China's Urban-Rural Income Gap: A Re-examination

Bjorn A Gustafsson, University of Gothenburg
Meng Cai, Minzu University of China
Terry Sicular, Western University

Abstract

Underlying China's high level of income inequality is a substantial urban-rural income gap. Past studies have reported estimates of China's urban-rural income gap and have discussed contributing factors, one of which is China's household registration or hukou system. The hukou system has segmented China's population into two groups based on rural versus urban place of origin, each with different opportunities and outcomes. Citizens from rural backgrounds have been disadvantaged in multiple regards, including employment, housing, schooling, and social welfare, and social protections.

Recent developments in China justify a re-examination of the urban-rural income gap. Much of the past literature analyzes the gap during the time period when China's population was majority rural and when migration was predominately short-term in nature. This, however, is no longer the case. In 2011 China's rural population fell below 50 percent of the total for the first time in history. By 2023 the rural population had fallen further to 34 percent. Concurrently, China's urban migrant population, which previously consisted largely of short-term or temporary workers, has become increasingly long-term and settled.

The recent acceleration of urbanization in China has taken place in the context of a new, ambitious set of policy reforms that aim to transform China into an urban society and eliminate the distinctions between its urban and rural populations. These reforms are embodied in China's New-type Urbanization Plan (NtUP), which was announced in 2013 and launched in 2014. Among other things, the NtUP outlines multiple, major changes to the hukou system. Barriers to obtaining an urban hukou are to be eliminated in smaller cities and towns and substantially relaxed in medium-sized cities, while strict hukou controls continue in large, mega-cities such as Beijing and Shanghai. New estimates of the urban-rural income gap based are needed to understand the effects of these policies.

Understanding China's urban-rural income gap requires attention to measurement. The standard approach to measuring the gap is to divide the average per capita household income in urban areas by the average in rural areas. In a setting of rapid urbanization such as in China, this approach is problematic. In such a setting relatively large numbers of individuals who were previously in the rural denominator will be reclassified as urban and moved into the nominator. Reclassification from rural to urban will cause the standard measure of the gap to change even if all incomes remained constant. Consequently, changes in the standard gap reflect not only changes in relative incomes but also population movements. Furthermore, the impact of reclassification from rural to urban on estimates of the standard gap is affected by selection, that is, by the characteristics of those who are reclassified relative to those who are not. Selection and

the characteristics of those who have been reclassified have changed during the course of urbanization in China.

An additional concern regarding measurement of China's urban-rural income gap is a statistical break in Chinese household income statistics. Most estimates of China's urban-rural income gap are based on income statistics from China's National Bureau of Statistics (NBS). In 2013 the NBS revised its annual household income and expenditure survey and modified its definition of household income. Not coincidentally, in 2013 China's urban-rural income gap so measured experienced an unusually large decline. As we will show, a fairly large share of this decline was due to the statistical break. Consequently, many estimates of China's overstate the decline in the gap.

In this paper we reexamine China's urban-rural income gap based on new estimates of the gap that address the above measurement considerations. We begin section 2 with relevant background about urbanization in China. Here we provide a brief history of China's urbanization policies and the hukou system, with a focus on the policies since 2013 associated with the NtUP. Along the way we present some statistics on the urban share of China's population as well as on the share of the population that holds urban hukou. This discussion motivates our empirical analysis and informs our proposed alternative, hukou-based measures of the urban-rural gap.

In section 3 we turn to data and measurement. For our empirical analysis we use data from the China Household Income Project (CHIP) survey datasets for 2002, 2007, 2013 and 2018. We use the CHIP data because it contains rich information not only on household incomes but also on individual and household characteristics, including location of residence and hukou. Using this information, we are able to address several important measurement issues. We discuss these measurement issues, and we carry out two adjustments to the standard urban-rural income gap, one to address differential urban-rural changes in the cost of living and the other to adjust for the 2013 statistical break.

In section 3 we also propose two alternative measures of the urban-rural income gap. One alternative, which we call the 'current hukou income gap', classifies individuals as urban or rural based on whether their hukou in the year of analysis is urban or rural. Classifying individuals based on their current hukou gives an indication of the income advantage in that year associated with holding an urban hukou.

In section 4 we present estimates of the standard urban-rural income gap without and with the two adjustments. Adjusting for changes in relative costs of living does not substantially alter estimates of the standard gap, but adjusting for the statistical break is important. Without adjusting for the statistical break, standard estimates will substantially overstate the decline in the urban-rural gap. The remaining sections of this paper present further, related empirical findings."