Title	The role of fairness and unity of treatment in Japanese labor markets
Sub Title	
Author	Evans, Robert, Jr.
Publisher	Keio Economic Observatory (Sangyo Kenkyujo), Keio University
Publication year	1995
Jtitle	Keio Economic Observatory occasional paper. E No.17 (1995. 4)
JaLC DOI	
	Fairness and Unity of Treatment in Japanese Labor MarketsWhat is the role of fairness and unity of treatment in Japanese labormarkets? Initially the dominant values which the Japanese apply to labormarkets must be identified. What is the source of these values? How havethey changed over time? How have they actually affected labor markets?Are differences between Japanese and foreign labor markets, particularlyAmerican labor markets, explained by differences in values or the manner inwhich those values are expressed within the economy? These are the centralissues which are addressed in this essay.
Notes	
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AA10818580-00000017-0 001

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって 保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Keio Economic Observatory

Occasional Paper

April, 1995

The Role of Fairness and Unity of Treatment in Japanese Labor Markets

by

Robert Evans Jr.



KEIO ECONOMIC OBSERVATORY (SANGYO KENKYUJO) KEIO UNIVERSITY



Keio Economic Observatory Occasional Paper

The Occasional Papers of the Keio Economic Observatory (Economics section of Sangyo Kenkyujo at Keio University) present research which has been conducted by members of the observatory.

Papers are published nonperiodically. There are two series: One is written in Japanese (J. Series) and the other is written in English (E. Series). Some papers in KEO Occasional Paper Series may be reproduced again in revised form in the <u>Keio Economic Observatory Review</u> which is published periodically by Sangyo Kenkyujo.

Editors of KEO Occasional Paper: Kanji Yoshioka, Sakiko Tsuzuki, Kazusuke Tsujimura and Hitoshi Hayami.

Publisher:

Sangyo Kenkyujo Keio University Mita 2-15-45, Minato-ku Tokyo, 108, Japan Tel: 03-3453-4511 (ext.2323) Fax: 03-3453-5640

Any person who wishes to obtain this paper or other back numbers of this series should contact the office of Sangyo Kenkyujo.

The Role of Fairness and Unity of Treatment in Japanese Labor Markets

by

Robert Evans Jr.

Atran Professor of Labor Economics Brandeis University Visiting Professor Keio Economic Observatory Keio University and Abe Fellow

April, 1995

Fairness and Unity of Treatment in Japanese Labor Markets

What is the role of fairness and unity of treatment in Japanese labor markets? Initially the dominant values which the Japanese apply to labor markets must be identified. What is the source of these values? How have they changed over time? How have they actually affected labor markets? Are differences between Japanese and foreign labor markets, particularly American labor markets, explained by differences in values or the manner in which those values are expressed within the economy? These are the central issues which are addressed in this essay.

1. Japanese Values

Discussions of Japanese labor markets often begin with the assertion that Japan is a vertical society with strong hieratical relationships. While true, the most important value which pervades the employment relationship is an emphasis upon equality for individuals in relevant groups. A variety of scholars have commented upon this. Laura Hein has written that the Japanese basis for postwar economic planning, the March, 1946 document produced by Saburo Okita's study group had, as one of its three principles, a more egalitarian economy. [1994:758] Okita, himself, has written of the Income Doubling Plan in the late 1950's, that he was personally concerned about reducing income gaps between agriculture and industry, large and small firms, and among geographical regions. [1983:79] Nathan Glazer some 20 years ago wrote, "The Japanese factory is perhaps the most egalitarian in the world outside of China." [1976:887] Thomas Rohlen writing of the bank which he studied stated that for men"...This is essentially an egalitarian system of material reward." [1974:173] Michael Smitka in his book about sub-contracting argued that the development of labor market practices in Japan "...Severely constrained the ability of firms to pay their regular workers dissimilar wages." [1991:110] It should be added dissimilar wages based upon differences in company seniority and educational levels were considered appropriate. John Lorriman and Takashi Kenjo have written that the Japanese ethos implies that university graduates of the same cohort will be paid much the same salary at least until age 45.[1994:154] Ronald Dore wrote that differences in values between Japan and the United Kingdom are a better explanation for differences in behavior than are superior skills in human relations.[1987:88] And he noted that markets in Japan take on a moral quality and are regulated by fairness. [1987:190]

The importance which the Japanese place on equality may be found in a study of the values of members of elite groups in several countries. The results showed that the Japanese elites favored smaller income ratios between groups than they thought existed, and that they favored smaller ratios than did elites in the United States. Japanese business and labor elites favored income ratios between groups which were about one-half as large as did business and labor elites in the United States. [Verba, 1987:130-132] Demands for equitable treatment can be found among residential communities [Allison, 1994:179] and also apply within local Matsuri. [Bestor, 1989:254-5] It is necessary, however, to add that equality applies most strongly to those within the relevant community. This is consistent with Confucian thought which allowed people to treat others in proportion to the intimacy of relations. [Taka, 1993:39] Consequently individuals outside the relevant community can be treated quite differently without values being seen to have been compromised. It is this emphasis upon equality within but not necessarily across different communities as opposed to individuals across the entire population which leads some writers to argue that an official ideology of egalitarianism is not applied to the work place.[Pharr, 1990:183] Consequently the issue for the contemporary Japanese labor economy is what are the relevant communities to which a standard of equality is to be applied. A variety of different groups must be considered. These include Hyojun Rodosha [standard workers] compared to Chutosaivosha, [mid career employees] regular workers compared to temporary, dispatched, and part-time workers. Among all of these, currently the most important question deals with women workers, because of their increased role as employees and international trends.

2. Women Workers

What is the fundamental economic unit? Is it the individual? Or is it the family? Many Western scholars writing about women in the Japanese work place assume that the correct answer is the individual. The Japanese economy, however, seems to presuppose that the answer is the family. Historically the family as the basic unit can be seen in the importance of the *ie* and in family registers. Within the *Shinto* religion men and women were seen as having separate but reinforcing power. [Rosenberger, 1994:101] During Japan's growth and development before 1940 social opinion did not encourage women to obtain advanced educations, and disapproved of their working outside that home since both of these were viewed as inconsistent with the

general norm that women's place was in the home. [Fujimura-Fanselow and Imamura, 1991:233]

In the immediate Post War years the view of the male as the economic provider for his family was consistent with the fact that in 1950 only about 10 percent of married women were employed outside the home or family business.[Brinton, 1993:118] This family orientation also may be seen in union demands in the those postwar years for a wage policy based upon *Densangata*, a living wage whose level depended upon worker family needs and not the economy of the employer. The idea was not new. It was first discussed in the 1920's when some firms began to employ lifetime commitment for some employees. [Evans, 1991:303] Additionally, considering that the vast majority of all women marry, for example in 1990 94.2 percent of all women 40 to 44 years of age had been married, it may not have been an unreasonable answer 40 years ago. Whether it still is reasonable is a crucial issue, and is considered in section six.

3. The Source of Standards

Like so many things in Japan, the roots of the value system are to be found in the Tokugawa era, 1603-1868. During the Tokugawa era there were four categories of citizens. Socially the highest group was composed of the nobility. As a practical matter the most important were those in the the military government with the Shogun and his Bannermen at its center, the regional governors, the Daimyo, and their Samurai supporters. Next came the peasants who comprised the largest group. Last came the merchants. Within each of these communities ability and hard work might allow one to improve one's or one's family position overtime. However, movement across social boundaries was practically impossible.

