Editors' Overview

The 47th issue of the *International Productivity Monitor* features two symposia: one on productivity and industrial policy, and the other on productivity and climate change. Each symposium includes three articles.

Recently, OECD countries have renewed their focus on industrial policies to address political, economic, and societal challenges. Historically, these policies involved the state selecting or protecting certain firms or sectors. Modern approaches now aim to address information and coordination failures. While industrial policies have been measured by their support for employment and strategic industries, productivity has often been overlooked.

The symposium on industrial policy and productivity explores the impact of industrial policy on productivity and economic performance. The first article by **Catherine Mann** from the Bank of England, the University of Manchester, and the University of Brandeis, argues that while global integration has historically driven productivity gains, rising geopolitical tensions and domestic economic concerns have led to increased use of industrial policies. These policies aim to address externalities and support key industries but often fail to match the effectiveness of global integration. She concludes that a combination of global engagement and well-targeted industrial policies is essential for reviving productivity growth and addressing inequalities amongst firms.

The second article by **Diane Coyle** and **Ayantola Alayande**, both from Cambridge University, examine the UK's industrial policy interventions in life sciences and pharmaceuticals, financial services, and the creative industries. Despite a historical aversion to active industrial policy, the UK has implemented sectoral policies "by accident." The authors are most positive about life sciences and pharmaceuticals, where stable policies have supported innovation and investment. In financial services, despite regulatory instability, infrastructure investments and innovation support have maintained the UK's status as an international financial center. For creative industries, success has often come despite government policies. The authors argue that intentional, strategic industrial policies could improve productivity through better coordination, reduced investment risk, and enhanced spillovers.

The final article in the symposium by **Tim Sargent** from the MacDonald Laurier Institute examines the effects of industrial policy on four Canadian sectors: steel mills, aluminum smelting, auto assembly, and aerospace. The study finds that aluminum smelting and auto assembly outperformed in terms of productivity growth, while the other two sectors showed disappointing results. The analysis suggests that industrial policy can support high-productivity industries and prevent their decline, but its overall impact on productivity growth is inconclusive. The article highlights the need for careful consideration of industrial policy's role in economic performance.

This symposium underscores the com-

plex role of industrial policy in shaping better economic outcomes. While strategic, well-coordinated policies can enhance productivity and address inequalities, the effectiveness varies across sectors and regions. The findings highlight the need for tailored, evidence-based approaches to maximize the benefits of industrial policy.

Many consider climate change the existential issue of our age, with many ramifications for the economy and society. One issue related to climate change that has received limited attention is the implications for productivity performance. To shed light on this important relationship, the second symposium in this issue features three articles that explore various aspects of the climate change-productivity nexus.

In the first article in the symposium, **Dirk Pilat** from The Productivity Institute and the Valencia Institute for Economic Research provides a comprehensive exploration of the link between productivity and climate change. He finds that mainstream studies have significantly underestimated the damaging aspects of climate change for both growth and productivity, while overestimating the long-term costs of policies to address climate change. He recognizes that standard measures of productivity, like MFP, do not yet show a transition to a sustainable growth path and that the current pace of decoupling between CO2 emissions and GDP growth is far below what is needed to reach net zero. He concludes that the challenge for policy is how to design climate change policies to attain net zero while at the same time supporting productivity growth and living standards.

Standard multifactor productivity (MFP) measures often overlook environmental changes and climate change costs. **Carl Obst** from the Institute for the Development of Environmental-Economic Accounting addresses this by using ecosystem accounting to integrate the environment into MFP. He reviews frameworks for environmentally adjusted MFP estimates, focusing on three entry points: subtracting bad outputs from GDP, including natural capital inputs in production functions, and treating environmental expenditures as additional output. Obst develops an ecosystem MFP model, illustrating its application with an apple farmer. He identifies two main challenges: understanding and measuring the relationship between ecosystem physical flows and outputs, and estimating the cost shares relevant for ecosystem inputs.

The world has experienced a secular decline in productivity growth in recent years. At the same time, measures of natural capital produced by both the United Nations Environment Program (UNEP) and the World Bank show an absolute fall in natural capital, which includes ecosystem services affected by climate change. In the third article in the symposium, **Christina Caron** makes a case that the depletion of natural capital has directly contributed to the slowdown in productivity growth. In a comprehensive review of the literature, she provides many examples of how changes to natural capital, including damage to ecosystems from climate change, have negatively affected productivity. She concludes that natural capital has gone from a productivity accelerator to a productivity dampener, with climate change a key part of this story.