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Decomposing Multifactor Productivity Growth in Canada by Industry and Province, 1997-2014

This paper estimates the sources of multifactor productivity growth in Canada between 1997 and 2014 by province and industry. Two decompositions from the literature are applied which lead to very different conclusions. A generalized exactly additive decomposition (GEAD), which includes price effects and treats any growth in a sector's input share as a positive contribution to aggregate MFP (holding prices constant) from that sector, suggests that rising natural resource prices and reallocation of inputs to the mining and oil and gas extraction industry in the oil-rich provinces were the primary drivers of MFP growth in Canada while the manufacturing sector dragged MFP growth down. In contrast, the "CSLS decomposition" excludes changes in relative prices and considers reallocation to a sector to have a positive effect on productivity only if that sector has above average productivity, finding that mining and oil and gas was the main hindrance to Canada's MFP performance while manufacturing, finance, insurance, real, estate, and leasing, and wholesale trade were the major sources of MFP growth which was concentrated in Ontario, Quebec, and BC.