There were three important characteristics of these social groups. First the dominant ideology was Confucianism which taught the importance of benevolence from those in authority to those under their control. Secondly, within each of these social groups or communities there were ties of reciprocal obligations which often stretched across generations. Lastly, unlike European feudalism in which the military class which held land from the King in return for their allegiance lived on those specific pieces of land, the Japanese military leaders, turned into bureaucrats during the Tokugawa years, lived in the castle towns away from land and peasant villages. Without visible authority figures living among them, as in Europe, Japanese communities had to evolve their own methods of internal control. Tsuneo Sato has written that the peasants in the villages were roughly equal in economic resources and in their social standing, [1990:45] while Phillip C. Brown has discussed the importance of fairness and equity in the practices of internal control. [1993:94-96:227]

The nature of the major crop, rice, largely dictated the results. Rice requires a great deal of cooperative labor in the allocation of water rights, maintaining watercourses, and planting and harvesting the rice. Ken-ichi Imai has written that rice cultivators developed spontaneous cooperation. [1992:199] Left to their own devices and required to cooperate with each other it is hardly surprising that equality within each rural community became the standard of the day. John Haley has written that despite differences in wealth and power the people within a *mura* (village) lived with an ideology that they were equal. [1992:44]

The Meiji Restoration brought many changes. Some of these would strengthen the values of equality while others would erode communities of interest and their emphasis upon equality. A major purpose of the Meiji Restoration was to change Japan in order that she would be able to remain free from domination by foreign powers. A beginning step came on September 4, 1872 when the Preamble to the Fundamental Code of Education was issued. This made it clear that there was to be a new stress on individualism, equality among the classes and self-improvement. [Rubinger, 1989:228] As a means to that end foreign ideas, educators, and learning was imported and converted to Japanese usage. The Japanese government searched the world for ideas and models, many of which were imported in part to define the various parts of a modern society and country. To achieve their aims in the field of education the government moved to establish a base of elementary education, a process not completed until the turn of the century because of farmer opposition and the size of school fees. Outside of education in the advanced areas of the economy the dominant model for firms and for relations with workers was capitalism as practiced in the West. Imported capitalism eroded equality for it meant a depersonalized relationship between firms and workers, especially blue collar workers. By the 1890's the idea that workers could be treated as dispensable inputs was wide spread.[Imai:1992:180]

Equality as a standard became largely lost. There were many distinctions between workers in dress, toilets, gates, dining facilities and the payment of bonuses which when paid were reserved for senior management officials. [Smith, 1984:593] This meant, as Aoki has written, that the commitment to reciprocity of village life was in the 1920's lacking in those parts of the economy dominated by modern economic processes. [Aoki in Aoki and Dore, (eds.), 1994:30]

The loss of equality of treatment was keenly and severely felt by the workers. Factory newspapers were filled with letters of complaint about favoritism, and cartoons in worker papers made the same point. A principal demand by the workers was for *chii no kojo* (higher status). [Smith, 1984:589, 606] For unions in the prewar years fair treatment of workers was as important as job security and wage security. For example the Ishikawa-jima strike of 1921 had at its core, demands for equality of treatment and respect from the employers. [Gordon, 1991:77,204-5]

One of the difficulties faced by firms in the modern sector was how to maintain their skilled work forces, and how to deal with unions. In both these areas there emerged over time a resort to traditions of the past. Senior workers and internal unions were treated more as members of the family of the enterprise. In practice this meant a strong seniority component to wages and commitments to the continuation of employment, and for unions consultation much more than actual contracts. Still, it was a distinct minority who shared in these benefits. In the mid-1920's the influence of these factors began to be evident in the wage structure as the wages differences between large and small and medium sized firms began to be emerge.

War in China and associated planning for a larger war became the next major influence. The Sangyo Hokoku Kai (Industrial Patriotic Society) was substituted for unions in an effort to organize the workers for war production. In 1938 the Society recognized employees as well as employers as members of the firm. In 1940 the government passed an outline that said that the firm was an organic body composed of capital, management, and labor. Both of these were strongly opposed by employer groups. [Ozaki, 1994:360,367]

The Great Pacific War came to an end and with it the authority struc-

tures which had ruled Japan. These structures which had supported inequality within the work place, were swept away. In their place came the American Occupation with its own ideas of democracy. Four major policies of the occupation were important. One was the breakup of the Zaibatsu. A second was land reform which gave ownership of the land to the cultivators. The third was the shifting of educational policy away from the complete domination of the Ministry of Education. This associated with the growth of the Teacher's Union enshrined the concept of equality within the formative years of a child's education. What equality meant was the every child was expected to be able to succeed, and effort and industry were the keys which would determine child would succeed, and not some abstract idea of differential ability. [White, 1987:115] The fourth policy was the encouragement of unions in the style of New Deal unionism under the Wagner Act in the United States. The newly encouraged unions grew very rapidly. By 1949 they represented 55.8 percent of employees. Their central demand was for equality of treatment, and this was written into the Trade Union Act of 1946.

Some writers attribute Japanese workplace demands for equality to the importation of American ideas of equality associated with the Occupation. The achievement of ideals of equality in the Japanese work place was aided by the Occupation, but the demands themselves reflected historic concepts within Japan which largely had been suppressed and ignored since early Meiji.

Despite an American expectation that Japanese unions organized under their own "Wagner Act" would come to look and act like American unions, they didn't. Japanese unions followed their own path. The joining of blue collar and white collar workers within a single enterprise organization under Sangyo Hokoku Kai, and the emphasis upon enterprise unions, lifetime commitment, and seniority based wages for senior workers in the 1920's, as I wrote many years ago, dictated this result.[Evans, 1970] Writing more recently, though expressing long held views, Haruo Shimada [1992] has argued that the adoption of the Three Treasures, enterprise unionism, lifetime commitment, and seniority based wages was the result of long and bitter struggles between firms and unions in the immediate postwar years. Early postwar years marked a struggle between more radical elements in unions for production control and in companies for a return to the early 1920's with employers firmly in control. More conservative political attitudes within Japan doomed the radical unionist ideas while union strength in the face of major job losses due to rationalization rendered employer ideas of a return to the ideas of the 1920's impossible. Out of the compromises, worked out firm by firm, came equality of social standing, bonuses for all, long term employment commitments for all levels of core workers, and enterprise unions. These postwar developments are extensively discussed by Andrew Gordon.[1985]

The concepts of equality within the work place developed in these early postwar years seem to have remained relatively unchanged in the 40 years of growth following recovery from the War in 1955. In recent years there appear to be modest changes in personal values, but whether this means a change in standards is difficult to say. The Prime Minister's Office has asked the same series of questions in surveys over the years. Among them has been the question, which of six value statements is the closest one to the interviewees own attitude toward life. Four of the six possible answers are: (a) "Live a Pure Life.", (b) "Get Rich"; (c) "Live Without Worry", and (d) "Live a Life to Suit One's Own Taste." In 1953 the proportions selecting each answer were 29 percent, 15 percent, 11 percent, and 21 percent. The 1953 values were little changed from those recorded in 1930 except for the category, "To Lead a Life Dedicated to Society" which had been 34 percent in 1930, had fallen to 10 percent in 1953 and then trailed off even lower.[Hidaka, 1984,66] Between 1953 and 1983 "Suiting One's taste" rose from 21 percent to 38 percent which was a slight drop from 1978. "Living Without Worry" also increased its perentage while the proportion choosing "Getting Rich" stayed constant. "Live a Pure Life" dropped by about 2/3rds. There is some evidence to suggest that these views are formed early in adult life and then persist, so that the observed changes are those of successive generations and not individuals within age cohorts changing their minds. Thus males ages 25-29 who chose "Suit One's Own Taste" rose from 24.7 percent in 1953 to 51.1 percent in 1983. For the 1953 cohort of 25 to 29 year old who were 55-59 years of age in 1983 their choice of "Suit One's Own Taste" had risen only from 24.7 percent in 1953 to 33.3 percent in 1983.[Hayashi, 1992:142-146]

