

Abo, Tetsuo, Mr, Acad, Management, Japan, *"Socio-Economics of Wage Differentials: A suggestion from Japanese-style gradual differentiation system of wage"*

1. Introduction

The purpose of this presentation is to illuminate the socio-economics implications of how to differentiate wage or salary and promotion systems in terms of principle of equality as well as performance of management system. It would not be enough persuasive to simply insist the necessity and desirability of egalitarian income systems as an opinion of economic democracy. Judging from the viewpoint of economics and management theories, or empirical evidences of the activities of firms, it would be necessary and interesting to investigate and discuss the objective plausibility or realizability of such systems.

The difference between gradual and precipitous slope of wages looks to be simply the matter of degree. However, there must be decisive differences in these two types of reward system not only for equalitarian-oriented income distribution but also for style and performance of management and business activities. Here there is a serious problem of "trade-off" relation between these two: Usually too much equalitarian income distribution can be realized at the costs of management performance. However, some times there is an important compatible case: equalitarian income distribution system is enhancing the performances.

Generally speaking, as a management system, the difference would depend on industry, society, corporate strategy and, to some extent, national policy as for which is more effective or desirable. Let's take up the case of Japan, for example, in comparison with the United States, European countries, and so on.

2. Two types of wage system as a key component of management system.

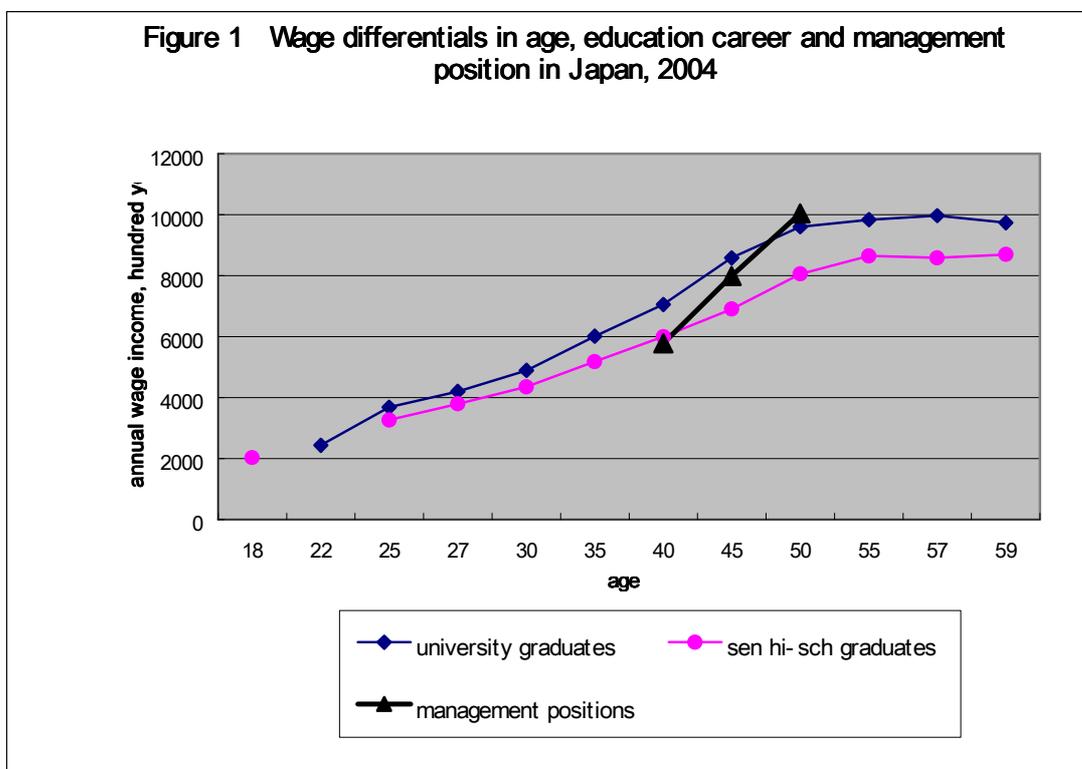
Japanese type in international comparison

First, I will show a typical wage structure in Japan using some statistical data as follows.

Table 1 Wage differentials in age, education career and management position in Japan, 2004 (thousands of yens)

| | 18 | 22 | 25 | 27 | 30 | 35 | 40 | 45 | 50 | 55 | 57 | 59 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|----|
| univ. graduates | 2,438 | 3,676 | 4,197 | 4,889 | 6,012 | 7,054 | 8,581 | 9,599 | 9,843 | 9,974 | 9,741 | |
| s.hi.sch graduates | 2,032 | 3,261 | 3,791 | 4,358 | 5,182 | 6,000 | 6,900 | 8,054 | 8,647 | 8,580 | 8,701 | |
| mgt positions | | | | | | 5,785 | 7,992 | 10,043 | | | | |

Source: *Rosei Jiho, Bessatsu (An extra issue)* , p.40, 49, Rosei Kenkyu sho, 2005



Source: from Table 1

In Table 1 and Figure 1 on wage differentials in age, education career in Japan an apparent feature can be seen. That is a small differentiation and slow-long term up rising wage system: a clear correlation with age, indicating not much differences with education career and managerial position(rank premium).

