

Technological Change, Technical Efficiency and Canada's Post-2000 Productivity Performance

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Productivity growth has decelerated in Canada since 2000. The deceleration has attracted a great attention from researchers and policy makers, which has an important implication for economic growth and living standard improvements. Despite an extensive research on this important topic, however, the cause is still unclear. In this paper, we shed more light on the productivity slowdown. Unlike previous studies that focus directly on the overall productivity, in this paper we decompose the overall productivity into two components: technological change and technical efficiency. Technological change measures the maximum productivity potential (or productivity frontier) while technical efficiency reflects the ability/technique in achieving the potential. Using a linked firm level data, we intend to show if the productivity slowdown is mainly due to the decline in technological progress or in efficiency improvement. We also extend the analysis to provide further evidence on the driving forces (for example, investments in R&D, ICTs and intangibles) that underlie the developments.