Since 1974 in repeated questions about what made them satisfied with their life, there have been few trends in the answers. While working and family life have remained at about 45 percent and 35 percent, resting, hobbies, and chatting with friends have all grown to about 30 percent. [Prime Minister's Life Survey 1991:53]

Other surveys with different questions find little change in certain basic attitudes. Workers were asked whether they would prefer a boss who never made unreasonable demands at work but never helped them with issues outside of work, compared to a boss who sometimes made unreasonable demands but who also helped with issues outside of work. In 1953, 85 percent choose the boss with a personal touch. In 1983 the proportion choosing that type of boss was 89 percent having been in the 80 percent range in each year of the every five years in which the survey was taken, except in 1958 when the proportion had dipped to 77 percent.[Hayashi, et al., 1992:56]

Some scholars believe that there will be significant future changes because of new economic conditions. They suggest that the core of new workers will arrive without the "insecurities and optimism of the postwar era" [Murakami and Rohlen 1992:83 and 89] Yet, those who enter the work force today arrive with their own set of uncertainties, and we must remember that the times of the beginning of the "Three Treasures" and of their postwar resurgence were times of labor surplus. Some change is always to be expected, but in the absence of cataclysmic events, it is apt to be slow and measured. This can be seen in the slow shift t of weights accorded different factors with the wage structure. The direction is to place more emphasis upon personal effort and achievement. How these will actually work out in practice will take some years to make clear.

4. Evidence of the Influence of Equality

Strangely for a social science, economics is largely devoid of time and people. Yet, all economic activities are performed by humans for human objectives. It would seem natural to believe that standards of morality, ideology, and culture should play important roles. Yet in American economic circles, and places heavily influenced by them, these attributes play almost no role in economic analysis. My own long standing view is that morality, ideology, and culture are important, and specifically that standards of equality can be found to play a specific role in the Japanese economy.[Evans, 1971: 179] This means that evidence of equality's role in economic structures and in economic outcomes will be found.

A. We begin with the obvious, the similarity of dress, dining rooms, etc. among all classes of employees within enterprises and the inclusion of bonuses payments for all workers, key parts of the union demands for equality of treatment in 1945, remain firmly in place. The sense of almost all Japanese that they belong to the middle class has, if anything, become more pronounced in recent years. In 1961 41.5 percent of Japanese identified themselves as having the status *chu no chu*. This percentage rose to a high of 61.3 percent in 1973 and in 1991 was 54.4 percent. Those who identified themselves as upper class grew from .3 percent in 1961 to between .5 and .7 percent in recent years.[Prime Minister's Office, 1991:6]

B. Japanese income distributions rank among the most equal in the world. During the period from 1939 to 1955 Lorenz curves became more equal and then after 1960 began to narrow rapidly during the era of rapid growth.[Ono and Watanabe, 1976:374 and 378] During the period of rapid growth the Gini coefficient dropped from .382 in 1962 to .334 in 1973, rose to .370 in 1978 and declined again to .346 in 1980.[Bronfenbrenner and Yasuba, 1987:111] Professor Mizoguchi has calculated slightly different ratios but ones whose time pattern is equivalent. [Choo, 1991:5] Looking at household disposable income, Japan is at or near the top of OECD nations for equality. Japan has the highest proportion of income going to the lowest 20 percent of the income distribution. In the early 1980's it was about 10 percent of income or twice the rate for the United States.[Bauer and Mason, 1992:403 and 408] Currently Japan's ratio of income to the richest 20 percent over that of the lowest 20th percent is four or just about one-third of the eleven found in the United States. [Economist, Nov. 5-11:20] There are some problems with Japanese income distribution data which have caused some scholars to argue that income is more unequally distributed than shown by these comparisons. Similar problems exist as well for other countries and it is not clear how relative rankings would be affected if corrections were to be made to all of them. In addition to relatively equal income Japan also has a low concentration of wealth compared to other countries. [Tachibayaki and Takata, 1994:201]

C. Aggregate wages are set under the influence of equality. In 1955 the spring wage struggle began under the leadership of Sohyo. Its express aim was to use the strength of the strong unions to improve the bargaining power of the weaker unions. In a sense it was to recapture some success which had been obtained by union strength in the immediate postwar years. Initially the struggle was limited to Sohyo and Sohyo related unions while Domei had its own fall struggle. Yet over time, no doubt pushed by the ending of the Japanese business fiscal year in March, *Shunto*, the spring struggle, became the the process by which aggregate wages in the private sector were set in each year. Since government wage setting bodies made their recommendations following private sector settlements, *Shunto* effectively determined general wage increases for the entire Japanese economy.

There are two things which are important about Shunto. One is the pattern of the distribution of results. Initially the dispersion by industry of wage settlements [measured by the 75th percentile settlement less the 25th percentile settlement divided by twice the median settlement] was quite large. For the years 1956 through 1958 the average was .25. Then, as the Shunto concept developed, the distribution of wage increases began to narrow, averaging .14 in the next five years. Beginning in 1967 through 1974 the measure averaged .069. This was followed by five years with dispersions which averaged .126. The decade of the 1980's averaged .109. The first four years of the 1990's have averaged .098. The more difficult economic times of the post oil shock years have seen higher dispersions than in the boom years. The 20 years of slower growth after 1974 have averaged .111 which is 60 percent higher them in the boom years. Yet within recent years Shunto settlements during rising portion of the business cycle are somewhat larger than those during declining portions. [Rodo Hakusho(Labor White Paper), various issues] Still, given the stresses and strains which Japan has experienced the relative narrowness of these suggests the continued importance of a striving for relative equity.

The second important aspect of *Shunto* is its continued existence. This suggests that the importance of trying to achieve a narrowness of results is still important. This is reinforced by a comparison with the United States. Right after the Second World War aggregate wages in the United States were set in wage rounds which involved very centralized bargaining.[Evans, 1971:116-122] The wage rounds had several rationales. One of them was

to project the strength of powerful unions to weaker locals of the same unions. This system broke down in the early 1960's for a number of reasons, though some would date the demise ten years later.[Mitchell, 1990:157] Part of the reason for the breakdown of the wage round system was that their was no real concept of equity. Wage rounds became a form of one ups man ship in which the leaders of powerful national unions tried to impress their members that they were the "real" wage leaders. Too, union demands on smaller employers tended to be for both wage levels and for wage increases which did not allow for differential productivity between large and small firms to be adjusted.

