evaluation function may also refer to group-level properties in addition to individuals' perceptions of goods and bads (Jasso, 1998). The justice indexes are estimated for one good (or bad) at a time and can subsequently be combined into a giant justice index, which summarizes a society°·s complete justice situation as follows;

$$E(J)=E\left\{\theta \ln\left(\frac{A}{C}\right)\right\}, \qquad \text{(equation 3)}$$

2. Determinants of Actual and Just Earnings

Our chief objective is to investigate how a nation operates to shape its sense of justice. We explore determinations of the actual reward and the just reward. Our approach is to estimate actual earnings functions and just earnings functions and to test for gender and country differences in these functions. We begin the analysis by specifying Mincer-type equations for the actual and the just rewards (Mincer, 1974). These equations differ only in the dependent variable. In the actual earnings equation, the dependent variable is the natural logarithm of the actual job income; in the just earnings equation, the dependent variable is the natural logarithm of the just job income. The explanatory variables are gender, schooling, and age (as a proxy for experience). To capture nonlinearities, age is represented by two regressors (age and age-squared). Further, as gender difference in distributive justice is one of the perennial problems (Kilbourne at al., 1994; Bernhardt et al., 1995; Jasso and Webster, 1997), we separate men and women into two groups in order to analyze gender differences. Our aim has been to estimate earnings functions separately for men and women in Korea and Japan where the situation of men is considered to be significantly different from that of women in the labor market (Tsuya et al., 2000; Seetharam, 2003). The actual and just earnings equations may be written;

$$\ln(Y)=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+e, \qquad \text{(equation 3)},$$

where the dependent variables (Y) represents either actual earnings or just earnings. The exponential of the intercept in the actual and just earnings equations may be thought of as a base salary. In the actual earnings function, it is interpreted as the rental price of a unit of human capital, following the human capital literature. In the just earnings function, it is usually interpreted to be based on needs but may also be interpreted as the just rental price of a unit of human capital. It is to be noted that the intercept also reflects currency differences across countries. However, since the dependent variable is

logged, currency differences do not influence the slope coefficients (Jasso, 1998; Jasso and Wegener, 1999).

Ⅲ. Data and Measurement

Data are drawn from the 1999 round of the ISSP and 2003 round of the Korean General Social Survey (KGSS). Twenty-six nations participated in the 1999 round of the ISSP. The ISSP provides the best currently available cross-national information on stratification. It is the leading project in the collection of data from probability samples from various countries, and with the 1987, 1992, and 1999 rounds of the project, it became possible to conduct a comparative study in various areas of stratification. The Japanese data used in the following analyses are taken from the ISSP data sets and were collected by NHK, a Broadcasting Culture Research Institute. The Japanese investigators used a two-stage stratified random sample of Japanese citizens aged 16 or older. First, urban and rural areas are divided into a number of groups (strata) based on similarities in local features and industrial structures. From each of these groups, streets and village-sections are again grouped together to form sampling units. From among such sampling units, 150 survey districts are selected at random. Then, from the Basic Resident Registers for these districts, 12 individuals aged 16 or over are selected according to a fixed random number. As for the fieldwork method adopted, the self-completion method was basically employed, which means that interviewers dropped off and later picked up questionnaires. In all 1,800 questionnaires were issued and 1,325 valid questionnaires are analyzed in the data. (For further details on sampling characteristics, see ISSP (2002).)

The major purpose of the KGSS was to collect data sets compatible with the data sets in the ISSP. The first round of the KGSS (2003) includes questions on national identity; which was the main module in the 2003 ISSP. Additional questions on other subjects such as inequality, work orientation, and family are also included in order to make the data set compatible in more diverse topics. The KGSS

employs personal interview surveys, collecting 1,315 responses from subjects aged 18 years and older. The KGSS's nation-wide sample was drawn from a multi-stage-stratified sample design. The members of the KGSS collected detailed information about (1) socioeconomic backgrounds, such as education, occupation, income and employment status; (2) attitudes in relation to social trust, social problems, and politics; and (3) stratification-related life satisfaction and subjective class consciousness (Seok et. al., 2005).

