

Editors' Overview

The second issue of the *International Productivity Monitor* for 2022 (No. 43) includes the second part of our Symposium on Productivity and Well-Being (the first part was published in the Spring issue, No. 42). A separate introduction to the second part of the Symposium follows this overview. Below we discuss the other two articles in the issue.

Following the three articles on productivity and well-being and a reflection by John Helliwell, a well-known scholar on the study of subjective well-being and happiness, this issue includes two other major articles. The article by **Weilin Liu** and **Qian Cheng** from Nankai University, and **Robin Sickles** from Rice University focuses how an integrated production network across countries, like in the European Union, can help to optimize the allocation of resources and thus generate spatial productivity spillovers. The authors examine the impact of technology spillovers, proxied as the indirect effects of domestic and imported inputs arising from capital and intermediate goods (backward) linkages to other (neighbouring) industries, on total factor productivity (TFP) growth. They use a spatial time-varying stochastic frontier model that features technological interdependence and heterogeneous productivity growth at the industry level. To measure the effects, the authors combine data on global value chain linkages obtained from input-output tables (based on from the World Input-Output Database) with measures of total factor productivity at the industry level for 10 European Union member states and, for comparison, the United States (based on the 2017 EU KLEMS release). While there is no visible effect from the indirect use of domestic or imported capital stock along the supply

chain (due to capital scarcity), the authors find substantial TFP spillover effects from the imports of intermediate inputs. On average about 27 per cent of the spillover embodied in intermediate input has transmitted across borders. Within Europe, Germany offered the most network effects, followed by the Netherlands, the Czech Republic and Sweden. Hence the authors conclude that input-output linkages constitute an important channel for the transmission of productivity spillovers.

The second article by **Bishwanath Goldar** for the Institute of Economic Growth in Delhi, India deals with a well-known conundrum about India's trade liberalization in the early 1990s. According to earlier research, this trade liberalization seems not to have led to an improvement in TFP growth in the manufacturing sector during the 1990s compared to the previous decade. Using several lines of inquiry, the author shows that the productivity growth performance of Indian manufacturing was better in the 1990s than has been assumed so far. First, the author suggests various corrections to the measurement of TFP growth measures. These adjustments include an upward revision to the growth rate of labour input in manufacturing during the 1980s, a downward revision in the labour income share during the 1990s, and correction for the underestimation of the impact of rising energy

prices during the 1990s which had impacted single-deflated value added negatively. Together, these corrections significantly reduce the TFP growth gap for the 1990s compared to the 1980s. Second, the author argues that a decline in the effective protection rate following trade liberalization may have caused a downward bias in TFP because of the erosion of the rent component in value added. Third, a comparison

of plant-level data for the entire manufacturing sector after 1998 confirms the view that trade liberalization raised productivity growth, though primarily in large manufacturing plants whereas smaller plants did not see such gains. Hence the author concludes that the reforms have led to an improvement in productivity growth during the 1990s.