D. Movements in wage structures also exhibit the influence of equity. Between 1924 and 1933 the coefficient of variation for wages for 40 occupations rose from .195 to .232 during a period of generally weak demand for labor. In those industries in which male relative wages were rising there was a spill over to the wages of women working in those same industries. Since there was no shortage of female labor or of skills, I believe it was the influence of equity with firms which generated these results.[Evans, 1971:178-181]

Contrary to experience in the United States, Japanese wage distributions have not been widening. American wage distributions have been rising since sometime in the 1950's Montgomery and Stockton, 1994:209 and Juhn, Murphy and Price, 1993:420] Then since the 1970's the widening of the distributions has involved both ends of the distribution pulling away from the median, and there has been a widening of differentials within age and educational groups.[Davis, 1992:3]

The causes for a expanding disdersions in the United States have been sought by a variety of scholars in dozens of papers. The most commonly offered explanation has been a rising dispersion of capital and skills. [Montgomery and Stockton, 1994:216] This has given rise to an increasing demand for general discretionary skills, and that has been reflected in a rising wage premium for education and experience.[Ryscavge, 1994:14] Alternatively some have seen the durable goods trade deficit as the primary explanation for the trend.[Borjas and Ramey, 1994:13] Given that the dispersion reflects both the decline in lower wages and a rise in wages at the top concentrated in different time periods, it is probably inappropriate to seek a single cause.

If technology and a rising demand for skilled workers are generating this widening wage distribution, then the same process should be affecting Japan since the same new technologies and skill needs should apply equally to Japan which operates on the same technological frontier. Some have argued that powerful trade unions, centralized bargaining and high minimum wages have in some European countries blunted the widening of wage differentials under strong demands for more technologically trained workers. [Economist, Nov. 5-11, 1994:20] By this count Japan should have expanding differentials. The degree of union density has not been high since shortly after 1946 and has declined in recent years. Bargaining is not centralized in the European tradition, and minimum wages don't exist in any practical way. The reality of unions and bargaining is more complicated than its surface elements. The Shunto pattern of bargaining and a continuing high level of union density among larger firms provides some of the same structural factors which seem to mitigate a tendency to wards a widening wage dispersion in some European countries.

As can be seen in Table I the distribution of Japanese wages narrowed during the years of very rapid growth, 1961- 1970. There then followed a slight narrowing during the period of rapid inflation associated with the first Oil Shock. The changes during rapid growth would be expected in the most neoclassical economy. The narrowing due to inflation would not be. Rather it reflects considerations of equity, because all levels of workers are seen as suffering from similar increases in the prices of basic goods. Since 1975 the overall pattern of wage distribution has returned to its 1970 level.(Table I) Much of this may reflect the importance of age in Japanese wage distributions and a work force which is growing older. Had 1993 wages been distributed to a population with the age structure of 1978, the dispersion would have been .47 rather than .55. An examination of wage distributions between 1973 and 1988 by Umezawa and Kanno showed that for male employees wages distributions for the major industrial group were different but all had maintained stability between 1976 and 1988.[1990:30 and 32]

The differing patterns in returns to education and to experience in the United States and Japan are shown in Table II. It shows the expanding wage pattern in the United States for experience and education that lie behind the conclusions that increased demands for skill associated with technological change characterize the American wage distributions. Table II also shows the great stability of these relationships in Japan. A similar conclusion is evident in Table III. Table IV indicates that the narrowing of wage differentials in the first three Tables can also be found in other distributions as well.

One can argue that the existence of the narrower differentials in Japan in the face of the same technological changes observed in the United States is proof of the role of fairness. Here the role of fairness may be seen as operating both directly and indirectly. The direct role would reflect pressures for equity in the face of differential demands for more and less skilled labor. The indirect role of equity is the manner in which it has helped shape Japanese employment practices in ways which have reduced the kinds of pressures being felt in American labor markets. In order to maintain a homogeneous work force Japanese firms often rely on sub-contractors for specialized services. A sharp increase in the demand for the skills of subcontractors may put pressure on their wages to rise, but not on the wages of the main organization. Even more important is the fact that the Japanese firm is organized to produce both an output of goods and services and increased skills among its workers. Thus as technology becomes wider and deeper the companies have responded by employing workers with a potential to learn and adapt to these new situations.[Lorriman and Kenjo, 1994:64] In Japan the the need technical and managerial skills are developed in workers during their career within the company. Thus, unlike in the United States it is not necessary for the firm to pay a rising wage differential to attract and hold the required skills.

An alternative explanation has been proposed by Borjas and Ramey who have argued that between 1962 and 1983 the major economic variable which tracks best with the pattern of movements in wage inequality is the net imports of durable goods which competed with less skilled American workers.[1994:312] Yet two of the more important industries to be adversely affected by trade were iron and steel and autos whose wages were above average and this would have mitigated somewhat the influence of the trade variable. Too, the explanation would seem to apply to the falling away of wages in the lower 20th percentile, but has little to say about the expansion of wages in the top 20th. Still, it does raise the question of Japan's export position and any resulting influence on the wage structure.

The influence of role of international trade on Japanese wage differentials between 1967 and 1987 has been examined by Yoshio Higuchi. He argued that the rapid rise in the value of the yen placed pressure on Japanese firms which squeezed the wages of older workers more than it did that of younger workers because the potential costs of mobility for the older workers were relatively much greater than for the younger workers. This result was most clearly visible for iron and steel workers and electrical machinery workers.[1989:491-492] Yet, if one looks at the ratio of wages for high school educated workers 50 to 54 years of age to those 20 to 24 years of age in manufacturing in the early 1990's the higher the ratio the greater the proportion of total product which was exported which is not consistent with the Higuchi view. On the other hand, in 1993 that average ratio of wages for these two age groups for 20 manufacturing industries was 2.10 while for 31 non-manufacturing industries it was 2.35 which is more consistent with Higuchi's results.

5. Fairness and Mid-Career Employees

What is a fair difference in the wages between employees who are similarly situated except for firm tenure ? It is easier to describe the main influences upon these wage ratios than it is to assess the appropriate outcome. All firms provide some on-the-job training. Consequently newly employed midcareer individuals will lack some of the human capital possessed by long tenured individuals. This will be particularly true in Japan because firms strongly believe in the correctness and uniqueness of their company's approach to work issues. In addition companies believe that employees obtain this knowledge by participating in, and observing their superiors in the day to day conduct of business.

In Japan the concept of life time commitment by the employer [shushin koyo] and its attendant requirement that the firm provide extensive training means that for many individuals their working life will be with the original employer. The promise of adequate wages for an employee and his family's lifetime consumption means that wages rise over the course of one's working life, at least until age 55. In order to encourage productivity by these core employees the firm maintains a wage difference between similar employees

who differ by length of service. Thus a reasonable wage difference will be seen as fair since it reflects productivity and is meant to encourage long term stability of employment.

In April of each year when new graduates begin their employment, high wage employers will have attempted to hire the best and the brightest. If they have been successful their mid-career hires will on average be less qualified than those all ready employed. This will give rise to "fair" wage differentials.

These reasons imply that the initial wage differentials between mid career and long service employees of comparable age and education will be seen as fair. As the mid career employee gains tenure with the new firm, what should happen to the wage differences? There are two expectations and they imply different ratios

A) The unseen quality differences over time will reveal that some of the mid-career hires are better qualified than some with long tenure whose true abilities are now evident to the employer. This fact along with the increased on the job training and knowledge of the new firms's approach to business should mean that as the mid-career employee acquires more and more tenure in the new firm, his or her wage disadvantage will diminish.

In Table V it can be seen that on average there is some modest improvement. The 25 to 29 year old college graduate with five less years of tenure received 15 percent less compensation. By age 50-54 the difference has been reduced to 6 percent. Yet for the 30 to 34 year old who starts ten years behind there is little relative improvement by age 50 to 54. Nor does there appear to be much improvement for those with even less tenure at age 50 to 54. Patterns for high school educated workers and for college educated women are essentially similar.

