## Abstract for "Three Worlds of the Chinese Welfare State: Do Health and Education Change the Picture?"

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The Chinese welfare system has had dramatic changes during the past 35 years. Using the nationally representative China Household Income Project 1988, 1995, 2002, and 2007 data, this paper aims to quantify the size, structure, and redistributive effects of the Chinese welfare state utilizing the detailed income data available and imputations of health and education benefits that are often excluded from existing studies. Existing evidence on this topic suggests that the Chinese welfare system has diverged into three worlds: the more generous and progressive urban world, the minimal and very regressive rural world, and the growing yet still regressive migrant world. In this paper, we aim to provide updated and more thorough evidence on the size, structure, and redistributive effects of the Chinese social welfare system to see if the story of the three worlds holds. More importantly, we aim to understand if the inclusion of the two vital components of in-kind social benefits, health and education, might change the story. In other words, would the three worlds be further apart from each other or would the gaps between them be narrowed by health and education?

Building on a series of recent studies on this topic, this paper makes the following new contributions. First, comprehensive definitions and measurements of final household income and household social benefit package are used. The household social benefit package includes cash transfers, health, education, housing, food, and other in-kind benefits. Most importantly, health and education will be included based on imputations from self-estimated market value of health care benefits received (in the case of health) and provincial per capita government expenditures (in the case of both health and education). The final household income package consists of market income (including wage income, income from private enterprises/individual business, property income, and rental value of owner-occupied housing), social benefits, private transfers, minus taxes and fees. Second, different from research in many other countries, most existing studies on household income in China calculate income as household per capita values and does not use any other equivalent scales to take into consideration the economies of scale. In this paper, we will experiment with a few equivalent scales such as the OECD equivalent scale to test whether the main conclusions about the size, structure, and redistributive effects of the Chinese welfare state might be changed.

CHIP is a repeated cross-sectional study widely considered to be among the best available national survey data on household income, expenditures and program participation. Samples of the CHIP study were drawn from larger National Bureau of Statistics urban and rural samples using a multistage stratified probability method to achieve national representativeness. CHIP 2007 included 10,235 urban households, 13,000 rural households, and 5,000 migrant households. CHIP particularly fits the analytical needs of this study: On the one hand, it provides detailed information on the various cash and in-kind social benefits received by all urban, rural and migrant households, along with a detailed accounting of other income sources; on the other hand, questions on income and benefits were asked largely consistently across the four waves of CHIP surveys, allowing the tracking of changes and comparisons over time. The use of the unprecedented 2007 data allows us to provide a more updated, comprehensive picture of the Chinese welfare state and draw implications for China's ongoing and future social policy reforms.

The size of the social benefit package will be measured by the amount of social benefits received by families as a percentage of their household final income. The shares of the various social benefits in the total social benefit package measure the structure of the social benefit system. We use two measures to gauge the redistributive effects of the Chinese social benefits. First, we compare pre- and post-transfer income inequality levels measured by the Gini coefficient to see whether and to what extent social benefits helped reduce overall income inequality. Second, we calculate the economic distances between the bottom (i.e., 10th percentile income) and top (i.e., 50th percentile income) of the income distribution based on pre- and post-transfer income to evaluate the regressivity or progressivity of the social benefits. All analysis will be done within the respective urban, rural, and migrant samples and then in the combined national sample.

How would we impute the values of health and education benefits? For health, two estimation methods will be used. First, when available, we will use the market value of health benefits as reported by the participants themselves to approximate health benefits. Such self reports are available in 1995, 2002 and 2007 surveys as well as in the 1988 rural survey. Second and alternatively, we will use administrative data on provincial per capita public expenditures on health care to impute health benefits. Such imputations will match individuals' reported health insurance coverage, including their insurance status and type of insurance. Two broad types of health insurances are available in China: employee insurance for those working and citizen insurance for those not working. Similarly for education, administrative data on provincial per capita public expenditures will be used to match individual school attendance and type and grade of the school. Such imputation methods have both pros and cons. It will enable us to have a more accurate estimate of the size and structure of the social benefits but somewhat undermine the redistributive effects of these benefits.

Armed with the inclusion of health and education benefits and enriched by the use of multiple equivalence scales, this paper will provide new empirical evidence advance the existing literature on the Chinese social benefit system and suggest important and timely policy implications. Alongside urbanization and population aging as well as pressure for democratization, China faces the ongoing challenge of how to integrate the fragmented and often fractious social welfare system across the urban, rural, and migrant worlds. It will be a delicate effort of balancing the rights of the Chinese citizens, economic growth and financing responsibilities, maintaining social order and stability, and the political will and power of the Chinese government.