Having considered various justice indexes as described in the previous chapter, we decided to use several types of justice indexes. As for respondents°· earnings, we employed three types of questions related to the evaluation of earnings. At the rounds, the ISSP asked respondents pertinent questions about the respondents themselves; (i) whether they thought they were underpaid, fairly paid, or overpaid; (ii) what they were actually paid; and (iii) what they considered their earnings should be.

The first type of justice index (Justice-I) is based on the first question; the reflexive justice evaluation. It indicates an overall judgment of their earnings made by the respondents themselves. We assigned -2, -1, 0, +1, and +2 to each category in the responses for their earnings (very underpaid, somewhat underpaid, just-paid, somewhat overpaid, and very overpaid, respectively). This type of justice index is calculated from the means of every individual's scores.

Other types of justice indexes are based on the two equations (equation 1 and equation 2) summarized in the previous section. These equations yield two basic justice quantities; actual rewards and the reflexively disclosed just rewards. For each respondent, we constructed the justice evaluation J (technically, the reflexively experienced justice evaluation) by taking the natural logarithm of the ratio of the actual earnings to the just earnings. The second type of justice index (Justice-II) comes from the original justice index suggested by Jasso (1987). This index does not distinguish positive evaluations from negative justice evaluations since a given society's justice index is calculated from the mean of each individual's index. The last type of justice index

(Justice-III) considers every type of justice evaluation. This justice evaluation comes from the absolute magnitudes of justice index.

As for the evaluation of different occupational groups, we used questions on evaluated and just rewards for each group. The ISSP asked respondents questions on earnings for nine occupational groups; (i) how much people in each occupational group were paid, and (ii) what respondents considered just earnings for those in each occupational group were. The occupational groups include the following occupations: skilled workers in factories, doctors in general practice, chairmen of large national corporations, lawyers, salesclerks in department stores, owner-managers of large factories, supreme court justices, unskilled workers in factories, and members of the cabinet in the federal government.[2] Note here that we constructed the justice evaluation from the data on evaluated (not actual) and just earnings.

Ⅳ. Results

1. Justice Evaluation

Table 1 reports the distributions of the judgments for respondents' earnings in the two societies. The distribution of the responses from the two societies is not equally spread. Their distributions are highly skewed. Most responses belong to the categories of 'much less than I deserve', 'somewhat less than I deserve', or 'what I deserve'. The data indicate a disjuncture between the two societies. For example, the Japanese show lower frequencies (16.8%) in the category of 'much less

2. ISSP does not provide specific reasons for choosing only the nine occupations. It is possible to presume that the nine occupational groups largely represent major groups of international standard classification of occupations. The major groups of ILO classification are the followings:1)legislators/senior officials/managers; 2) professionals; 3) technicians and associate professionals; 4) clerks; 5) service workers/shop and market sales workers; 6) skilled agricultural and fishery workers; 7) craft and related trade workers; and 8) plant and machine operators and assemblers; and 9) elementary occupations (ILO, 1990).

Table 1. Senses of Injustice (percentage)

	Korea	Japan
Much less than I deserve	17.7	16.8
Somewhat less than I deserve	33.5	37.1
What I deserve	24.3	22.0
Somewhat more than I deserve	1.3	2.6
Much more than I deserve	0.7	0.5
Can't choose	3.3	6.2
Never Worked	19.2	14.9
Cases	**1,315**	**1,325**
Real GDP per capita* (US dollar)	15,881.34	24,141.58

Note: * Heston and Summers (1996); Heston et al., (2002)

than I deserve' than the Koreans (17.7%). In the category of 'somewhat more than I deserve', Koreans show lower frequencies (1.3%) than Japanese (2.6%). The pattern of responses seems to be related to the level of economic development (e.g., GDP per capita).

Table 2 presents magnitudes of the three types of justice indexes for the two societies. It seems that all three indexes move upward as the level of economic development goes up. In all indexes, Japan shows a smaller amount of injustice than Korea. When examining these indexes for several other countries (Appendix 1), we find that Japan occupies a premier position, followed by Korea. However, the concentration of justice indexes suggests a somewhat different pattern. As shown in Table 2, comparing Korea and Japan, the pattern of standard deviation is different from that of the justice indexes. Korea has a smaller amount of standard deviation of injustice than Japan. That is, Koreans show a higher level of homogeneous judgment on what they deserve, i.e., justice earnings.