B) At older ages those with a university education will hold more responsible positions. More often than not, and especially in larger corporations, the majority of these will be long service employees. Consequently the negative premium for mobility would rise with age especially in larger firms.

In intermediate sized firms, 100 to 999 employees, the existence of a disproportionate share of growing companies will mean that mid-career employees will have been hired to maintain the expansion and this has given them more opportunities for promotion. Consequently the wage differences will be less than in the larger firms. This prediction is confirmed by the data in Table VI which shows the compensation ratios for men 45 to 49 years of age with 20-25 years of service in order to be able to match them with results from an earlier study [Evans, 1984a], and to avoid the open-ended tenure category 30 and more years. The data are shown for 1980 and 1993. In 1993 those with 15-19 years of service received 14 percent less and those with 5-9 vears of service 23 percent less than those with 25 to 29 years of service. In 1980 those differences had been 12 and 17 percent suggesting that the cost of mobility has risen over the last decade. In general, as can be seen in the table, the premium for tenure is highest among larger and smaller firms. In vears of growth and opportunity in the labor market the size of the premium for tenure has fallen. For example, looking only at those with 5-9 years of service, their wages as a proportion of those with 20-29 years of service rose from 65 percent in 1965 to 76 percent in 1976 and 83 percent in 1980. Now in 1993 they received 78 percent. Too, the relatively high wages of men with less tenure in the category class 100-999 in the 1980 data reflect those who went to work for these companies during the high growth years.

Over the course of a working lifetime a number of employees will seek and obtain employment at times other than upon graduation from school. A survey in 1990 and 1991 reported that almost three quarters of all firms had employed mid-career employees. The proportion of firms over these two years who had made such hires ranged from a high of 86.7 percent of all firms of the size class 30-99 to a low of 43.6 percent for the largest firms, those with 1,000 and more employees. Industrially there were not many differences, except among utilities where only 15.1 percent had hired midcareer employees and finance and insurance in which only 32.3 percent had done so. Perhaps not surprisingly these two industries pay the highest levels of compensation. Almost half of all mid career hires were less than 30 years of age with the proportion of mid-career hires who are less than 30 years of age being highest among the largest employers, 61.0 percent, and lowest among the smallest, 43.3 percent.

Among men, most received similar pay from the new employer as they

had from the previous one, except for those under the age of 30 who reported higher income in the new position than in the previous position. Men who changed jobs after the age of 50 received less. Women's experience was different. They received higher wages in their new positions up to the age of 60. ["Heisei 3 Nen.."] These patterns are consistent with the compensation data reported in Table V and VI.

6. Women Workers

In recent years women have increased their participation in the paid labor force. In 1970, 18 percent of the potential labor force of women were employees. In 1992 the number was 37 percent. Women now constitute 40.5 percent of Japanese workers though only 35 percent of employees and about one fifth of these are non-regular employees. Women's labor force activities differ most sharply from those of men around the twin events of marriage and the birth of children. In 1993 among women 25 to 29 years of age 92 percent of those who were single were in the labor force but only 40 percent of those who were married were in the labor force.[*Hataraku*, supplement, p. 8]

When female employment is viewed as an adjunct to the important elements in a woman's life of being a wife and mother it is not surprising that their labor should be placed in a different category within the firm. Nor is it inherently unfair. As can be seen in Table VI the penalty for non-continuous employment is not so different between men and women. For both men and women this reflects the fact that employment has been structured around long term commitment to employees with rising real wages over the employee's lifetime. This in turn has meant that the firm must be organized so that there will be incentives for workers to achieve required levels of skill, and to provide high levels of effort and diligence over many years. The solution has been the incorporation of long chains of skill development, and managers groomed through a process of extensive job transfers including to other localities.

The problem of fairness is most acute for those women who are prepared to follow the male pattern of long tenure. All too often employers expect that newly hired women graduates will not complete these processes and have denied all women the opportunity to start.[Lam, 1992:60-61] Beyond that, when some women make it clear by their continuation of employment that they are career employees, many employers deny these women the opportunities made available to male employees. According to a 1981 study of firms which offered some opportunities for promotion to women, only 14 percent allowed them to become a *bucho*, 36 percent limited. promotion to the first administrative position, that of *kakaricho*.[Lam, 1992:61]

According to regulations issued at the time of the implementation of Japan's Equal Employment Opportunity Law one of the concerns was managerial opportunities for Japanese women university graduates. That there have been some improvements is clear, but they seem limited. One reaction of employers was to make even clearer the two track system to higher managerial positions. One track involves limitations on inter company transfers, a track which precludes a person entering it from ever being president of the company. While both tracks were open to men and to women, predominately the non-presidental track was occupied or chosen by women. A study of 40 major firms with over 135,000 employees in 1990 which had these tracks found that that 99 percent of the men were in the full management track and only 1.3 percent of the women. [Lam, 1992:215]

Wage ratios continue to suggest that equal opportunities for women still need corporate efforts. Initially wages are quite close. The female to male wage ratio for technical college graduates in large firms (1,000+) in 1993 was .976. For high school educated workers it was .968. But for college educated workers 30-34 years of age and 5-9 years of tenure with the employer the ratio had fallen to .862. And as tenure grew longer and age grew older the ratio continued to fall so that at 50-54 years of age and 25-29 years of company service it was .737. High school educated workers wages followed a similar path. For workers 25 to 29 years and had 5-9 years of experience the ratio had fallen to .865 and at ages 45-49 and 25-29 years of service it was .793. Still, among younger workers there has been progress over time. In 1970 based upon the ratio of median wages women ages 25 to 29 years of age earned 60 percent as much as did men of those ages. In 1993 they earned 85 percent as much.

The issue is most vivid at the level of senior managers, in Japan the level of the *Bucho*. The same is true in the United States where only 5 percent of senior managers of *Fortune* 500 companies are women.[*Financial Times*,

March 31, 1995, p.11] In 1993 only 1.6 percent of those who held the rank of Bucho were women. In most companies it takes long years of company service to become a Bucho, but even here women are under represented. In 1993 among men 50 to 59 years of age with a college education and 25 or more years of company service there were approximately 14,000 Buchos. This represented about 60 percent of the men with those same characteristics of age, education, and company service. Among women of the same age, education, and company service there were only 42 Buchos but these were only 5 percent of those with similar characteristics. In addition within these various ranks (Bucho and Kacho) women appear to be promoted at older ages than men and to earn from 8 to 20 percent less than men of similar rank, age, and educational background in similar sized companies. It does appear that there are ample opportunities for Japanese firms to both more closely conform to the moral thrust of the Equal Opportunity Law, and of more importance to give reality to the strong concerns for fairness which has been given to male employment.

7. Conclusion

Concepts of fairness within employment have deep roots in Japanese religion, culture and history. After being relatively suppressed during the first third of this century they reappeared greatly strengthened from the ashes of War. They were written into the Trade Union Act, and underlay union wage policy both under *Densangata* and its successor *Shunto* which began in 1955 and which continues today. Other government policies, too, such as those which underlay the Income Doubling Plan and the control of the price of rice have shared had a goal of reducing wage and income differences.