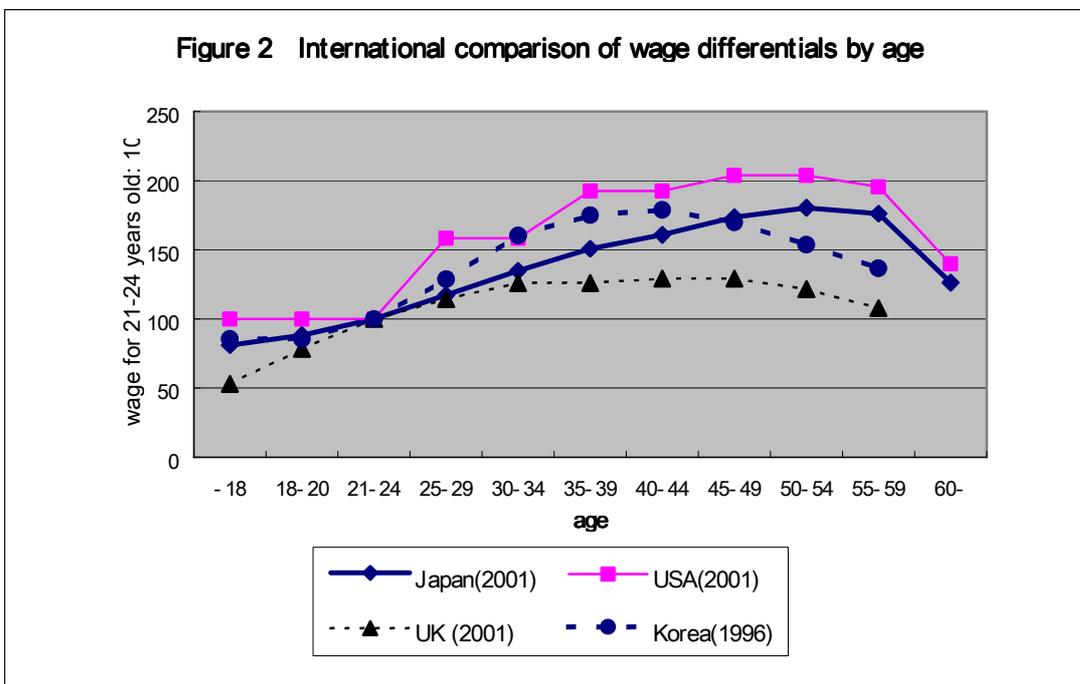
Table 2 Wage differentials by age in Japan, USA, UK and Korea

(100: wage level of 21-24 years old)

| | -18 | 18-20 | 21-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60- |
|-------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Japan(2001) | 81 | 88.3 | 100 | 117.3 | 134.7 | 150.7 | 160.9 | 173.6 | 180.4 | 176.1 | 126.3 |
| USA(2001) | 100 | 100 | 100 | 158.4 | 158.4 | 192.6 | 192.6 | 203.8 | 203.8 | 195.4 | 139.8 |
| UK (2001) | 52.9 | 78.4 | 100 | 114.3 | 125.9 | 125.9 | 129.1 | 129.1 | 121.6 | 107.9 | |
| Korea(1996) | 85.6 | 85.6 | 100 | 128.6 | 160.4 | 175 | 178.8 | 169.8 | 153.6 | 136.5 | |

Source: Kosei Rodo-sho, *Sekai no Kosei Rodo*, 2003, Furoku 22

(The Ministry of Health, Labor and Welfare (Japan), *The Health, Labor and Welfare in the World*, 2003, p. Appendix 22)



