Notching R&D Investment with Corporate Income Tax Cuts in China*

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Abstract

Governments around the world encourage R&D investment based on the belief that economic growth is highly dependent on innovation. This paper analyzes the effects of a large fiscal incentive for R&D investment using a novel link between administrative and survey data of Chinese firms. The fiscal incentive is part of the InnoCom program, which awards a lower *average* corporate income tax rate to qualifying firms. The program generates a notch, or jump, in after-tax firm values since qualifying firms are required to maintain their ratio of R&D-to-sales above a given threshold. This sharp incentive varies over time and across firm characteristics. We exploit this policy variation to implement a cross-sectional "bunching" estimator that is novel in the R&D literature, to analyze potential evasion responses, and to estimate the effects of R&D on productivity. We find that this program led a large number of firms to locate at the qualifying R&D intensity threshold. We find that a substantial fraction of this response is due to tax evasion, and that accounting for evasion is crucial when estimating the effect of R&D on productivity.
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