The Interest Rate Elasticity of Investment: Micro Estimates and Macro Implications

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Abstract

I develop a difference-in-differences method of estimating the elasticity of investment to interest rates using cross-sectional variation and high-frequency monetary shocks. My estimates imply that a 1 p.p. decrease in interest rates increases capital demand by 4% eight quarters after the shock. This indicates a significant effect of interest rates on investment but is much smaller than prominent extrapolations of the interest rate elasticity derived from the investment response to tax policy changes. In a quantitative model with heterogeneous firms, I show that the impulse response I estimate provides a powerful tool to discriminate between models with different frictions. The evidence favors models with external financing constraints, while models with large real adjustment costs cannot match evidence from both interest rate and tax policy shocks.

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