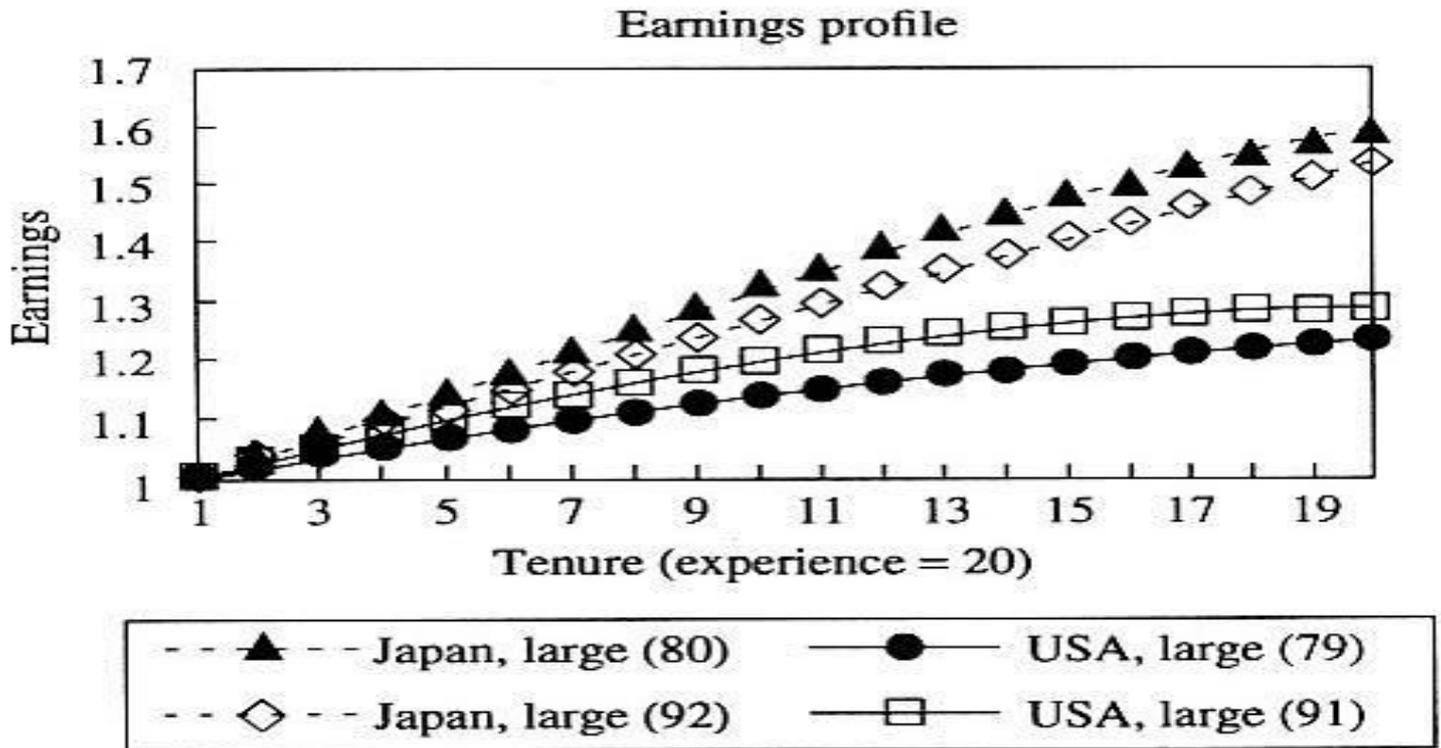
Source: From Table 2

Second, in Table 2 and Figure 2, a considerable different image can be seen regarding wage differentials in the international comparison. Although an increasing tendency of correlation with age is commonly seen by the end of thirties for all the four countries there are also some significant differences: 1) By the end of age thirties the increasing ratios for the USA and Korea are much higher than that for Japan. 2) After the age forties the increasing ratios for USA and Korea are almost stopping or changing to decline, compared with a steady slow increasing tendency for Japan. 3) For the UK the correlated movement of wage with age is seen only before the mid thirties.

These differences would suggest that for the USA and Korea some other incentive factors must be to a considerable extent influential in addition to age, indicating that large differentiated wages or incomes would be paid according to the differences in performances, education careers, and so on. And also would suggest by the end of thirties and after the forties there are no influences (or even negative for Korea and the UK) with ages.

Japanese and American type earning and management systems The above difference in wage structure is seen in its more details between Japan and the USA in the following figures cited from the research by Tachibanaki and others. I will try to explain it in relations with the management styles of the two countries.

