


Article

Impacts of Digital Financial Inclusion on Urban–Rural Income Disparity: A Comparative Research of the Eastern and Western Regions in China

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Abstract: This study aims to investigate the influence of digital financial inclusion on China's urban–rural income disparity. A comparative analysis on income differences between western and eastern regions in China was conducted in this paper. The study utilized a static panel approach as it consisted of 22 provinces in China that covered the period from 2011 to 2020. This paper employs Stata software for the data analysis. The dependent variable of this study is the urban–rural income gap. Meanwhile, the independent variables consist of the total index level, breadth of coverage, depth of use, degree of digitization, digital payment level, digital insurance level, and digital credit level. The control variables employed in this article are education level, financial support, economic transformation, technological progress, and trade openness. The empirical outcomes indicate that the seven independent variables potentially minimize the urban–rural income gap between the two regions. However, digital financial inclusion appears to have a more significant effect in lessening the urban–rural gap in the western region compared to the eastern region in China. The findings demonstrate that all the variables exhibit a higher degree of influence on the urban–rural income differences in the west than in the east, except for the credit index. The outcome reveals that the effect of the credit index in the western region (0.10%) is slightly lower than the eastern region (0.11%). In general, the present findings can provide valuable insights for policy makers in their efforts to address the urban–rural income gap in the two regions through the implementation of digital financial inclusion initiatives. The study should be conducted regularly to observe the trend of the income disparities between the western and eastern regions in China. Future studies can also focus on other regions or narrow the focus to provincial and city levels to capture more detailed information.

Keywords: digital financial inclusion; urban–rural income disparity; eastern region; western region



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1. Introduction

As early as December 2003, the United Nations raised the concept of financial inclusion and proposed that financial services should benefit all groups, especially vulnerable groups, in a more just and distributive way. In 2005, China began to use the concept of financial inclusion (Asian Development Bank Institute 2014). In 2015, financial inclusion was officially included in China's national development strategy.

The Gini coefficient ranges from 0 to 1. A numerical value that approaches 1 expresses a wider income gap, and a numerical value that approaches 0 shows higher income equality. The United Nations Development Programme stated that if the Gini coefficient of a country exceeds 0.4, it indicates that the country's income gap is serious, and the country needs to take urgent action to address this gap. Figure 1 shows the Gini coefficient in China from 1978 to 2020. In 1995, China's Gini coefficient rose to 0.445 for the first time. Beyond the warning line of 0.4, the income gap starts to become a problem that must receive great attention in the evolution of China's economic growth. Since the beginning of the 21st

century, China's economy has taken off, but income disparity still remains high. In 2008, it reached a peak of 0.491, which is close to the point where the income gap is particularly large. In 2020, the Gini coefficient scored as high as 0.465, indicating that income disparity in that year was very large. Therefore, China urgently needs to address this excessive income disparity.

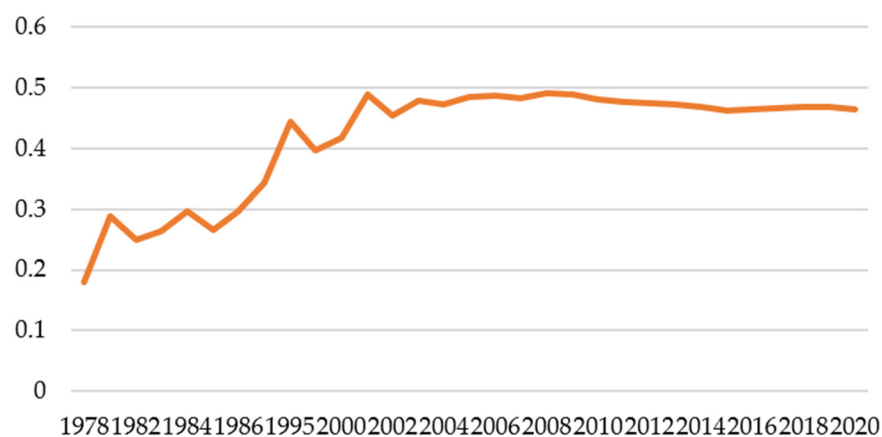


Figure 1. Overview of Gini coefficient of China, 1978–2020.

The widening of the income gap between urban and rural areas poses a significant challenge to China's sustainable economic development. The regional economic development imbalance is particularly pronounced, with a noticeable "dual structure" phenomenon in the financial system and a severe problem of financial exclusion. In China, there are four major economic parts: eastern, western, central, and northeastern. The eastern area consists of 10 provinces, while the western region comprises 12 provinces (as shown in Table 1). These two economic zones, the eastern and western parts, are the largest in the country. However, there is a considerable disparity in their levels of economic development, with the western region lagging behind the eastern region due to geographical factors. Generally, residents in the eastern areas have higher incomes as compared to those in the western areas, and the income disparity is relatively higher in the western region. Therefore, it is crucial to examine the differences and similarities in the influence of digital inclusive finance on income disparity among these two regions. This paper aims to address this key question and provides insights into the dynamics of income disparity and digital financial inclusion in the eastern and western regions of China. This study will contribute to the existing literature because there are a limited number of comparative studies examining the impacts of financial inclusion on the urban–rural income disparity by regions in China. Additionally, the results of the present study can serve as a guideline for the government to reduce the income gap and promote balanced economic growth in the long term.

Table 1. China's four major economic regions.

Four Major Economic Regions	Including Provinces, Municipalities Directly Under the Central Government and Autonomous Regions
The Eastern Economic Zone	Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan
The Central Economic Zone	Shanxi, Anhui, Jiangxi, Henan, Hubei, and Hunan
The Western Economic Zone	Inner Mongolia Autonomous Region, Guangxi Zhuang Autonomous Region, Chongqing Municipality, Sichuan, Guizhou, Yunnan, Xizang Autonomous Region, Shanxi, Gansu, Qinghai, Ningxia Hui Autonomous Region and Xinjiang Uygur Autonomous Region
The Northeast Economic Zone	Liaoning, Jilin, and Heilongjiang

This paper is organized as follows. Section 2 reviews the existing literature that is related to present study. Section 3 discusses the methodology employed. The results and