Editor's Overview

THIS ISSUE OF THE *International Productivity Monitor* contains five articles on: recent productivity developments in the world economy; aggregate measures of income and their implications for productivity and living standards; the role of sectoral employment shifts in aggregate productivity growth in Canada; productivity trends in regulated industries in Canada and the United States; and international productivity comparisons in the financial and business services sectors.

Please note that because of funding matters, a Fall 2009 issue of the *International Productivity Monitor* was not produced. The last issue published was Number 18 in the Spring of 2009. This current issue, Spring 2010, is hence Number 19 because of the non-publication of the Fall 2009 issue.

For the first time since the early 1980s, world labour productivity fell (down 0.2 per cent) in 2009, a victim of the global economic crisis. In the lead article, a team of economists headed by **Bart van Ark** from the Conference Board provide a detailed analysis of recent productivity developments in the world economy based on the Conference Board's updated Total Economy Database. They find that because of continued strong labour productivity growth in China, and to a lesser degree India, productivity growth in the emerging and developing countries remained positive in 2009 at 1.8 per cent, although down from a robust 6.3 per cent in 2007. In contrast, labour productivity in the advanced economies fell 1.2 per cent in 2009 after a 1.3 per cent rise in 2007. Within the advanced economies productivity trends diverged significantly in 2009. Labour productivity advanced 2.5 per cent in the United States, but fell 1.0 per cent in the Euro Area, increasing the U.S. productivity level advantage.

To the general public, and even to most economists, Gross Domestic Product (GDP) is synonymous with income and output. But there are in fact eight aggregate measures of income and output (GDP, GNP, NDP, NNP, GDI, GNI, NDI, and NNI). In the second article, **Chris Ross** from the University of Toronto and **Alexander Murray** from the Centre for the Study of Living Standards define the eight measures, identify for which measures official estimates are available from Statistics Canada and the U.S. Bureau of Economic Analysis, construct estimates for the measures for which official estimates are not available, and examine trends in the eight measures for Canada and the United States for the 1980-2008 period and subperiods.

They argue that from a productivity perspective GDP and NDP are the most appropriate measures, while from a living standards perspective NNI is the best measure, as the latter measure includes terms of trade effects, focuses on the income received by the residents of the country and captures the sustainability of the capital stock. NNI has grown much more rapidly than the other income measures in Canada in the 2000s and even considerably faster than NNI growth in the United States. Indeed, NNI per capita in Canada in 2008 was 86 per cent of that in the United States, much higher than the 80.3 per cent figure for GDP per capita.

The Canadian economy has experienced major sectoral reallocations of labour in recent years and some have speculated that these shifts may have contributed to the slowdown of productivity growth in the post-2000 period. In the

third article, **Andrew Sharpe** from the Centre for the Study of Living Standards addresses this issue through a decomposition of aggregate labour productivity growth into within-sector effects and reallocation effects. The latter include both industry level effects and industry growth effects. He finds that reallocations of hours worked had little impact on aggregate labour productivity growth in the 2000-2007 period. There had been a negative effect in the 1973-2000 period and the loss of this effect between the two periods actually lessened the fall in productivity growth after 2000. It was rather the fall in manufacturing productivity growth from 2.9 per cent per year in the 1973-2000 period to 1.1 per cent per year in 2000-2007 that accounted for the overall fall in the growth of business sector output per hour. To explain Canada's poorer productivity performance in the 2000s, we must explain why manufacturing productivity growth in this country has tumbled.

Regulation is often considered a barrier, and deregulation a tonic, to productivity growth. In the fourth article, **Wulong Gu** and **Amelie Lafrance** from Statistics Canada examine productivity growth in nine regulated industries in Canada and the United States from 1977 to 2006, a period when deregulation took place in a number of industries. They find that in Canada the labour productivity growth rate in the regulated industries was faster than that experienced in the business sector in 1977-2006 and that it had picked up from that experienced by regulated industries in the pre-1977 period. They attribute this positive development to deregulation, which has been shown to reduce barriers to entry, increase competition, and enhance incentives to innovate and to adopt advanced technologies.

The financial services sector and the business services sector account for an important part of the business sector, yet these sectors receive considerably less attention from a productivity perspective than other industries, such as manufacturing. To address this relative lack of information on these key sectors, **Pamfili Antipa** and **Marie-Elisabeth de la Serre** from the Banque de France in the fifth and final article examine levels and rates of productivity growth in these two industries for the United States and four major EU countries (Germany, France, United Kingdom, and the Netherlands). They find that in 2005 three of the four countries (the exception was Germany) had significantly higher levels of output per worker in financial services than the United States. In contrast, three of the four countries (again the exception was Germany) had lower levels of output per hour in business services than the United States.