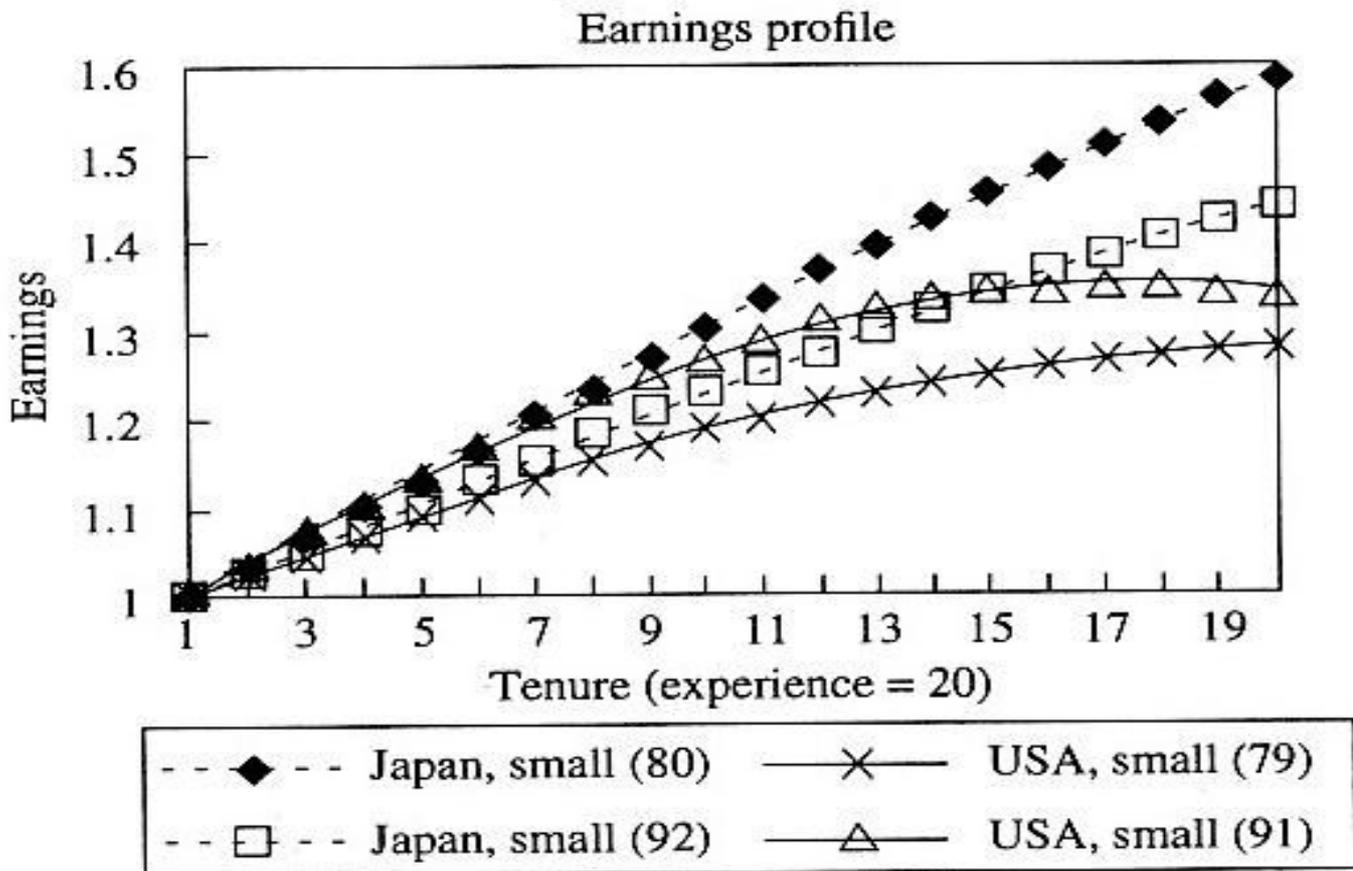
Figure 3 Earnings–tenure profile in large firms



Source: Tachibanaki, T., *Wage Differentials: An International Comparison*, Macmillan, 1998, p. 136

In Figure 3, a very clear difference in the correlation of earnings and tenure (in twenty years experience) between the US and Japan is shown especially in large firms. This is the more distinct principal case compared to the following other medium or small firms: the stronger correlation for Japan and much weaker for the US, not so large change in two distant timings of around 1980 and 1990 though only a little closing movements can be seen. Here also is suggested that there is some rank premiums as the important factors to create the above difference, e.g. 14% for supervisor in the US vs. 11% for Japan (7% for section chief and 4% for foreman)(Tachibanaki, op.cit., pp. 136-8)

Figure 5 Earnings–tenure profile in small firms



Source: Tachibanaki, *op.cit.*, p. 135

Figure 5, the most noticeable feature in the changes in small firms is the closing directions of earnings-tenure profiles in twenty years from both sides of Japan and the USA from their traditional curves: to less correlation for Japanese small firms and to more for American small firms. It seems to be that American small and medium firms have been changing, in contrast to large firms, to be more equalitarian and gradual differentiation direction.

What relation and implications do such wage and earnings structures have with the total management systems in both two countries?

On one hand, in Japan, small differentiation wage and salary system can be said to be relevant to the firms or industries where management and innovations are pursued as the result of accumulations of bit-by-bit ideas, knowledge, and R&Ds in the long run involvement by the various levels of employees with strong sense of cooperation, “my company consciousness”. There is no rapid promotion for young elites who skip their seniors on the promotion ladder so that promotion competition is only limited among the peers who entered to the same company in a same year (“slow promotion”).

