## Japan Academy Prize to:

Fumio Ohtake

Professor, and Director, Institute of Social and Economic Research, Osaka University

for Inequality in Japan



## Outline of the work:

Dr. Fumio Ohtake has been investigating problems of the income and wage distribution in Japan, applying standard statistical methods, taking into account the state of related academic research in other industrialized countries. His investigations in this area started well before popular books on the so-called "kakusa problems" or "kakusa society," roughly translated as "disparities in incomes and wages" or "differentiated society," became bestsellers from around 1998. Standard statistical (or econometric) methods as used herein refer to analyses to test various hypotheses using large-sample microeconomic data.

Inequality in Japan, published in Japanese in 2005, is a compilation of works by Dr. Ohtake (and his collaborators) conducted in this area up to 2005. The studies contained in Chapter 1 through Chapter 5 deal mainly with various facts about disparities in income distribution and factors thought to be related to them, as well as people's attitudes towards such disparities and the government's redistribution policies. Chapter 6 through Chapter 10 treat various facts regarding wage differentials as well as people's attitudes towards wages, personnel retrenchment by employers, and work-sharing.

The main arguments in the first half of the book are summarized as follows. Since the 1980's there has been a trend of widening inequality in the distribution of incomes and wages in the United States, the United Kingdom and a few other countries, and an apparently similar trend has been observed in Japan. In the U.S., its main causes are seen to be increasing wage differentials among employees with different educational backgrounds and skills, brought about in the process of the revolution of information technologies and economic globalization. In Japan, however, wage differentials due to educational background, age or firm size have not widened. Dr. Ohtake sought to solve this puzzle of why there has been a trend towards increasing wage and income differentials despite an almost stable pattern of wage differentials between groups of different educational background, age and so on. He found the answer to lie in the aging of the entire population of Japan. Income variances within an age cohort are generally small in younger generations, but become larger in older ones. In the U.S. and other countries, aging of the population is not much advanced, hence it is not a major factor in increasing overall wage differentials, whereas in rapidly aging recent Japan it is about the most important factor behind increasing inequality in income distribution. In the process of solving this puzzle, Dr. Ohtake pointed out that the concept of "initial income" in Japan's Income Redistribution Survey differs from those used in most other countries' statistics, in that it omits the public pensions but includes retirement allowances. Accordingly, he pointed out that the arguments of some authors who used the Survey but ignored this discrepancy in making international comparisons were misleading.

The extent to which increasing inequality in income distribution is shown to be due to population aging in Japan depends on the statistics used and on the period examined. It is possible that even before 1999, income distribution within specific groups (especially among younger generations) had been becoming gradually more unequal. One reviewer commented that Dr. Ohtake appeared to have "foretasted" such a tendency, but the principal message of his book, that aging is the dominant factor in increasing wage inequality in Japan, has been widely accepted without qualification.

Along with population aging, another important factor which is behind the trend towards inequality in household income in Japan is changes occurring in household structure. In the 1980's a household of four people, typically a couple with two children, was most numerous, but in the 1990's households of two members became most numerous, followed by single-member households. Within these two types of households, those composed of an elderly person or a couple above sixty years old are increasing in number. Seniors are mostly retirees, so that an increase in households comprising only seniors means an increase in the number of households with no earned income, and hence a widening inequality in income distribution. At the same time, a decline in household size and women's wider participation in the labor market have also tended to accelerate the trend of inequality in household incomes.

If the recent trend towards increasing income differentials in Japan is mainly reflective of changes in the age structure of the population and in the household structure, then it would in a sense be a non-issue. In recent years however, many people appear to perceive an increasing inequality in income distribution and to be seriously concerned about this tendency. The next task was then to explain why they feel so. In answering it, Dr. Ohtake explored the reasons behind the divergence between the reality and people's perception of it. He designed and carried out a questionnaire survey on people's understanding of increasing disparity and on whether they perceive it to be a "problem." His analysis of the survey revealed that many people think that the income disparity is increasing and also that it will widen in the future. Especially, well educated people and higher income earners perceive and foresee increasing inequality more than do lower income earners. The former, however, do not judge this to be a serious "problem." Lowincome earners rather than high-income earners, and, in contrast to some other developed countries, men rather than women are more supportive of redistribution policies by the government.

In the latter half of the book, various aspects of wage differentials in Japan are analyzed and international comparisons are made. In Japan, a widening of wage differentials in the 1980's was primarily related to an aging trend among workers, and after 1990 there has been little substantial change in wage differentials. Some widening tendencies were observed in wage differentials among younger workers of different educational backgrounds, and among middle-aged and older employees who are university graduates. Also, during recession, some widening of wage differentials is observed between employees of firms of different size, and between those regularly employed and part-time workers. Yet the kind of sharp increases of wage differentials as observed in the U.S. and U.K., especially among people with different educational backgrounds, have not taken place in Japan.

In the U.S., U.K. and Canada, the so-called IT revolution has increased the demand for skilled workers, and what is called "the digital divide" generally widened the wage differentials. Dr. Ohtake examined preceding research works on this aspect of wage differentials in other countries as well as in Japan, and also analyzed the results of a questionnaire survey conducted by Osaka Prefecture. His conclusion was that the use of computers in Japan had not so far had a significant influence on the wage structure. Japan's wage differentials appear to be different in this aspect from those of most other countries'.

Dr. Ohtake's *Inequality in Japan* presented numerous remarkable new results by applying the standard statistical methods to various large samples of micro data on incomes and wages. It constitutes an epoch-making achievement in this regard. The situation of inequality in Japan continues to change. Change in the objects of research is inherent in social sciences. Empirical research in social sciences must cope with ever-new problems and targets. We look forward to Dr. Ohtake continuing to contribute to scientific analysis of the distribution of incomes, wages and assets in coming years as well.