

# On a Controversy on

### "Macro-Statistics" in China

Hiroshi Ohnishi Professor of Kyoto Unoiversity Graduate School of Economics

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Graduate School of Economics Faculty of Economics Kyoto University Kyoto, 606-8501 JAPAN

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In the last decade of this century, there has been a severe controversy on a new proposition that two academic groups of statistics in China have to be unified into one "Macro-Statistics". These two groups are a school of mathematical statistics and school of social statistics, and as we know, we also had a same kind of controversy in Japan. Therefore, to follow this controversy in China is very beneficial for both countries, and maybe both academic schools.

#### I. Points of Issue on the Controversy

In this section, I want to introduce some representative opinions on this controversy, and then summarize them.

The first typical opinion from the school of social statistics can be observed in Ye(1999). He showed his recognition that the social statistics is undervalued now like the mathematical statistics was undervalued in the past, and claimed that both schools have to respect each other.

The second opinion that I would like to show now is by Li(1999). The author was the ex-president of the state statistical bureau (SSB) of China. Therefore, he must inherit the formal viewpoint of the SSB, but also must think to mediate both schools. Such a position is expressed in his paper. First, he set his position as a Marxian, and said that the system of statistics belongs to both larger systems of science: social economics and international statistics. However, he said

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that statistics has to be lead by the former larger system, although the relationship with the Chinese system of statistics and International Statistics is equal. This opinion is based on his Marxian viewpoint, because the Western statistical studies lack some important viewpoints proposed by Marxian theory. However, of course, he recognizes the need to introduce the Western statistical theory for the new Chinese socio-economic system.

A slightly more advanced compromise is proposed by Ji and Liu(1998), who are members of the school of social statistics. According to them, because mathematical statistics has undervalued a role of social science, both schools have to cooperate with each other in order to build "Macro-statistics." However, they admit that mathematical statistics is very useful to analyze stochastic phenomena and to find new causal relations which exist in our society.

However, opinions of the school of mathematical statistics is very critical. For example, Yan(1997) claims that global standards are formed by the mathematical statistics, although substantial sciences are important too. Therefore, he recognizes the social statistics as a part of a larger system of statistics like natural-engineering statistics has to be a part of the larger system of statistics.

Furthermore, more radical opinions are proposed by younger generations like Tang(1997). He recognized that advanced economics in the Western world is divided from the field of statistics, and statistics has become a pure mathematics. Therefore, he claims that we don't need any social statistics, and such a field has to be studied in the field of economics. I think that his strong proposal is based on the present strong self-confidence of the school of mathematical statistics in China. And in other words, based on their lack of confidence that the present Chinese mathematical statistics is still now underdeveloped compared with the global

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standard.

Therefore, we can summarize this controversy as follows. That is, the school of social statistics claimed importance of substantial sciences; for example, economics in our field. On the other hand, the school of mathematical statistics claimed that to catch up to the global standard of the mathematical technique and theory in this field is a precondition for the Chinese statistics. From this viewpoint, some members of the school of social statistics are for the new proposal of "Macro-statistics", and the others are against. On the other hand, some members of the school of mathematical statistics are for the same proposal as stated above, and the others are against. In this sense, I think, the important thing is not whether that new proposal has to be accepted or not, but how to understand the proper relation between the two statistics.

#### II. Self-recognition of the Social Statistics in Japan

As stated in the introduction of this paper, we had the same kind of opposition between these two academic schools. Under that opposition, how has the Japanese social statistics recognized and redefined itself?

One strong definition was the principle of "statistics = a substantial social science." This principle put importance on the substantial science by such a definition that statistics must be a social science.

Another definition was the principle of "statistics = a methodological social science." This principle also makes it clear that such a social science must be incorporated into the methodology. The most important thing is that both principles put importance on that substantial science as well as on the methodological science. This attitude was followed by many kinds of inner

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controversy in the school of social statistics in Japan, and was made clear by the slogan : "statistics as a social science".

Therefore, the relationship between the social statistics and the mathematical statistics is not between the applied and the theoretical science (as some authors who belong to the school of mathematical statistics say), because the substantial theory is laid a stress on not by the mathematical statistics but by the social statistics. At least, Japanese academic society still now has the tradition of the social statistics in the Western world.