It is of interest to learn how the justice evaluation is shaped for the different occupational groups. Table 3 shows the second type of justice index for the different occupational groups. Magnitude of injustice for the occupational groups varies considerably across the two nations.

Table 2. Reflexive Justice Indexes

	Korea	Japan
Justice-I	-.856	-.851
	(.817)	(.807)
Justice-II	-.287	-.230
	(.398)	(.416)
Justice-III	.304	.269
	(.386)	(.392)

Note:

Justice-I: $E(J)=E(w\times D)$ (w: -2, -1, 0, $+1$, or $+2$; D: the evaluation of respondents earnings)

Justice-II: $E(J)=E\left(\theta \ln\frac{A}{C}\right)$

Justice-III: $E(J)=E\left\{\theta\left|\ln\left(\frac{A}{C}\right)\right|\right\}$

Korea shows a wider range of injustice than Japan. For example, the injustice evaluation in Korea lies between .645 (for the chairman of a large national corporation) and -.316 (for an unskilled worker in a factory), while that in Japan lies between .350 (for a member of the cabinet) and -.212 (for an unskilled worker in a factory).

As shown in Table 3, the rank ordering of injustice for occupational groups also differs. In Japan, respondents show the lowest level of justice evaluation for the unskilled worker in a factory, followed by skilled workers in a factory. On the other hand, the justice evaluation of cabinet member is the highest (.350), followed by the chairman of a large national corporation (.283) in Japan. Although professionals are also evaluated to be highly overpaid in Japan, their magnitudes are comparatively lower than these two occupations.

In Korea, the levels of unskilled workers' just earnings are the lowest (-.316)[3], and the second most under-rewarded occupation is that of salesclerk. On the other hand, the chairman of a large national

3. We found country-specific variations in the evaluation of just earnings for other countries. For example, doctor's earnings are the lowest in Russia, while those of salesclerk in a department store are perceived to be the lowest in some other nations, such as Philippines, the U. S., and Norway.

corporation appears to have lost the trust of the general public in Korea. The chairman retains their position as the most overpaid category, followed by lawyers and doctors (For the comparison with other nations, see Appendix 2.).

Table 3. Judgment Evaluation for Occupational Groups

	Korea	Japan
A Skilled Worker in a Factory	-.195 (.317)	-.190 (.337)
A Doctor in General Practice	.218 (.432)	.182 (.501)
The Chairman of a Large National Corporation	**.645** **(1.005)**	.283 (.589)
A Lawyer	.381 (.587)	.159 (.514)
A Salesclerk in a Department Store	-.242 (.316)	-.165 (.345)
An Owner-Manager of a Large Factory	.174 (.537)	-
A Supreme Court Justice	.158 (.438)	.115 (.526)
An Unskilled Worker in a Factory	**-.316** **(.361)**	**-.212** **(.382)**
A Member of the Cabinet in the Federal Government	.195 (.426)	**.350** **(.798)**
Range	.961	.562

Note: Justice Evaluation: $E(J)=E\left(\theta \ln\frac{A}{C}\right)$

2. Determinants of Earnings

Besides exploring differences across nations in actual earnings and just earnings, it is important to analyze their determinants. Analyzing the factors that determine actual earnings is a major subject in the study of stratification. Analyzing the factors that determine just earnings is also an important subject in the study of justice theory.

More specifically, if actual earnings and just earnings differ across nations, it becomes of interest to learn what the factors are that to determine these differences.

Analysis of the determinants of actual and just earnings can be carried out with the earning equation based on the theory of human capital. This equation specifies that the natural logarithm for earnings is regressed on schooling, age, and a proxy for experience (Mincer, 1974). Schooling is represented by years of schooling completed. Its associated coefficient is interpreted as the rate of return to an additional year of schooling. In order to capture non-linearity in earning functions, age is represented by two regressors, i.e. age and age-squared. A proxy for experience is the measurement of age minus schooling. Sometimes researchers take the preschool period and the period of military service into consideration. In order to carry out a comparative study, we measure experience without considering these periods. Furthermore, we estimate the earning equations for each sex, which enables us to carry out a test for the homogeneity hypothesis.

