

Financing Durable Assets

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Abstract

This paper studies the financing of durable assets in a model with collateral constraints due to limited enforcement. Durability affects the ease of financing. Specifically, we show that more durable capital requires a larger down payment of internal funds per unit of capital making it harder to finance. Thus, financial constraints have a bigger impact on purchases of more durable capital, such as land, structures, and durable equipment. This basic insight has implications for the choice between new and used capital, technology adoption, and the rent versus buy decision. When new capital assets are more durable than used ones, unconstrained borrowers buy new capital and sell it when it is used, while constrained borrowers purchase used capital. When new capital assets are also more productive than older vintages, financial constraints inhibit technology adoption by constrained borrowers reducing their productivity. Constrained borrowers may adopt less durable, low quality assets, that is, otherwise dominated technologies. When assets can be rented (or leased), more durable and new assets are rented, and thus renting is an important mode of financing for such assets.

Keywords: Collateral; durability; financial constraints; vintage capital; leasing; technology adoption.

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