Furthermore, my more important critique against the claim by the school of mathematical statistics in China is that the applied sciences which use many methods of statistics put importance on the substantial sciences. These characteristics are more typical in the field of economics. For example, one of the most influential approaches to analyzing macro-economic policies is the computable general equilibrium approach (CGE approach), and in this approach, results of the analyses are deeply dependent on the theoretical framework. I think such a deep dependence is the result of a rapid development of the economic theory. In this sense, we have to recognize that the attitude of the school of social statistics must become stronger.

#### III. Proposals for the School of Social Statistics in China

Therefore, we have to understand that even now the social statistics has their own value and role, and must not lose this fight with the school of mathematical statistics. In this sense, the school of social statistics has to participate strongly in this controversy, and must not ignore from this controversy. This is my basic proposal for the school of social statistics.

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However, my proposal for the school of social statistics is not only this one. Besides the above proposal, I have three more proposals as follows;

The first one is that the school of social statistics itself has to study and have good results in the field of substantial sciences. Researches on substantial sciences also are the tasks of the school of social statistics.

The second one is on the problem of what kind of research has to be done by the school of social statistics. In my opinion, not only the Western economics but also the Marxian economics have to be developed by the school of social statistics, because the latter one cannot be studied by the other statistical schools. In Japan, we already have many achievements in this field. For example, a multicountry econometric model based on Lenin's theory of *Imperialism* (Ohnishi, 1998), a Marxian model on the decreasing profit rate (Ohnishi, 1998, 1997), a Marxian model of labor theory of value (Izumi, 1992).

Third, statistical epistemology itself has to be a field of their research and education. Yue (1994) is a prominent achievement in this field by the school of social statistics in China, and also the Japanese school of social statistics has many debates in this field. In the next section, I introduce our debates.

IV. Recent Statistical Epistemology in the School of Social Statistics in

Japan

Before introducing our controversy, I have to admit that majority of the member of the Japanese school of social statistics are also indifferent to such controversy. It is almost the same as in China. However, some participants of this controversy are from slightly younger generations (including me). It is very

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important.

Such new controversies were started by a senior member of our school. Yoshida (1990, 1991) claimed an importance of the mode of research(he call it as "Weise"), and claimed that it has to be a field of our research. Without recognizing that it is our field, our statistical epistemology cannot be a field of social statistics.

The second important viewpoint was offered by a member of the new generation. Yamada (1996) claimed that our viewpoint of statistical research has to be the people's, because the people's viewpoint and the ruler's viewpoint are different and different viewpoints introduce different research conclusions. As you know, this opinion is based strongly on a Kantian constructivism, because he claims that all of our recognition are non-neutral and "constructed" by *ad hoc* recognitions or theories. In his opinion, *ad hoc* theory is the most critical, and in this sense, his viewpoint is for the tradition of the school of social statistics that puts importance on substantial sciences. Kantian constructivism has been also the tradition from the establishment of our school.

My proposal for the school of social statistics and for Yamada's are the same, because I also admit that different social classes or strata have different understanding on our society based on their different "constructive" recognitions. However, I understand that social mechanism of such different recognitions itself has to be studied by the academy of statistics. For example, why and how does the labor class have a certain recognition, and others have different ones? In my opinion, we cannot give up on reaching a neutral and comprehensive recognition on the real world, and only such understandings on the diffusive distribution of the different recognition and its mechanism can guarantee for the long road to the neutral and comprehensive recognition. The most important thing in this article

is that such kind of research to an appropriate understanding on the mechanism of social recognitions itself is a social science. In this sense, I claim that statistics itself is a kind of social science as a substantial science. This viewpoint can be understood by a renewed definition of "statistics = a substantial social science."

I have to admit that some participants in this new controversy are against my proposal from a different viewpoint. Sano(1997) claimed that the school of social statistics has to develop a new statistical method such as data analysis which is a part of social sciences. He defines his viewpoint as a renewed definition of "statistics = a methodological social science."

Therefore, all of our new viewpoints put importance on the role of substantial sciences in the statistical researches. In this sense, the school of social statistics in China also has to redefine its own value and develop its own advantage.

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