As Table I made clear these policies as they have worked through the economy have been crowned with success. Wage dispersion fell to its lowest level in 1978. Since then there has been a modest overall rise, but this represents the aging of the Japanese population within a wage structure in which there are marked differences in wages by age. Fairness has had its strongest manifestation among long service male workers, though it has affected all workers. Women as they have become more active members of the paid labor force have seen their wages more closely approximate men's wages but their is still room for improvement if fairness is to be complete.

			Table I			
	Ja	panese I	Dispersion	of Wa	ages	
Year		Male A			$emale A_i$	-
	All	25 - 29	50-54*	All	25 - 29	50 - 54
1958	.76	.51	n/a	.64	.56	n/a
1959	.78	.46	n/a	.66	.56	n/a
1960	.76	.46	n/a	.59	.53	n/a
1961	.73	.44	.64	.56	.52	1.09
1962	.68	.36	.69	.52	.48	.93
1963	.65	.40	.60	.50	.46	.90
1964	.73	.47	.66	.49	.58	.83
1965	.60	.40	.65	.46	.44	.83
1966	.59	.37	.60	.55	.42	.86
1967	.59	.38	.62	.45	.42	.84
1968	.56	.36	.59	.42	.40	.61
1969	.54	.39	.59	.43	.39	.74
1970	.55	.36	.59	.42	.39	.73
1971	.52	.34	.58#	.42	.37	.70#
1972	.51	.35	.57#	.41	.36	.71#
1973	.51	.31	.54	.44	.32	.73
1974	.50	.31	.55	.44	.33	.75
1975	.50	.28	.55	.47	.33	.84
1976	.49	.28	.61	.39	.32	.63
1977	.50	.54	.62	.41	.32	.65
1978	.48	.31	.54	.43	.34	.68
1979	.50	.28	.58	.42	.33	.66
1980	.50	.27	.58	.42	.31	.64
1981	.52	.28	.58	.43	.32	.65
1982	.52	.28	.59	.43	.32	.65
1983	.52	.28	.59	.43	.32	.63
1984	.54	.28	.59	.43	.31	.62
1985	.54	.27	.58	.46	.31	.66
1986	.54	.27	.58	.46	.30	.65
1987	.54	.27	.58	.47	.30	.66
1988	.55	.28	.58	.47	.30	.69
1989	.56	.28	.58	.47	.29	.67
1990	.56	.28	.57	.46	.29	.66
1991	.55	.27	.55	.45	.28	.63
1992	.55	.26	.54	.45	.27	.63
1993	.55	.26	.54 [.58#]	.44	.27	.63

The measure is 90th percentile less 10th percentile divided by twice the median. (Source: Wage Census) [#] Before 1973 the age category was 50 to 59.

Table II	
WAGE RATIOS FOR MALE WOR	KERS
US	Japan

		U.S.			Japan	
	College	Senior	Junior	College	Senior	Junior
	Sr/Jr	Coll/H.S.	Coll/H.S.	Sr/Jr	Coll/H.S.	Coll/H.S.
1969	1.54	1.43	1.42			
1970		•••••	•••••	3.33*	.73*	.95
1974	1.81	1.43	1.39	3.33	1.48	.93
1979	1.95	1.43	1.30	3.70	1.67	1.02
1989	1.80	1.49	1.74	3.53	1.62	.98
1993				3.31	1.54	.99

The American data are from Murphy and Welch, 1992, 300. The Japanese data are from the *Wage Census*. The ratio of senior worker wages to junior wages in the United States is for workers with 26 to 35 years of work experience to those with 1-5 years. For Japan it is for workers who are 50-54 years old to those who are 20-24 year old. [*] These are for workers who are 50-59 years of age, not 50-54.

Table III

College	to High	School	Wage	Differ	entials	
-	_	U.S	-		Japan	
	1967	1979	1989	1965	1980	1993
Male College						
to High School		[1.26]				
Ages 25 to 34	1.32	1.20	1.66	1.24	1.24	1.17
Ages 35 to 44	1.50	1.49	•••••	1.49	1.21	1.28

The ratios for 1965,1967, 1979, and 1980 are from Evans, 1984A. The 1989 U.S. ratio is for experience levels of 6 to 10 years from Murphy and Welch as is the 1979 bracketed ratio. The 1993 ratio for Japan is from the *Wage Census*. The Japanese data are for wage plus bonus.

TABLE IV

INTER QUARTILE RANGE FOR MANUFACTURING

		r irm Size	
Year	1,000+	100-999	10-90
1954	.40	.51	.57
1960	.44	.49	.71
1967	.32	.63	.48
1974	.22	.30	.37
1981	.20	.25	.30
1993	.10	.13	.15

The data are for 35 to $\overline{39}$ year old male blue collar workers in manufacturing with a high school education. Through 1981 they were reported in Evans, 1984B, Table V. All ratios include bonuses and are from the *Wage Census*

			Table	V				
Wages plus B	onuses of	Male Co	ollege G	raduate	es by Ag	ge and	l Tenure,	1993
Ten				15 - 19				
1	Age							
50	-54 100	94	85	78	73	65	60	
45	-49	100	92	81	75	73	62	
40	-44		100	91	78	77	72	
35	5-39			100	88	81	69	
30)-34				100	89	84	
25	5-29					100	85	
199	3 wages ph	ıs bonus	for colle	ege educ	ated wor	men		
Ter	ure 30+	25 - 29	20-24	15-19	10-14	5 - 9		
age								
50-	54 100	109	104	84	. 69	56		
199	3 wages plu			_	school g	radua	tes	
Ter	nure 30+	25 - 29	20-24	15 - 19	10-14	5 - 9		
age								
50-	54 100	82	73	65	59	56		
		_				_		
199	3 wages ph			-		-	lates	
Ter	nure 30+	25 - 29	20-24	15 - 19	10-14	5 - 9		
age		_						
50-	54 100	82	65	58	52	45		

Table VI College Educated Males 40-49 years Wages plus Bonus by Firm Tenure Years of Service All 100-999 10-99 1.000 +20-29 Y 15-19 Y 10-14 Y 5-9 Y 3-4 Y 1-2 Y 0 Y Percent with 20-29 years of svc. 20 - 2915 - 2010 - 145 - 93-41-2

Percent with 20-29 years of service

References

- [1] Allison, Gary D., 1993, "Citizenship, Fraagmention and the Negotiated Polity" in Gary D. Allison and Yasunori Sone, (eds.), Political Dynamics in Contemporary Japan, Ithica: Cornell University Press.
- [2] Akerlof, George, 1976, "The Economics of Caste and of the Rat race and Other Woeful Tales", Quarterly Journal of Economics 40 (Nov.), pp. 599-607.
- [3] Aoki, Masahiko, 1994, "The Japanese Firm as a System of Attributes " in Masahiko Aoki and Ronald Dore, The Japanese Firm, Oxford: Oxford University Press, pp. 11-40.
- [4] Baily, Martin Neil, Gary Burtless, and Robert E. Litan, 1993, Growth With Equity, Washington: Brookings.
- [5] Bauer, John and Andrew Mason, 1992, "The Distribution of Income and Wealth in Japan", Review of Income and Wealth 38 (Dec.) pp.403-428.

