

The series Working Papers on Economics is published by the Office for Economic Studies 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.

AUTHOR OR EDITOR

Oscar Mauricio Valencia-Arana

Jose Eduardo Gomez-Gonzalez

Andrés Garcia-Suaza

Autores y/o editores

[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.