

New Estimates of Canadian TFP Growth and the Contribution of Changes in Real Export and Import Prices to Real Income Growth

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Using new data from Statistics Canada, the paper shows that the productivity performance of the business sector of the Canadian economy has been reasonably satisfactory over the past 47 years. In particular, traditional gross income Total Factor Productivity (TFP) growth averaged 1.01 percentage points per year over the period 1961-2007 and when a net income framework was used, TFP growth averaged 1.04 percentage points per year. The focus of the study is on the real income generated by the business sector of the Canadian economy. Two concepts of income are used: a gross concept that includes depreciation as a part of income and a more appropriate net concept where depreciation is excluded from income. In both the gross and net income frameworks, the growth of quality adjusted labour input growth was the main driver of growth in real income followed by TFP growth, followed by growth in capital input and then by falling real import prices. However, in recent years, the contribution of falling real import prices turned out to be more than twice as important as capital deepening. A feature of this study is that we look at the contribution of changes in real export and import prices by commodity class. We find that increases in real energy export prices contributed an average of 0.18 percentage points per year to real (net) income growth while falls in the real export prices of machinery and equipment and automotive products subtracted an average of 0.17 and 0.13 percentage points per year from real (net) income growth. Somewhat surprisingly, the effects on real income growth of changing import prices by commodity class were fairly small with two exceptions: falling real prices of machinery and equipment imports (excluding autos) contributed an average of 0.49 percentage points per year to (net) real income growth while rising real prices of energy imports subtracted 0.13 percentage points per year. The falling real prices of imports of other consumer goods only added an average of 0.06 percentage points per year to real income growth. The study encountered many data problems which should be addressed in future work on Canadian business sector productivity performance.

ⁱ The financial assistance of the SSHRC is gratefully acknowledged. The first author also thanks John Baldwin, Serge Coulombe, Wulong Gu, Ulrich Kohli, Danny Leung, Alice Nakamura, Andrew Sharpe and Jianmin Tang for helpful comments. None of the above are responsible for any views expressed in this paper.