

Editors' Overview

The 49th issue of the *International Productivity Monitor* features six articles on a range of productivity-related topics: the potential impact of pro-competitive regulatory reforms on productivity; adult skills and productivity; labour productivity as a measure of technological change; efficiencies defenses and productivity growth; efficiency adjustments of hours worked; and the usefulness of the SNA as a measure of progress.

Canada's productivity performance has been abysmal in recent years and measures are needed to improve this performance. One policy proposal has been the deregulation of product markets. In the first article in this issue, **Gilbert Cetté** from NEOMA Business School, **Jimmy Lopez** from Université de Bourgogne, **Giuseppe Nicoletti** from LUISS University and **Océane Vernerey** from Université de Bourgogne model the impact of procompetitive regulatory reforms on productivity. The model shows how reforms in upstream sectors influence productivity in downstream sectors that rely on upstream sectors output as inputs. Their model covers 15 OECD countries and uses the OECD Product Market Regulation database. They find that if Canada adopted best-practice regulations, GDP per capita could increase 6.5 to 10 per cent in the long term, mainly from gains in professional services and wholesale and retail trade.

These very large impacts suggest that procompetitive regulatory reforms may be an important contributor to the revitalization of productivity growth in Canada. This work should serve as an important contribution to the ongoing debate on the effect of regulatory reforms in Canada.

Skills have always been known to be a crucial determinant of productivity growth,

but the exact relationship between skills and productivity has been poorly understood. In the second article, **Dan Andrews**, **Balázs Egert** and **Christine de La Maisonneuve** from the OECD, using the results of the 2023 Programme for the International Assessment of Adult Competencies (PIAAC), shed new light on these linkages. They find that the relationship between skill levels and productivity at the firm level is associated with R&D intensity. They conclude that work-related training is central for improving adult skills, but the effectiveness of this training requires workers to have strong foundational skills, emphasizing the importance of early education policies.

The measurement and quantification of technological change has always been challenging for economists. Total factor productivity growth is considered a superior measure of technological change compared to labour productivity as it captures the role of capital. In the third article, **Ulrich Kohli** from the University of Geneva proposes to adjust labour productivity for the use of capital in a new measure called, Total Labour Productivity (TLP). This new measure grew at a 1.3 per cent average annual rate in the US private non-farm business sector from 1990 to 2023, mid-way between the rate of growth of official BLS esti-

mates of labour productivity (1.6 per cent) and total factor productivity (0.9 per cent).

The impact of mergers on economic activity is two-fold: it reduces competition and raises prices, but also increases productivity through economies of scale and scope. This latter effect has been called the “efficiencies defense” and has been incorporated in competition law in many countries. In the fourth article, **Robin Shaban** from 2R Strategy employs a cross-country econometric model to investigate the impact of efficiencies defenses on total factor productivity (TFP). She finds that the introduction of these defenses in mergers is associated with higher TFP growth. However, she cautions that the effectiveness of the efficiency defenses varies across countries by their design and implementation as well as by the enforcement resources at the disposal of the competition body.

In the Jorgenson production model, capital is adjusted for efficiency while labour input is not. In the fifth paper, **Barbara Fraumeni** from the University of Southern Maine proposes to adjust hours worked for efficiency so there is symmetric treatment of the two factors of production in the model. She uses the scores from the 2012 Programme for the International Assessment of Adult Competencies (PIAAC) by age group, finding that persons in the age group of 55 and over showed 95 per cent of the efficiency as those in the 25-34 age group, while those in the 45-54 range

scored 96.2 per cent of the younger cohort. She then applies these numbers to hours worked in the United States and finds that the efficiency-adjusted hours worked grow 0.01 percentage points per year less than unadjusted hours worked from 1975 to 2023. In turn, this raises total factor productivity growth by 0.01 percentage points, a very small effect. The author also explores the possibility of vintage effects but finds no compelling evidence that the quality of labour input at the lowest level of detail changes over time.

The “Beyond GDP” debate is highly relevant for productivity analysis since GDP is the numerator in the productivity definition. If GDP is poorly measured, productivity estimates may also be put in question. In the final article, **Paul Schreyer**, formerly OECD Chief Statistician and now at the Economic Statistics Centre of Excellence, assesses Diane Coyle’s recent book *The Measure of Progress: Counting What Really Matters*. He first identifies what he sees as the key messages of the book, namely that GDP is not a reliable measure of societal progress, that GDP falls short even by its own standards as a measure of economic activity, and that alternative frameworks for measuring progress are needed. Schreyer is overall sympathetic to what he calls a “thought-provoking critique of the SNA”, but argues that GDP remains a good tool for gauging economic developments.