

**Title:** *How Productive Is Chinese Industry?*

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In this still on-going exercise, we provide a fresh scrutiny of the productivity performance of Chinese industry for the period 1952-2000 using a newly constructed data set. We have relaxed most unrealistic neo-classical assumptions as used in other studies, such as profit maximisation, perfect competition and constant returns to scale and taken into account important issues such as industry heterogeneity, production function stability and heteroschedasticity and autocorrelation problems in panel regression analysis.

The data used in this paper are the result of series unprecedented efforts on measuring industry-level inputs and output in Chinese industry together further improvements in this study. For output, a physical output index approach is used to tackle the widely criticised overestimation due to underdeflation and underreporting problems in the Chinese statistical system. For labour input, the Jorgenson approach is followed to capture quality changes in industry labour force. In constructing capital stock data, flaws in official investment data and problems in depreciation and deflation are seriously tackled.

Contradicting other studies, our preliminary findings show significant decreasing returns to scale for both the central planning and reform periods, which supports the market distortion argument for the Chinese economy. With a breakdown by factor intensity, we find that capital-intensive industries experienced a substantial rise in decreasing returns to scale over the two periods, whereas labour intensive industries had the opposite. Our measure of TFP gives higher results than the conventional income-share approach.