- [6] Bestor, Theodore C., 1989, Neighborhood Tokyo, Stanford: Stanford University Press.
- Blau, Francine D., and Lawrence M. Kahn, 1994, "International Differences in Male Wage Inequality: Institutions vs Markets", NBER Working Papers.
- [8] Blinco, Priscilla, 1991, "Task Persistence in Japanese Elementary Schools" in Edward R. Beauchamp, (ed.), Windows on Japanese Education, New York: Greenwood Press, pp.127-138.
- [9] Borjas, George J. and Valerie A Ramey, 1994, "Time Series Evidence on the Sources of Trends in Wage Inequity", *The American Economic Review: Papers and Proceedings*, 84 (May) pp.10-16.
- [10] Brinton, Mary C., 1993, Women and the Economic Miracle, Berkeley: University of California Press.
- [11] Bronfenbrenner, Martin and Yasukichi Yasuba, 1987, "Economic Welfare" in Kozo Yamamura and Yasukichi Yasuba, (eds.), The Political Economy of Japan: The Domestic Transformation, Vol I, Stanford: Stanford University Press, pp. 93-136.
- [12] Choo, Hakchung, 1991, "A Comparison Income Distribution in Japan, Korea, and Taiwan" in Toshiyuki Mizoguchi, (ed.), Making Economies More Efficient and More Equitable, Tokyo: Kinokuya, pp.3-24.
- [13] Davis, Stephen, J., 1992, "Cross-Country Pattern of Change in Relative Wages", NBER Working Papers(June).
- [14] Dore, Ronald, 1987, Taking Japan Seriously, London: Athlane Press.
- [15] The Economist 1994, 333 (Nov. 5-11) 20.
- [16] Evans, Robert, Jr., 1970 "The Evolution of the Japanese Industrial Relations System", Business History Review (Spring).
- [17] 1971, The Labor Economies of Japan and the United States, New York: Praeger.
- [18] —, 1984A, "Life Time Earnings' in Japan for the Class of 1955", Monthly Labor Review 107 (Oct.) pp.32-36.

- [19] —, 1984B, "Pay Differentials the Case of Japan", Monthly Labor Review 107 (April) pp.24-29.
- [20] -, 1991, "The Puzzle of Early Retirement and Permanent Layoffs in Japanese Labor Markets", Journal of Asian Economics 2 (Fall) pp.301-307.
- [21] Flanagan, Scot C., 1982, "Changing Values in Advanced Industrial Societies", Comparative Political Studies, 14 (Jan.) pp.403-444.
- [22] Freeman, Richard, B., 1988, "Labor Markets", Economic Policy 3 (April), pp. 64-80.
- [23] —, and Ander Bjorklund, 1994a, "Gender Equality and Eliminating poverty the Swedish Way", *NBER Working Papers* 4995, (Dec.).
- [24] -, and Lawrence Katz, 1994b "Rising Wage Inequality: The United States vs Other Advanced Countries", in Richard B. Freeman, (ed.), Working Under Different Rules, New York: Russell Sage Foundation, pp. 29-62.
- [25] Fujita, Hidemori, 1989, "A Crisis of Legitimacy in Japanese Education" in James J. Shields Jr., (ed.), *Japanese Schooling*, University Park: Pennsalvania State University Press, pp. 124-138.
- [26] Fujimura-Fanselow, Kumiko and Anne E. Imamura, 1991, "The Education of Women in Japan" in Edward R. Beauchamp, (ed.), Windows on Japanese Education, New York: Greenwood Press, pp. 229-258.
- [27] Glazer, Nathan, 1976, "Social and Cultural Factors in Japanese Economic Growth", in Hugh Patrick and Henry Rosovsky, (eds.), Asia's New Giant, Washington: Brookings, pp. 816-896.
- [28] Gordon, Andrew, 1985, The Evolution of Labor Relations in Japan, Cambridge: Harvard University Press.
- [29] —, 1991, Labor and Imperial Democracy in Prewar Japan, Berkeley: University of California Press.
- [30] Haley, John O. 1992, "Consensual Governance" in Shumpei Kumon and Henry Rosovsky, (eds.), *The Political Economy of Japan: Cultural* and Social Dynamics Vol III, Stanford: Stanford University Press, pp. 32-62.

- [31] Hayashi, Chikio, Et Al., 1992, Data Analysis for Comparative Social Research, Amsterdam: North-Holland.
- [32] Hein, Laura E., 1990, *Fueling Growth*, Cambridge: Harvard Ubniversity Press.
- [33] —, 1993, "In Search of Peace and Democracy", Journal of Asian Studies 53 (Aug.) pp.752-778.
- [34] Hidaka, Kokuro, 1984, The Price of Affluence, Tokyo: Kodansha.
- [35] Higuchi, Yoshio, 1989, "Japan's Changing Wage Structure", Journal of the Japanese and International Economics 3 (Dec.) pp.480-499.
- [36] Hori, Shitaro, 1993, "Fixing Japan's White Collar Economy", Harvard Business Review 71 (Nov/Dec) pp.157-172.
- [37] Imai, Ken-ichi, "Japan's Corporate Networks" in Shumpei Kumon and Henry Rosovsky, The Political Economy of Japan: Cultural and Social Dynamics, Stanford: Stanford University Press, pp. 198-230.
- [38] Iwata, Ryushi, 1992 "The Japanese Enterprise as a Unified Body of Employees", in Shumpei Kumon and Henry Rosovsky, *The Political Economy of Japan: Cultural and Social Dynamics*, Stanford: Stanford University Press, pp. 170-197.
- [39] Juhn, Chinui, Kevin M. Murphy, and Brooks Price, 1993, "Wage Inequality and the Rise in the Returns to Skill", Journal of Political Economy (June) pp.410-442.
- [40] Koshiro, Kazutoshi, 1994, "Collective Wage Determination in Japan" in Bert Edstran, (ed.), Industrial Relations Wages and Employment in the Japanese Labor Market, Stockhom: Center for Pacific Area Studies of Stockholm University, pp.17-55.
- [41] Lam, Alice C. L., 1992, Women and Japanese Management, London: Routledge.
- [42] Long, Peter and Geoffrey Garrett, 1985, "The Politics of Growth", Journal of Politics 47 (Aug.) pp. 792-827.
- [43] Lorriman, John and Takashi Kenjo, 1994, Japan's Winning Margins, Oxford: Oxford University Press.

- [44] McKean, Margaret, A., 1989, "Eguality", in Takeshi Ishida and Ellis Krauss, (eds.), *Democrarcy in Japan*, Pittsburg: University of Pittsburg Press.
- [45] --, 1993, "State Strength and the Public Interest", in Gary D. Allison and Yasunori Alliso, (eds.), *Political Dynamics in Contemporary Japan*, Ithica: Cornell University Press.
- [46] Mitchell, Daniel, J. B., 1990, "Comment on Is Pattern Bargaining Dead: An Exchange", Industrial and Labor Relations Review, 44 (Oct.), pp.156-159.
- [47] Mitzoguchi, Toshiyaki and Noriyaki Takayama, 1984, Equity and Poverty Under Rapid Japanese Growth, Tokyo: Kinokuya.
- [48] Montgomery, Edward and David Stockton, 1994, "The Causes of Rising Dispersion of Relative Wages", *Industrial Relations*, 33 (April) pp.206-228.
- [49] Murphy, Kenin M. and Finis Welch, 1992, "The Structure of Wages", Quarterly Journal of Economics 57 (Feb.) pp.285-326.
- [50] Murakami, Yasusuku and Thomas P. Rohlen, 1992, "Social Exchange Aspects of the Japanese Political Economy" in Shumpei Kumon and Henry Rosovsky, (eds.), *The Political Economy of Japan: Cultural and Social Dynamics*, Vol III, Stanford: Stanford University Press, pp.63-105.
- [51] Myrdal, Gunar, 1972, "Remarks", American Economic Review 62 (May), pp.456-462.
- [52] Okazki, Tetsuji, 1994, "The Japanese Firm Under the Wartime Planned Economy" in Masahiko Aoki and Ronald Dore, (eds.), *The Japanese Firm*, Oxford: Oxford University Press, pp.350-378.
- [53] Okita, Saburo, 1983, Japan's Challeging Years, Canberra: Australian National University.
- [54] Ono, Akira and Tsunehiko Watanabe, 1976, "Changes in Income Inequality in the Japanese Economy" in Hugh Patrick, (ed.), Japanese Industrialization and Its Social Consequences, Berkeley: University of California Press.

