Preference Relativity, Ambiguity and Social Welfare Evaluation

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Summary

Although both developing mainland China and developed Hong Kong have experienced rapid growth in past decades, the fruit of economic growth is severely unevenly distributed across different social classes in these regions. Some indications have shown that most of the benefits of economic development go to the minority of people, low and middle working class get little benefit from economic growth. As a result, more and more people are unhappy about their current situation, social equity and stability have been threatened. Therefore, to enhance social welfare and build a harmonious society, it is necessary to have income distribution adjusted.

Theoretically, income distribution relates to social choice and social welfare, which are troubled by many impossibility theorems. There are three major tasks in this study. First, the author tries to clarify the conditions of existing impossibility theorems and explore the possibility for the social welfare function and social choice to escape from impossibility; second, the author tries to set up a unifying framework for social welfare evaluation under imperfect information and ambiguity, and lastly, the author tries to use the framework to estimate social welfare across regions.

The main contributions of the paper include: (1) the author finds that preference is a concept of relativity and it is important to choose a relevant reference frame to overcome social choice impossibility. Taking moral judgments into consideration of evaluation of social welfare, the paper shows that the social welfare function may exist under a proper reference frame. (2) With sublinear expectation modeling technique of ambiguity, a formal variational model is established to analyze the relationship between the social welfare function and the distribution function, and the relationship between the social welfare function and Gini coefficients. (3) It is proven that the ambiguity model is robust and invariant under some certain conditions. (4) The model economic welfare of Mainland China and Hong Kong and other regions is estimated, and its policy implications for Hong Kong and Mainland China are discussed.