

Is R&D Enough in to Improve Firm Productivity?

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R&D has long been recognized as an important factor and indicator of firms' innovation activities to improve productivity and gain competitive edge. However, most evidence on a positive link between R&D and productivity is based on industry level data, which may be complicated by the fact that industries are different in technological evolution and that better productive performers tend to be higher R&D intensive industries (e.g., the computer manufacturing industry versus wood product manufacturing industry). In this paper, we explore the variation at the firm level within the same industry in R&D and productivity performance. The micro data allows us to minimize the potential problem for a spurious relationship between R&D and productivity at the industry level. In addition, going beyond a simple relationship between R&D and firm productivity performance, we investigate what else is required to ensure R&D activities to generate larger productivity dividend. Specifically, we ask if the productivity dividend depends on other co-investments and the adoption of certain business strategies. The research should be of considerable interest to both researchers and policymakers. First, it provides us with a better understanding of the role of R&D in productivity growth. Second, it elucidates which factors enhance R&D effectiveness in improving productivity performance. And finally, it helps design more sophisticated and effective policies to support innovation activities in Canada.