

Editor's Overview

THIS EIGHTH ISSUE OF THE *International Productivity Monitor* produced by the Centre for the Study of Living Standards contains eight articles. Topics covered are: a progress report on endogenous growth theory; recent productivity developments in Canada and the United States; monetary policy in the new economy; the effect of information and communications technologies (ICTs) on UK productivity growth; the choice of the business sector versus the total economy for assessing aggregate productivity trends; the measurement of productivity growth in services industries; and a review article of a recent book *Why Economies Grow*.

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 the *International Productivity Monitor*. Unabridged versions of many of the articles are also posted. Comments on the articles are welcome, as are comments on our layout and design changes.

In recent years, our understanding of the sources of growth has been strongly influenced by endogenous growth theory. In the first article, **Peter Howitt** of Brown University, one of the leading researchers in the field, provides a progress report on the current state of the endogenous growth literature.

Among the many policy insights discussed by Howitt are that policies fostering technology transfer provide countries with the ability to converge to the productivity growth rate of the technological leaders; that educational attainment, the health of the population, public infrastructure and tax policy are all important drivers of productivity growth; and that competition policy can actually spur innovation and hence growth through a variety of channels, including a desire on the part of firms to escape competition by remaining at the technological frontier.

Since 2000, productivity growth in Canada and the United States have followed markedly different paths. In the second article, **Andrew Sharpe** of the Centre for the Study of Living

Standards finds that the remarkable productivity growth experienced in the United States in the past two years is most likely evidence of a post-2000 productivity growth acceleration, similar to the post-1995 acceleration. The source of this second acceleration appears to be the rapid pace of technological change, fostered by pressures on firms to cut costs, organizational changes that allow the productivity-enhancing potential of ICTs to be realized, and the cheapening of the price of capital goods relative to labour. In contrast, productivity growth in Canada decelerated after 2000. The source of the difference with the U.S. performance has been the labour market, with employment declining in the United States but showing strong increases in Canada. Sharpe states that Canada's poor productivity growth since 2000 has largely been a cyclical phenomenon, and that Canadian productivity growth should rebound as the economy recovers.

While much attention has focused on the factors that brought about the so-called new economy, much less attention has been paid to optimal policy responses following the establishment of the new economy. In the third article, **Gilbert Cette** and **Christian Pfister** from the Bank of France provide such an analysis for the case of monetary policy. They state that the term 'new economy' embodies both an acceleration in productivity growth and a disinflationary effect. Central banks can respond to the new

economy in several ways in attempting to meet their short-term growth objectives and longer-term inflation objectives. In the long term, monetary policy is most effective in achieving its objectives when the inflation target is changed in response to the new economy and when the monetary authority attempts to stabilize both inflation and output. In the short term, however, when uncertainties regarding the existence of the new economy are present, caution is called for in changing the assessment of the potential growth rate and the inflation target.

Much has been written, including in previous issues of the *Monitor*, on the importance of ICTs in productivity growth, but this research has focused primarily on North America. In the fourth article, **Giovanni Notaro** of London Economics investigates this issue for the United Kingdom using a bottom-up analysis, in which aggregate trends are derived from trends in the 11 sectors of the economy. Using a standard growth accounting framework, Notaro finds ICTs made a substantial contribution to output growth in the largest sectors of the UK economy in the 1990s, and that ICT capital is a primary driver of labour productivity growth in all UK sectors except mining and quarrying. He concludes that the weaker productivity performance of the United Kingdom relative to the United States can be attributed mainly to slower accumulation of capital, both ICTs and non-ICTs.

The fourth and fifth articles focus on the comparability of productivity growth measures across countries. **Jeremy Smith** of the Centre for the Study of Living Standards looks at the case of Canada and the United States, and finds that comparisons of aggregate productivity performance are sensitive to whether trends are assessed at the business sector or total economy level. This sensitivity is a result of substantially higher measured non-business sector productivity growth in Canada relative to the United States, which is partially explained by different

measurement techniques in the two countries. There is no definitive answer as to which level is preferable for international productivity growth comparisons.

Dirk Pilat and **Paul Schreyer** of the OECD discuss the new OECD Productivity Database. The database covers 26 OECD countries for labour productivity estimates, as well as 14 countries for multifactor productivity estimates. While the database represents the most comparable productivity estimates that are currently available for cross-OECD comparisons, the authors also describe current work planned by the OECD that will improve comparability further.

Productivity growth has tended to be slower in service industries than in goods industries. In the sixth article, **Anita Wölfl** of the OECD finds that measurement error may be responsible for slower productivity growth in the service sector. She notes that some service industries in certain OECD countries have experienced negative productivity growth over long periods, despite intensive use of ICTs, exposure to international competition, and the existence of economies of scale. Wölfl discusses the several possible sources of measurement error that may lead to this unexpected result and quantifies the impact of correcting for measurement errors on aggregate productivity growth.

The question of why of economies grow has been at the heart of economic inquiry since Adam Smith. The final article is a review of the recent book *Why Economies Grow: The Forces That Shape Prosperity and How to Get Them Working Again* by **Jeff Madrick**. He argues that the growth of markets through trade, colonization, and domestic expansion was the predominate factor in Western economic development. While technological innovation is necessary to growth, it is as much a consequence of economic opportunity as it is a cause, and perhaps even more a follower of economic growth than a leader.