

Editor's Overview

Welcome to the inaugural issue of the *International Productivity Monitor*, a new publication produced by the Ottawa-based Centre for the Study of Living Standards (CSLS). The objective of the *Monitor* is to focus attention on the importance of productivity for improving living standards and quality of life. We will be publishing twice a year articles from leading researchers on productivity issues, trends and developments in Canada and other countries. The *Monitor* will also serve as a vehicle for an international exchange of ideas and information on productivity topics.

The first issue of the *Monitor* contains eight articles on a wide range of productivity topics. There are the new economy and trend productivity growth in Canada, the renaissance of service sector productivity in the United States, a regional comparison of U.S.-Canada standards of living, the postwar productivity convergence experience among OECD countries, price cap regulation and productivity growth, and finally a symposium of three articles on the measurement and interpretation of total factor productivity.

In addition to the hard-copy version of the *Monitor*, which is available in English and French, all articles are available on-line at the CSLS website (www.csls.ca). Moreover, unabridged versions of many of the articles are also posted.

The first article by Andrew Sharpe and Leila Gharani from the Centre for the Study of Living Standards examines the factors behind slow productivity growth in Canada in the second half of the 1990s, in marked contrast to the acceleration of productivity in the United States, and discusses the prospects for trend productivity in Canada over the next decade or two. It concludes that the balance of evidence now favours an acceleration of trend labour productivity growth to the 2-2.5

per cent per year range, as the factors accounting for the U.S. productivity boom finally spill over into Canada.

The second article, which is closely related to the first article, is also by Andrew Sharpe of the Centre for the Study of Living Standards. It points out that there now appears to be a renaissance in productivity growth in the U.S. service sector, with output per worker growing five times faster in the 1995-98 period than in the 1981-95 period. This development appears to reflect the impact of the massive investments in information technologies, which finally now seem to be producing large productivity gains in a wide range of service industries.

The third article by Raynauld Letourneau and Martine Lajoie of Industry Canada provides a detailed regional analysis of levels of living standards, measured as output per capita, and productivity (output per worker) for the 1995-97 period, the most recent data currently available. They find that all regions and provinces of Canada trail the U.S. average in both living standards and productivity and that the productivity gap is the main factor behind the living standard gap.

The fourth article by Edward N. Wolff of New York University examines trends in convergence in OECD countries toward U.S. productivity levels during the postwar period and finds strong evidence for this phenomenon up to 1990, with rapid growth in investment, education, and R&D in OECD countries accounting for the catch-up. The process of convergence seems to have ended in the 1990s, reflecting slower growth in OECD countries, a diminishing of the forces behind the convergence process given the narrowing of the productivity gap with the United States, and perhaps most important, the acceleration of productivity in the United States.

The fifth article by Jeffrey I. Bernstein of Carleton University and the NBER discusses the use of total factor productivity for price setting in regulated industries. He argues that the long-term, industry-wide productivity experience that is not subject to strategic manipulation by regulated firms should be the productivity growth rate used to develop the appropriate offset factor for price cap regulation.

The final three articles are a symposium of total factor productivity. In the first of the articles, Timothy C. Sargent and Edgard R. Rodriguez of Finance Canada discuss the issue of the choice between labour and total factor productivity. They conclude that both measures have uses. For periods of less than a decade,

labour productivity is the preferred measure, but for longer periods total factor productivity is superior. When capital stock estimates are of poor quality, it is better to use labour productivity.

In the second article in the symposium, Richard G. Lipsey of Simon Fraser University and Kenneth Carlaw of the University of Canterbury in New Zealand provide a trenchant critique of the concept of total factor productivity. They conclude that “the degree of confusion surrounding TFP, particularly the assumption that low TFP numbers imply a low degree of technological dynamism, would seem to us to justify dropping the measure completely from all discussions of long term economic growth”.

In the third article in the symposium, Erwin Diewert of the University of British Columbia provides a comprehensive discussion of what is needed to develop reliable measures of total factor productivity in terms of output and the different classes of inputs. He concludes that the current system of industry statistics in all advanced countries has not kept up with the evolution of the economy from primary and manufacturing production to the production of services and that if we want accurate measures of total factor productivity at the industry level, statistical agencies must be given additional resources.