Tables 4-5 report the estimates of the actual earnings and just earnings equations for men and women in Korea and Japan. It is important to examine the meaning of the actual and just rates of returns with respect to the independent variables. The actual return provides an indicator of productivity and the strength of the economy. The just return offers a clue for the process through which ideas on justice are formed. For example, having experienced prolonged injustice, people may adjust their ideas on just returns downward (Jasso, 2000). Overall, both societies show a similar pattern of regression coefficients for actual earnings and just earnings. The actual return to schooling is greater than the just return on to schooling for both men and women in both societies. The return to experience is also moderately greater for actual earnings. Men's actual return to squared experience is moderately greater than women's, which suggests that men tend to experience larger declines in actual earnings as they age.

Yet the magnitudes of the returns vary considerably across the

Table 4. Determinants of Men's Earnings(Unstandardized Coefficients and t-Values)

	Actual earnings		Just Earnings	
	Korea	Japan	Korea	Japan
Schooling	.0741*	.0934*	.0628	.0710*
	(7.36)	(6.99)	(6.05)	(5.22)
Experience	.0388*	.0490*	.0140	.038*
	(5.81)	(5.46)	(2.48)	(4.05)
Squared Experience	-.00046*	-.00054*	.00008	.00043*
	(-5.29)	(-4.28)	(-1.16)	(-3.30)
Constant	12.9*	4.26*	13.9*	5.00
	(67.4)	(17.9)	(72.0)	(20.4)
R^2	.206	.170	.105	.106
Cases	468	409	490	390

* p <.05

nations. First of all, Korea has higher bases for actual earnings and just earning (12.9 and 13.9 for men, and 12.9 and 13.6 for women) than Japan (4.26 for men and 4.71 for women, and 5.00 for men and 4.81 for women). Second, the actual and just returns to schooling in Japan

Table 5. Determinants of Women's Earnings (Unstandardized Coefficients and t-Values)

	Actual Earnings		Just Earnings	
	Korea	Japan	Korea	Japan
Schooling	.0751*	.076*	.0524*	.095*
	(6.28)	(2.54)	(5.25)	(.35)
Experience	.0237*	-.0044	.0287*	-.011
	(3.63)	(.339)	(4.45)	(-.861)
Squared Experience	-.00027*	.000056	-.00034	.00019
	(-3.13)	(.299)	(-1.05)	(1.05)
Constant	12.9*	4.71	13.6*	4.81
	(60.1)	(10.3)	(72.14)	(10.7)
R^2	.192	.034	.125	.060
Cases	495	291	463	254

* p <.05

are greater than those in Korea. This indicates that the higher levels of injustice in Korea may be affected by the lower rates of return to schooling and experience. That is, the lower returns to schooling and experience in Korea suggest that these rates work as a mechanism through which Koreans exhibit a stronger sense of injustice as measured by the justice indexes.

V. Discussion

In this paper, we examined objective material rewards and subjective standards to construct a justice evaluation index. These indexes provide a flexible framework for the justice evaluation for various occupations. Rather than reiterate what has been shown above in detail, we shall briefly mention two fruitful avenues for the comparative study of justice evaluation. First, as shown in the comparative study of reflexive justice evaluation, there are differences in the degree of inequality and the overall range of just earnings between Korea and Japan. Koreans have higher means for injustice and a smaller amount of variation for injustice. That is, more Koreans feel that they receive less material reward than they deserve, and they are also more homogeneous in their justice evaluation on earnings.

Second, the justice index for several occupational groups gives a more detailed evaluation of just earnings across both nations. The result shows that there is a consensus on the hierarchy of earnings. However, it shows disagreements concerning the extent of earnings differentials and the overall range of just earnings. The most interesting result is that Koreans are more egalitarian in terms of just earning evaluation. That is, Koreans evaluate upper-class occupations as more over-rewarded and lower-class occupations as more under-rewarded. Koreans are more critical in their evaluation of just earnings for occupations that are considered to be more desirable in advanced capitalist societies, such as the chairmen of a large national corporations, lawyers, and medical doctors. Further, they sympathize more with lower-class occupations, such as sales clerks and unskilled

workers. One exception is that Koreans are more generous in their evaluation of earnings for politicians, while Japanese regard politicians as the most over-rewarded category.