This means a significant result that there is no apparent defeated person from that competition for almost all the employees until the very last moment of their company life and they would (or have to!) continue to have a motivation to work hard for their company through almost whole the period of time in their “life time employment”. This style of employment and reward system is likely to be more easily organized under the socio-cultural background where majority of people are homogenous and inward looking-oriented, like in

Japan. People there are very keen to be differentiated each other though not so vast, and as a result salary gap between the president of a company and the rank and files is usually not so large as in the United States(See, *President*(in Japanese), December 5, 2005 and *Forbes*, October 10, 2005).

This system is also suited for among the industries like automobile, machines such as electric and electronics and machine tools, and industrial materials such as iron and steel, ferrite, silicon, synthesised textile materials, and so on. R&Ds and production technologies in these industries are called as “integral” type, according to Fujimoto’s theory of architecture (Fujimoto, et al. [2001]).

On the other hand, in the USA, big differentiation wage and salary structures based on distinct performance-oriented pay systems are characteristic. These structures are usually applied for the firms or industries where small number of talents and brilliant people are playing key roles in corporate planning, R&D activities for breakthrough-type new technologies and products. There are far smaller elements of seniority framework where younger elites are skipping over their seniors. Promotion competitions are open to all-the individuals but finally limited into a few talents and importantly to say that there is not much room for any motivations or incentives for other remaining majority of employees to work hard for their company.

These types of reward systems are popular in industries such as chemical, pharmaceutical, information-communication machines and software, and aerospace-military related products, where once some nucleus technologies based on systematic theories or imposed operational conditions are set up ordinary mass-production type operations afterward are usually simple and almost automatically proceeding on (many of them are grouped into Fujimoto’s “modular” type).

3. Merits and Demerits of Japanese style wage and reward system

Merits and Demerits-Evaluation Which type is more effective for companies and happier for employees, and more desirable in prosperity or security for a society? Needless to say, this is not simply problem of choice but, as can be supposed from the above, there must be a sort of “affinity” for people and societies. Whereas in the United States and many other Anglo-Saxon societies, strongly influenced by market-fundamentalism based on thoroughgoing individualism, and in even many East Asian countries such as China, people like rapid promotion and big variant-type salary systems. Generally speaking, there would be “trade-off relationship” between equality and efficiency. This is a critical issue in modern welfare society and usually it is not easy for both aspects to be co-existed.

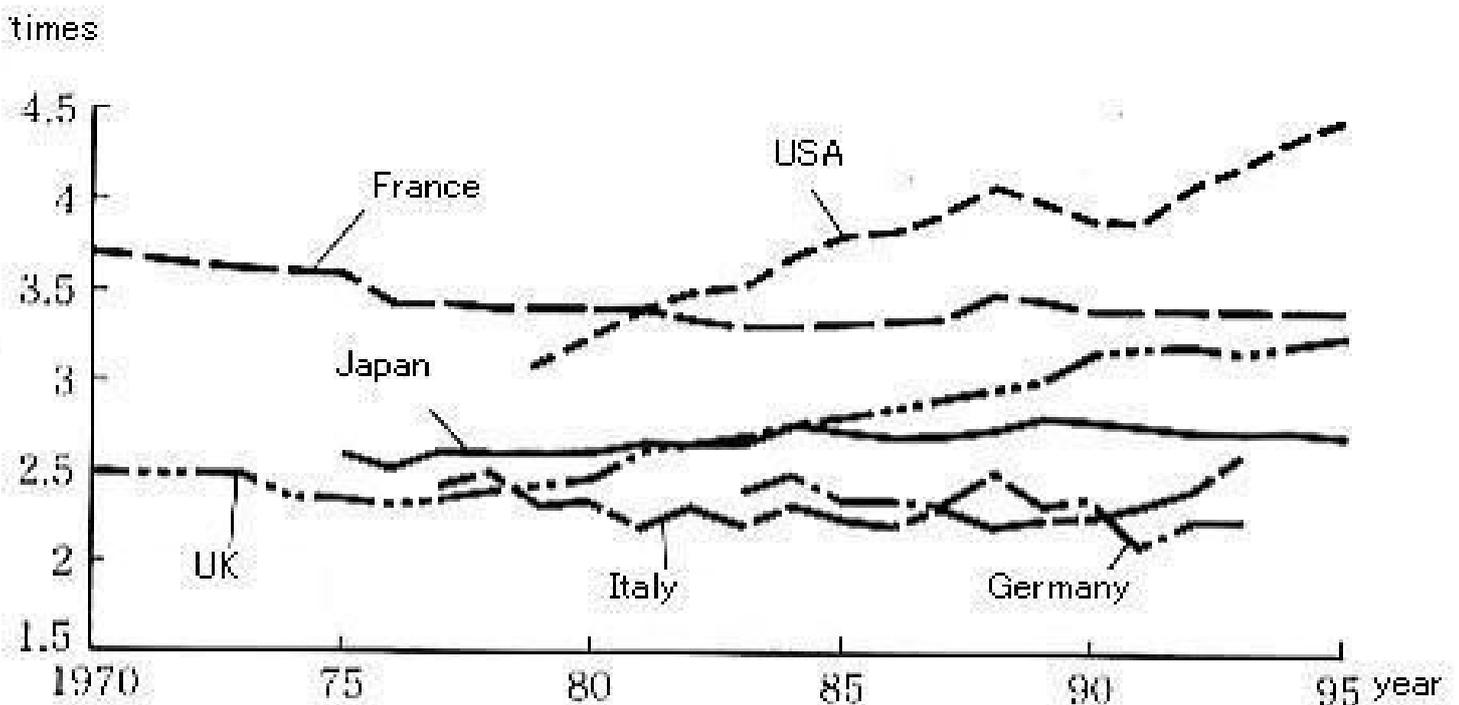
Merits for Japanese society In Japanese society both two are largely compatible but not always. Especially within companies in Japan gradually differentiated wage and promotion systems have widely diffused and they are strongly correlated with age (see Table 1 and Figure 1) but also combined with meticulously organized individual merit system, i.e. “shoku nou-shikaku sei “(an in-house grading qualification system with individual merit system for all the employees). This is quite different from job-centered reward system typically seen in the USA, but a person-centered system so that very flexible ways of working for majority of employees are possible. This system was well working at least since the 1960s until the mid-1990s and has still principally working with some modification after the fall of bubble economy in the 1980s(will be mentioned later).

