

## ABSTRACT

The purpose of this paper is to develop and estimate a model of production with endogenous technological change. Technological change arises from R&D capital accumulation decisions. These decisions respond to market and government incentives and generate R&D capital spillovers.

A spillover network of senders and receivers is estimated. The network shows that each receiving industry is affected by a distinct set of R&D sources and each sending industry affects a unique set of receivers. For the receivers, spillovers generally expand product markets, lower product prices, increase production costs and input demands. For the sources, significant R&D spillovers cause the social rates of return to R&D capital to be substantially above the private returns.

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