## **Regional human capital in Republican and New China**

Its spread, quality and effects on economic growth

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## Abstract

In recent decades there has been increasing attention for Chinese economic development. There has been a big debate though if its growth is caused by capital accumulation (perspiration factors) or driven by TFP growth (inspiration factors). The difference between both stances is quite substantial since, if the perspiration theory is correct, one expects the growth of the Chinese economy to slow down over time as the capital accumulation grows increasingly less efficient. However, so far this question is difficult to analyse for China since we lack information on one of the factors of production, human capital.

To analyse this question, in this paper we develop a new dataset on human capital for the provinces of China between 1922 and 2010. Using our new dataset together with physical capital and per capita GDP, allows us to do a TFP analysis for sub periods. We find a continuously negative TFP growth suggesting that reduction in productivity was a structural feature of the Chinese economy. If true, this was to lend support to the perspiration theory and would suggest a slowdown of the Chinese economy in the future. However, standard growth accounting allocates both technical efficiency of the factors of production and the general technical development to TFP. Subtracting technical efficiency from TFP growth, we find that general technological development turns increasingly positive in the 1990s and 2000s. This suggests that, whereas until the reform period China was largely driven by capital accumulation, afterwards general technical development got an increasingly prominent place giving hope for continued economic development in the future.