Can Measurement Issues Explain the Canada-U.S. ICT Investment per Worker Gap?

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In 2011, business sector investment per worker in information and communications technology (ICT) in Canada was only 57.8 per cent of the U.S. level, indicating an ICT investment per worker gap of 42.2 percentage points. Numerous explanations have been advanced to explain this gap, one of which is that the ICT investment data from Statistics Canada and the Bureau of Economic Analysis are not strictly comparable. The primary focus of this report is to analyze that hypothesis. We compare the methodology used to measure ICT investment in Canada and the United States and find that issues related to measurement account for approximately 4 percentage points (10 per cent) of the gap. Although software investment has been responsible for 90 per cent of the gap in recent years, seven out of 17 industries in Canada actually had greater investment per worker levels than the United States in both total ICT and software. A small number of ICT-intensive industries has been responsible for 39.1 per cent of the total gap. This supports the conclusion that the Canada-U.S. ICT investment per worker gap is largely the result of industry-specific factors which affect software investment.