But why so special in Japan? The point is whether capable talent people can accept such equalitarian reward systems or not. The main reasons for that are as follows.1) Japan is likely a less differentiation-oriented society and competitions there are limited basically in homogenous-inward looking people. It is relatively easy to differentiate people within small ranges. In other words, it is very difficult to have distinct big differences in their incomes or assets among people. 2) In a company competitions are mostly limited within a group of employees who graduated from schools or universities and entered the company in a same year. Based on the above “shoku nou-shikaku sei long term fairer evaluation (then gradual differentiation wages and slow promotions) are expectable. 3) Here honor or respect among employees in the same company is even more important than money.

Problems for Japanese society. The above story for Japanese companies is not always true for Japanese society as a whole.

1) As shown in Figure 6 regarding the international comparison of social wage distribution, Japan is not very

equality-oriented society compared with Germany or Italy, though not so inequality-oriented as the USA, France and the UK. In the ratio of the highest wage group to the lowest the USA was far the highest since the 1980s and becoming increasingly even higher and Japan also had a slight upward tendency. Actually there are many research results recently that the social distribution of income or assets in Japan has been becoming more unequal (typically in Tachibanaki[1998a], but there is a very persuasive critics to this by Otake[2005] that Tachibana's argument is too excessive.) For example, the poverty ratio in 2000 Japan (15.3%) is ranked 5th in OECD countries, following the USA(17.1%) ranked 2nd, compared with the UK (11.4%, 9th), Germany (9.8%, 13th) and France(7.0%, 17th) (OECD data, from the Mainichi Shinbun, Dec. 30, 2005).