- [55] Pharr, Susan, J., 1990, Losing Face, Berkeley: University of California Press.
- [56] Prime Minister's Office, 1991, Kokumin Seikatsu ni Kansuru Seirin Chosa /People's Life Survey/, Tokyo: Prime Minister's Office.
- [57] Ryscavge, Paul, 1994, "Gender Related Shifts in the Distribution of Wages", Monthly Labor Review 117 (July) pp.3-15.
- [58] Rohlen, Thomas P., 1974, For Harmony and Strength, Berkeley: University of California Press.
- [59] Rosenberger, Nancy R., 1994, "Indexing Hierarchy Through Japanese Gender Relations", in Jane M. Bachnik and Charles J. Quinn, Jr, (eds.), Situated Meaning, Princeton: Princeton University Press, pp.88-112.
- [60] Rubinger, Richard, 1989, "Continuity and Change in Mid-Nineteenth Century Japanese Education" in James J. Shields Jr, (ed.), Japanese Schooling, University Park: Pennsylvania State University Press, pp.224-233.
- [61] Sako, Mari, 1992, Prices Quality and Trust, Cambridge: Cambridge University Trust.
- [62] Sato, Tsuneo, 1990, "Tokugawa Villages and Agriculture" in Chie Nakane and Shinzaburo Oishi, (eds.), Tokugawa Japan, Tokyo: University of Tokyo Press.
- [63] Shimada, Haruo, 1992, "Japan's Industrial Culture and Labor Management Relations" in Shumpei Kumon and Henry Rosovsky, (eds.), *The Political Economy of Japan: Cultural and Social Dynamics*, Vol III, Stanford: Stanford University press, pp.267-291.
- [64] Smith, Thomas C., 1984, "The Rights to Benevolence: Dignity and Japanese Workers, 1890-1920", Comparative Studies in Society and History, 26 (Oct.) pp.587-613.
- [65] Smitka, Michael, 1991, Competitive Ties : Subcontracting in the Japanese Automobile Industry, New York: Columbia University Press.
- [66] Tachibanaki, Toshiaki, and Seijo Tokata, 1994, "Bequest and Asset Distribution", in Toshiaki Tachibanaki, (ed.), Savings and Bequests An Harbor: University of Michagan Press.

- [67] Umezawa Shintaro and Tosihaki Kanno, 1990, "Showa 50 Nen Dai Iko ni Keru Chin Gin Kozo no Henka ni Tsuite" ["Changes in Wage Structure Since 1975", Rodo Tokei Chosa Geppo(Monthly Labour Statistics and Research Bulletin], 43 (Jan.) pp.25-33.
- [68] Verba, Sidney, et al., 1987, *Elites and the Idea of Equality*, Cambridge: Harvard University Press.
- [69] White, Merry, 1987, *The Japanese Educational Challenge*, New York: Free Press.
- [70] Zweimuller, Josef and Erling Barth, 1994, "Bargaining Structure, Wage Determination, and Wage Dispersion in 6 OECD Countries", *Kyklos* 47 (no. 10), pp.81-93.

÷

Recent List of Keio Economic Observatory Occasional Paper

Japanese Language series :

1992年

1992年	
J.No.23	菅幹夫
	「航空輸送産業の大気汚染物質排出量の推計
	ーー産業連関表を用いた環境対策研究プロジェクトーー」46P.
J.No.24	松野一彦
•	「離散的選択:家計労働供給のモデルと計測」58P.
J.No.25	早見均
0	「異動発生源による大気汚染物質量の推定――自動車の場合――」
	32P.
J.No.26	吉岡完治、外岡豊、早見均、池田明由、菅幹夫
J.1.0.20	「環境分析のための産業連関表の作成」64P.
J.No.27	黑田昌裕、新保一成
J	「CO ₂ 排出量安定化と経済成長」34P.
1993年	
J.No.28	早見均
•	「労働時間効率と生産行動の分析」129P.
J.No.29	辻村江太郎、続幸子
-	「3財消費モデルにおける価格効果について」10P.
J.No.30	佐々波楊子、黒田昌裕、吉岡完治、馬成三、浦田秀次郎、菊池純一
	「中国沿海地区経済開発の波及効果
	— —平成4年度現地調査の概要及び資料等——」48P.
J.No.31	松野一彦
	「二変量離散的選択による非核世帯員の労働供給モデルと測定」
	53P.
J.No.32	吉岡完治、早見均、池田明由、菅幹夫
	「省エネ住宅の環境負荷に対するシミュレーション分析
	――環境分析用産業連関表の応用――」 32 P.
1994年	
J.No.33	岩田暁一、藤原浩一、砂田洋志、飯田仲衛、吉田淳
	「板寄せ法における模索過程の分析」31P.
J.No.34	篠崎美貴、趙晋平、吉岡完治
	「日中購買力平価の測定――日中産業連関表実質化のために――」
	23P.
J.No.35	佐々波楊子、馬成三、吉岡完治、桜本光、浦田秀次郎、河合啓希、
	黄于青
	「中国沿海開放とその波及効果」27P.

English Language Series :

1988年

E.No.8	Shi Li-He,
	"An Analysis of The Production Function of the Technical
	Structure of Chinese Agriculture" 27P.
E.No.9	Keiichiro Obi,
	"Observations vs. Theory of Household Labor Supply" Vol.2
D M 44	138P.
E.No.10	Kazuhiko Matsuno,
	"Formulation of a Quantal Response Model and Its Application
	to the Labor Supply of Married Females Facing Multiple
1000	Employment Opportunities, " 50P.
1989年	
E.No.11	Nobuko Inagawa,
	"Economies of Scale, Technology, and Intra-Industry Trade"
1001 5	20P.
1991年 FN 10	
E.No.12	Keiichiro Obi,
	"Household's Labor Supply Function in Terms of Numerical
1000年	Income-Leisure Preference Field" 28P.
1992年 E.N. 12	17 1 11 1 M
E.No.13	Kazuhiko Matsuno,
	"Bayesian Estimation of Discrete Choice Models : Labor Supply
1994年	of Multiple Household Members" 37P.
E.No.14	Kaiishing Ohi
L.NO.14	Keiichiro Obi, "An Fauilibrium Madal of Continuity II, II, II, II, II, II, II, II, II, II
	"An Equilibrium Model of Continually Heterogeneous Labor Market" 30P.
E.No.15	
L.NO.15	Keiichiro Obi, "Maasuroment of The Distribution of Decomposition IV. II.
	"Measurement of The Distribution of Reservation Wage Using Household Data: Price of Labor From Preference Maps for In-
	come and Leisure" 30P.
1995年	come and Leisure 301.
E.No.16	Robert Evans Jr,
	"United States Labor Market Regulation" 17P.
	contest otates Labor Market Regulation 111.