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# Capital income and income inequality: Evidence from urban China

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ABSTRACT

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Using the urban household survey data collected by the National Bureau of Statistics of China from 1988 to 2009, this study examines the distribution, composition, and changes in capital income and its contribution to income inequality. The data shows that capital income has increased considerably in past 20 years in urban China. Although the average value of capital income is still relatively low, the dispersion of capital income is significant, and for high-income earners capital income is substantial. Compared to other forms of income, capital income is distributed the most unequally, and its contribution to total income inequality has been growing. This study also examines capital income in China's western, central, and eastern regions separately, and finds that capital income is highest and contributes the most to income inequality in the eastern region. *Journal of Comparative Economics* **40** (2) (2012) 228–239. School of Economics and Management, Tsinghua University, Beijing 100084, China.



## 1. Introduction

The recent rise in income inequality in urban China has attracted great attention from researchers and policy makers. Much of this attention has been focused on the magnitude of income inequality and the reasons for the rising inequality. As an individual's income consists of both wage and non-wage incomes, rising income inequality may be caused by widening wage inequality as well as non-wage inequality. Previous research on income inequality in China has mostly focused on wage inequality and discovered that the changes in the wage structure, e.g., the increasing returns to education, and widened wage gaps between gender, industry, occupations, and regions, have led to the rising wage inequality in urban China (Chi et al., 2011; Meng, 2004; Appleton et al., 2005; Gustafsson and Li, 2001a; Knight and Song, 2003, 1991). In contrast to the many studies on wage inequality, there are relatively few studies that have focused on inequality in non-wage income, specifically capital income.

Capital income has the potential to influence income inequality significantly. Capital income comes from the investment of tangible and intangible assets, and is comprised of interest, dividends, rent from leasing a property, profit from selling the property, or income from intellectual property. High-income earners tend to have greater assets and thus receive more capital income than low-income earners. Capital income is, then, accumulated as capital and generates more income, which consequently causes the further widening of income inequality. This effect is known as the Matthew effect (i.e., the rich get richer and the poor get poorer).

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In China, since the Shanghai and Shenzhen stock exchanges were founded in the early 1990s, investment channels for urban citizens have greatly expanded. Housing reform and the development of the housing market in the late 1990s have provided further opportunities for urban residents to acquire properties. With the fast-growing financial markets, many people in urban areas have accumulated considerable financial capital and have begun to enjoy the income stream it generates. In recent years, as capital income have grown so quickly, many people believe that it has become the major source of rising income inequality in China.[1] Despite this popular belief, there is little evidence regarding the role of capital income in China's rising income inequality. Motivated by this observation, in our paper we decompose income inequality into the components of wage income, capital income, and transfer income. With available data, we further decompose the inequality of capital income into specific sources. Considering the large income gaps between the western and eastern regions of China, we also conduct separate decompositions for different regions.

We find that capital income have generally increased since the 1980s and is highly volatile. Capital income is also extremely unequally distributed among urban residents – the dispersion of capital income is much greater than that of earnings and transfer income. We find that the contribution of capital income to the Gini coefficient have increased in recent years, but it is still smaller than that of earnings, mostly because the share of capital income in the total income is relatively low.

The rest of this paper is organized as follows: In Section 2, we introduce related studies in the literature. Section 3 provides background information about the growth of capital income in China. Sections 4 and 5 describe data and decomposition methods, respectively. The results are reported in Section 6. Section 7 summarizes and concludes the paper.

## 2. Review of related studies

In the scholarly literature, several studies decomposed income inequality by income source using the Chinese urban or rural household data.[2] Concerning urban income inequality, Meng (2004) indicated that large-scale unemployment as a result of labor reallocation was the major source of rising income inequality during the radical reform period, 1995–1999, and Gustafsson and Li (2001b) attributed the rising income inequality in 1988–1995 to the housing reform and the growth of subsistence income. Our study was similar to Gustafsson and Li (2001b), who decomposed the Gini coefficient of urban income inequality by income source for the period between 1988 and 1995. However, the income sources examined by Gustafsson and Li (2001b) were money income, subsistence income, in-kind income, and transfer income. They did not include capital income. In the 1980s and 1990s, urban households were generally poor and had few properties, so capital income was not important. However, in recent years capital income had grown, and as a result had become an important source of income for many households, especially the high-income ones. Thus, it is crucial to include capital income in the analysis. Moreover, compared to Gustafsson and Li (2001b), we used more recent data (from the 2000s) and obtained updated results.

In other transition countries, although capital income had not been studied specifically, it was suggested that non-wage private-sector income, including rent and investment income, exacerbated income inequality during transition years (Kattuman and Redmond, 2001; Milanovic, 1999). Guriev and Rachinsky (2006) indicated that privatization had transferred real estate to urban residents and farm land to farmers, resulting in an increase in both personal wealth and personal wealth inequality.

In contrast to the relatively few empirical studies on capital income in China and other transition countries, western scholars had long been studying capital income and the impact of capital income on income inequality. Lerman and Yitzhaki (1985) found that property income contributed to income inequality in the United States in 1980, but that its marginal contribution was exceeded by that of wage income. Jäntti (1997) indicated that although only 3% of income in the UK was property income in 1986, it was responsible for 10% of inequality. Jenkins (1995) showed that the inequality of capital income nearly doubled in the 1980s in the UK, and had a negative influence on household income equalization. In Gottschalk and Smeeding's (1997) review of cross-national studies, the growing correlation between increased capital income and income inequality was confirmed in the United Kingdom, Japan, Australia, and New Zealand; however capital income was not nearly as important as earnings in contributing to income inequality. The most recent cross-national study by Fräßdorf et al. (2011) found that capital income was exceedingly volatile and that its share in disposable income had risen in recent years. Moreover, capital income had made a disproportionately large contribution to overall inequality in Germany and the United States. In this paper, we compared our findings with those of western scholars and discussed the differences and similarities between China and other countries in terms of the role of capital income in income inequality.

## 3. Background

Before the economic reform, bank savings were almost the only source of household financial assets in China. But since workers were provided comprehensive benefits by their work units while monetary income was generally very low, people had little savings. In the late 1970s, aggregate household savings were less than 7% of gross national product (GNP) and in-

[1] According to an online survey conducted in 2007 by a leading news agency, *People Daily*, 76% of respondents believed that capital income would be the leading factor causing the further widening of income inequality. (http://paper.people.com.cn/rmlt/html/2007-12/01/content_33664641.htm#).

[2] Meng (2004) focused on urban income inequality; Gustafsson and Li (2001b) studied both urban and rural income inequality. Morduch and Sicular (2002), Benjamin et al. (2005), Wan (2004), and Wan and Zhou (2005) decomposed the rural income inequality into the contribution of various farm and non-farm incomes.