



Young Innovative Firms, Investment-Cash Flow Sensitivities and Technological Misallocation

Working Paper No. 1004 Keep in mind

The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).

On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.

AUTHOR OR EDITOR Oscar Mauricio Valencia-Arana Jose Eduardo Gomez-Gonzalez Andrés Garcia-Suaza

AUTHORS AND/OR EDITORS Oscar Mauricio Valencia-Arana

Can technological misallocation generate financial frictions? We build a theoretical model with testable implications, in which the misallocation between R&D and production activities generates borrowing constraints. The investor offers the innovator a rent that is contingent to the success of its project in order to make them exert an incentive-compatible effort level. However, this rent distorts the allocation of effort between activities. Specifically, it leads to a suboptimal level of effort impulsing a reallocation of resources from production to R&D. Consequently, the investor cannot appropriate the surplus resulting from innovation. This distortion increases the cost of external financing for firms that have large amount of intangible assets. Using Compustat data for manufacturing firms in the United States between 1982 and 2007, we show that cash-flow sensitivities are positive and increasing in firms with high R&D intensities.

The series Borradores de Economía is published by the Economic Studies Department at the Banco de la República (Central Bank of Colombia). The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.