These results appear to be related to the different economic and political situations in Korea and Japan. Despite the striking changes in the corporate sector (e.g., the breakdown of the chaebol system) in recent years, Korea's large corporations are still strongly influenced by their owners. In contrast, the separation between capital and administration is more visible in Japan. More large Japanese corporations seem to be run by CEOs who are more interested in managing than building and expanding their companies (Kang, 1996; Claessens et al., 2000). On the other hand, the Japanese parliamentary cabinet system seems to contribute to the discrepancy observed in the evaluations of the cabinet members. In Japan, members of the cabinet in the federal government are appointed by the prime minister and cabinet members need to be chosen from among the members of the Diet, Japanese national legislature. They are elected from single member constituencies or from electoral districts by proportional representation. Thus, Japanese cabinet members are more likely to be politicians than administrators.

As for earnings determination, both societies show a similar patter of returns to schooling and experience for actual earnings and just earnings. The actual returns are greater than the just returns for both men and women. Yet the returns to schooling and experience in Korea are smaller. This suggests that higher levels of injustice in Korea are affected by these lower rates of return to individual attributes, such as schooling and experience.

What is obvious is that the Koreans feel that they are more under-rewarded. Moreover, the gaps in just earnings for occupational groups are wider. From the results obtained in this paper, we cannot definitely conclude that the difference in just earnings between the two countries is simply due to the differences in their respective levels of economic development. Degree of exposure to globalization may be another important factor, and cultural difference is also worth studying in

order to identify the causes of these results. At present, it is hard to fully explain the differences in justice evaluation between Korea and Japan. Since this study is a preliminary step in a comparative study of justice evaluation in Korea and Japan, further analysis should be done. Although these results are worth mentioning here, elaborations are left to a future work.

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Appendix 1. Reflexive Justice Indexes: Other Countries

	Russia	Philippines	Korea	Japan	U.S.	Norway
Justice-I	-1.136	-.872	-.856	-.851	-.729	-.648
	(.807)	(.843)	(.817)	(.807)	(.789)	(.670)
Justice-II	-1.168	-.468	-.287	-.230	-.238	-.168
	(.794)	(.780)	(.398)	(.416)	(.430)	(.224)
Justice-III	1.169	.605	.304	.269	.314	.187
	(.793)	(.701)	(.386)	(.392)	(.409)	(.231)

Note:

Justice-I: $E(J)=E(w\times D)$ (w: -2, -1, 0, $+1$, or $+2$; D: the evaluation of respondents earnings)

Justice-II: $E(J)=E\left(\theta \ln\frac{A}{C}\right)$

Justice-III: $E(J)=E\left\{\theta\left|\ln\left(\frac{A}{C}\right)\right|\right\}$

Appendix 2. Judgment Evaluation for Occupational Groups: Other Countries

	Russia	Philippines	Korea	Japan	U.S.	Norway
A Skilled Worker in a Factory	-1.060 (.671)	-.304 (.516)	-.195 (.317)	-.190 (.337)	-.218 (.390)	-.130 (.195)
A Doctor in general practice	**-1.413** **(.782)**	-.162 (.571)	.218 (.432)	.182 (.501)	.064 (.561)	.084 (.454)
The Chairman of a Large National Corporation	**1.127** **(1.159)**	-.098 (.663)	**.645** **(1.005)**	.283 (.589)	**.528** **(.793)**	**.349** **(.748)**
A Lawyer	.039 (.984)	-.075 (.589)	.381 (.587)	.159 (.514)	.276 (.599)	.295 (.485)
A Salesclerk in a Department Store	-.807 (.690)	**-.350** **(.605)**	-.242 (.316)	-.165 (.345)	**-.275** **(.400)**	**-.199** **(.232)**
The Owner-Manager of a Large Factory	.650 (.990)	-.016 (1.185)	.174 (.537)	- .122	(.619) .216	(.834)
A Supreme Court Justice	.348 (1.040)	-.020 (.670)	.158 (.438)	.115 (.526)	.148 (.610)	.125 (.473)
An Unskilled Worker in a Factory	-1.024 (.659)	-.305 (.592)	**-.316** **(.361)**	**-.212** **(.382)**	-.255 (.437)	-.129 (.276)
A Member of the Cabinet in the Federal Government	.583 (1.062)	**.000** **(.803)**	.195 (.426)	**.350** **(.798)**	.281 (.681)	.016 (.479)
Range	2.540	.350	.961	.562	.803	.548

Note: Justice Evaluation: $E(J)=E\left(\theta \ln\frac{A}{C}\right)$