Misallocation and China's regional disparity: Theory and evidence

Topic: China's (Inter)provincial Input- Output Tables: Applications and Advances Author: Jiansuo Pei

One of the fundamental questions faced by academia and policy-makers is why some regions grow faster than others. In China's context, the regional disparity has been tackled by the central government, but far from resolved yet. Is resource misallocation an important determinant of regional disparity? Following Jones (2008), we first analyze the relationship between resource misallocation and total factor productivity and show that misallocation of resources tend to reduce income level in theory. Second, we construct a neoclassical growth model featuring intermediate goods with N sectors, illustrating the importance of the intermediate goods input in determining the output multiplier, which in turn affect the regional income disparity. Then, we show that the tax rate level (distortion) and its volatility have a negative correlation with income. Finally, China's input-output data of 31 provinces are used to empirically assess the extent that resource misallocation on regional disparity.

We find a strong positive correlation between regional multipliers and regional per-capita income, and also find that the input-output structure between regions has certain similarity. Furthermore, in order to quantitatively examine the effects of resource misallocation stemmed from intermediate inputs and various distortions (i.e., tax rates), we simulated corresponding parameters of other regions with that of Shanghai (the benchmark region, or the frontier). It is shown that, large room remains for most regions to improve resource allocation efficiency, as the incomes would have increased given that they were benchmarked to Shanghai. In addition, the relatively under-developed regions would experience higher growth rate, indicating that these regions suffered more serious resource misallocation. This study clearly enhances our knowledge on the fundamental role of intermediate inputs played in affecting output multiplier which in turn determining the regional income levels.