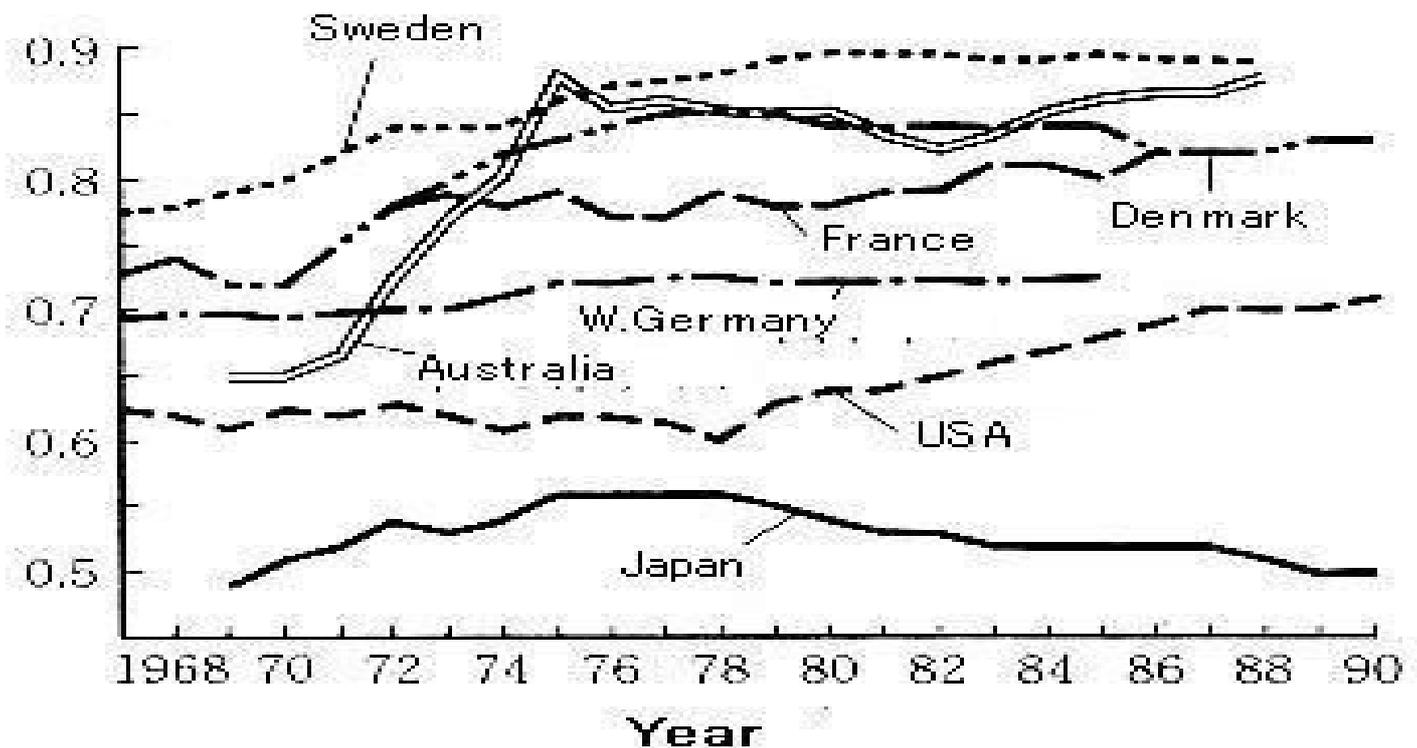
Note: Ratios of the second from the top to the lowest in the ranking of wage distribution divided into ten

Source: OECD, *Employment Outlook, 1996* (In Tachibanaki, T., *Nihon no Keizai Kakusa, Iwanami Shinsha, 1998*)

Figure 6 Change of Wage Distribution:
An International Comparison

2) It is also a big issue on the extremely unequal wage distribution for female in Japanese society. In Figure 7 the ratio of female wage to male in Japan is as low as around 50%, even much lower than the ratio 60-70% for the USA and far and away lower than the levels of 80-90% for Sweden, Australia, Denmark and France.

This can be thought partly as a “cost” of small differentiation system in a company as a result of big “social division of labor” because it is more convenient for companies to exclude women from inside the companies in order to create more “homogenous condition”. Then majority of women have been accustomed to mainly work as “specialists” for housekeeping and education matters of her families at home. Here, however, it should be pointed out that this would not be simply the responsibility of only men but also it is true that the resistance from women side has not been so strong. Even nowadays many women like to work as part-timers



Source : Blau and Kahn (1995), “The Gender Earnings Gap: Some International Comparison,” in Freeman and Katz (eds.), *Differences and Changes in Wage Structures*, University of Chicago Press.
(In Tachibanaki, op.cit., p. 95)

Figure 7 Ratios of female wage to male wage (male: 1.0)

3) While the correlation between wage and age is not so much different between large firms and small - medium firms in Japan, as shown above, the difference in wage levels between these two groups is usually larger than those in many other developed countries. This is principally because of the difference in structure of labor market, i.e. internal labor market in Japan and external in most Western countries. We can say that

this kind of vertical difference in wage level by company is another side of a coin of small differentials within a company: in many Western countries wage differentials in a company is larger than vertical difference by company.

4. International comparative studies for the applicability of the Japanese style wage system

We can illuminate empirically and theoretically the above topics regarding the relevant international applicability of the Japanese style gradual differentiation systems of wage and promotion, using our JMNESG's (Japanese Multinational Enterprise Study Group) research results on "Japanese hybrid factories" worldwide (See, Abo[1994], Itagaki[1997], Kumon and Abo[2004], Teikyo System Lab Symposium[2004]). Hereafter, I will try to take up just some noticeable cases and points.

1) The overall average "application" ratios for the Japanese management and production systems (composed of 23 element and 6 group items) to the Japanese subsidiary plants are around 3.0-3.3: by major regions in the worlds (North and Central America, East and South Asia, West and Central Eastern Europe) for about 400 factories visited by JMNESG from the mid 1980s to 2003. In this grading system of "application" 5.0 is 100% transfer (bringing-in) of Japanese parent systems to local subsidiary plants (0% adaptation to the local systems) and 1.0 is 0% transfer of the Japanese systems (100% adaptation to the local systems).

