## **Editor's Overview**

THIS TENTH ISSUE OF THE International Productivity Monitor produced by the Centre for the Study of Living Standards contains six articles. Topics covered are: the puzzling recent behaviour of labour productivity in Canada; an international perspective on Canada's productivity performance since the 1990s; the role of population growth in shaping productivity growth; the effect of hours of work and the employment rate on labour productivity levels in European countries; productivity growth and its contribution to economic growth since 1980 in Asia; and a review of two recent and comprehensive volumes on the importance of productivity and on its drivers, *The Power of Productivity* and *Transforming the European Economy*.

Readers are reminded that in addition to the hard-copy version of the *Monitor* available in English and French, all articles are available online at www.csls.ca under Publications and the *International Productivity Monitor*. Unabridged versions of some of the articles are also posted. Comments on the articles are welcome.

After accelerating in the second half of the 1990s, aggregate labour productivity growth in Canada has fallen off significantly since 2000. The lead article by **Someshwar Rao** of Industry Canada and Andrew Sharpe and Jeremy Smith of the Centre for the Study of Living Standards examines the factors behind this development, which is puzzling given the recent acceleration of productivity growth in the United States and the apparent strength of most productivity drivers in Canada. While the authors expect that future revisions may prove some of this poor performance to be a statistical mirage, they do identify several factors that may have contributed to the post-2000 productivity growth slowdown: the weakness of information and communications technologies (ICT) manufacturing; the slower growth of machinery and equipment (M&E) investment; slower economic growth; and higher commodity prices.

But the authors argue that in recent years Canada has suffered no major macroeconomic shock (excluding exchange rate shocks) and has undergone no policy development or reorientation that would have significantly impeded productivity growth. In addition, the pick-up in U.S. productivity growth after 2000, which appears to be related to the faster pace of technological change, may augur well for a return to stronger productivity growth in this country. Yet they note that the dangers of complacency are very real. They conclude by pointing out that future trends in productivity in Canada are largely in the hands of the private sector. Nevertheless, Canadian governments can facilitate productivity-enhancing investments by fostering a highly competitive business climate.

In the second article, **Dirk Pilat** from the OECD gives a somewhat different perspective on productivity growth in Canada than that given by the first article. Considering the entire 1995-2003 period and compared to all OECD countries, Pilat argues that Canada has actually performed quite well in terms of labour productivity growth. He notes that two factors fostering productivity growth in Canada have been our very high level of human capital and our low barriers to firm creation. The latter facilitates creative destruction by allowing new firms to challenge existing firms and force less productive firms out of the market. Canada also appears to have benefited from innovation driven by ICT use and related organizational change,

especially in the service sector. One weakness is innovative capacity, as Canada generally lags most other countries in terms of R&D intensity and patents.

The impact of demographic developments on productivity is still a little-explored subject. In the third article, Paul Beaudry of the University of British Columbia, Fabrice Collard of the University of Toulouse and David A. Green of the University of British Columbia find a strong and unexpected link between slow labour productivity growth and rapid labour force growth over the period from the mid 1970s to the mid 1990s. They situate this finding in the context of an adjustment period following a technological revolution, by which economies with more rapid labour force growth experience a more painful transition than other economies due to the greater amount of learning that is required in adopting the new technology.

Estimates produced by the OECD indicate that labour productivity levels are higher in a number of European countries than in the United States, implying that Europe and not the United States is the world technological leader. In the fourth article, **Gilbert Cette** of the Bank of France argues that a structural measure of labour productivity, closer to a measure of technical efficiency, would take into account the much lower employment rates and hours of work in Europe. Low employment rates reflect the exclusion of certain low-productivity groups such as the young and older workers from the labour force. Shorter average hours of work mean that workers experience less fatigue and are more focused when on the job. Consequently, Cette argues that there are diminishing returns to the employment rate and hours of work in terms of productivity and that once these effects are taken into account, the United

States reemerges as the world technology leader as manifested by labour productivity levels.

Asia has become the economic powerhouse of the world. The fifth article, by Noriyoshi Oguchi of Senshu University in Japan, provides a detailed discussion of trends in output, labour and capital inputs, and labour, capital and total factor productivity (TFP) in Asian countries since 1980. The author finds that TFP growth has been quite rapid in most Asian countries since 1980 and has made a substantial contribution to output growth. This is in contrast to the widely cited observation made by Paul Krugman that Asian growth before the mid 1990s was largely unsustainable since it had been due more to growth in factor inputs than in productivity. However, once the author adjusts for labour quality, capital quality and shifts in employment and capital to high-productivity sectors, TFP gains are less impressive. However, TFP growth has made an important contribution to output growth in a small number of Asian countries even after adjustment for improvements in labour quality.

The final article, by Bart van Ark of the University of Groningen, reviews The Power of Productivity by William W. Lewis and Transforming the European Economy by Martin Neil Baily and Jacob Funk Kirkegaard. While Lewis postulates a single silver bullet for productivity growth, namely the freedom of consumers, Baily and Kirkegaard advocate a broader package of measures. Despite what the reviewer feels is inadequate attention given by both volumes to innovation and education - two areas that are generally felt to be very important in terms of productivity - these books are sure to be seen as two of the major contributions to the debate on productivity and growth around the turn of the century.