. This means that a little more than half of the overall Japanese systems have been able to be transferred to many various local societies in the world, in other words, a little less than half of the systems have not been transferred. Here we can see, to a considerable extent, some international applicability or transferability of the Japanese systems as a whole. But what about reward systems?

2) The degrees of application ratios for wage and promotion systems are far different from region to region, i.e. 2.4-3.9 (North America in 1989 - Korea/Taiwan in 1992) for wage system and 3.1-3.7 (North America in 1989 - Korea/Taiwan in 1992) for promotion system. In North America (mainly the USA), especially, as explained above, wage and promotion systems are quite different from Japanese ones, so that shall be much distant from the Asian situations such as Korean and Taiwan where the local systems are closer to the Japanese ones. In the West European countries these scores are in-between the USA and East Asia but a little closer to the USA. The scores of application of wage are as follows: 2.8 for the UK(1997), 2.8 for the Continental Europe(1998). In the recent research (2000-01) in the USA we have found out the many noticeable changes in the application situations, but with regards to the scores of wage(2.3) and promotion(2.9) they are even lower than those in ten years earlier.

5. Concluding Remarks: Lessons and some suggestions

For a society as a whole we can learn some suggestions from the above in order to attain a more equalitarian, participation-oriented systems and, especially in some machine industries, higher performance, although there are not only problem of social and industrial affinities but also some "dark sides" derived from the Japanese systems, e.g. narrow and inward looking perspective from group-ism, limited transparency between organizations or individuals, social "division of labor" between male and female, regular employees and part timers, and so on. Here, a focal point would be to elucidate "possibility and limitation", according to society and industry, of international application of Japanese-style gradual differentiation system of wage and promotion.

Let's see some implications and suggestions for the international applicability of the Japanese style more equalitarian systems that are compatible with higher efficiency and quality to other countries. First, judging from the JMNESG research results, at least around half of the Japanese management and production systems would be able to be transferred to various overseas regions and countries. However, the degree of applicability of the systems are to a considerable extent, differ from country to country, particularly for wage and promotion systems between the USA and East Asian countries.

Second, what can be expected most there is that such a more egalitarian wage system would provide for more motivation to majority employees to work harder by themselves. On the other hand, however, by that systems smaller number of talented people may lose motivation more or less as they may get a little lower income compared with former levels. In Japan these capable persons are usually rewarded by respect and honor among colleagues in the company. This would be one of the most difficult matters for many other societies including Asian countries such as Korea and Taiwan.

But, thirdly, in this case, a company can strategically choose, to some extent, a more egalitarian wage and promotion system in any industry or society. In the case such a corporate strategy does not necessarily have an affinity for a specific society it would be true that the comparative advantage of the system may lose more or less its efficiency. Yet, on the other hand, some compensatory effects can be expected. Take for an example, it was reported that at the Japanese electronics and auto transplants in the UK blue colour people felt happier and had more motivation than white colour when Japanese style egalitarian work and reward systems were introduced (Trevor [1988]). Also at the many Japanese electronics and auto transplants in the United States and Continental European countries as well as in China we, JMNESG, have seen similar cases: Of course, the situations are not so simple and there are not a few Japanese transplants which have faced serious problems with employing and keeping capable managers and engineers. However, it is also true that even in these societies there are considerable numbers of white colour people who understand and accept the merits of Japanese style long-term and slow promotion systems (JMNESG). Any way I believe the total performance as a whole after carefully introducing the above Japanese systems to overseas societies can be better than the former level.

Fourth, needless to say, not all the wage and promotion systems related to Japanese style are desirable and sustainable. One of the most essential problems with the Japanese system is the limitation of scope that can effectively works, i.e. within a more homogeneous environment like within Japanese large companies. As described above, women, part-timers, and small companies are often excluded from such worlds.

This kinds of situations should be changed and have been actually changing because of recent changes of Japanese society. Women and especially younger generations have been becoming more independent and more “individualism”-oriented partly because of shortage working people. Then after the fall of bubble economy American style “performance-oriented evaluation systems” , i.e. sharply differentiated reward systems, have been equally discussed and tried introduced to a considerable number of large companies in Japan. Yet, in short, up until the early 2000s it turned out that most of the companies that tried to do so were not successful and many articles and books that were critical against those policies have been recently published (including Otake, *op.cit.*). Then, now we can see a tendency that majority of Japanese companies have been returning back toward more or less traditional stance of management style but never to the original ones, so say, actually to 3.0- 4.0 application and adaptation-“hybrid model”?. That would mean an easier international applicable model of the Japanese system.

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