Are Pro-Productivity Policies Fit for Purpose? Productivity Drivers and Policies in G-20 Economies

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This paper investigates the productivity performance of the G-20. The aim is to extract lessons for the long term that can help shape a more adequate and consistent policy framework for tackling the global productivity slowdown since the 2010s.

Together, the 19 sovereign countries that are members of the Group of 20 (G-20) represent

around 73% of global GDP and are, therefore, an adequate representation of global productivity performance. The research teases out how the sources of productivity growth have changed over time and between countries and regions at different levels of development. It then looks at what kind of policies have been applied to influence those sources of growth and what this implies for the policy mix since the 2010s.

Quantitative analysis from the 1970s to the 2020s

The empirical analysis divides the G-20 countries into three main groups:

- 1. "Leading but slowing" a group of countries that are leading in terms of productivity levels but slowing in terms of growth, which includes the most developed economies in the G-20: Australia, Canada, France, Germany, Italy, Japan, UK and the USA.
- 2. "Lagging but growing" a group of countries that has started from lower levels of productivity but has seen a rapid increase, including China, India, Indonesia, South Korea and Turkey.
- 3. "Muddling through" a group of countries that has remained weak in terms of productivity levels and growth rates, including Argentina, Brazil, Mexico, Russia, Saudi Arabia and South Africa.

Breaking down the different sources of productivity growth demonstrates that:

 Capital deepening and Total Factor Productivity (TFP) were joint drivers of labour productivity growth in the "leading but slowing" group during the 1970s and 1980s. However, as of the 1980s, TFP growth started to weaken substantially, followed by less capital deepening during the 2010s.

- 2. The **"lagging but growing"** group achieved some catch-up on levels of labour productivity in the "leading but slowing" group. Initially, the catch-up was mainly driven by faster capital accumulation, even though faster TFP growth did eventually contribute as well during the 1990s and 2000s. While capital accumulation has remained strong in the "lagging but growing" group throughout the 2010s, TFP growth has much weakened recently.
- 3. In the **"muddling through"** group, initial growth through capital accumulation was not sustained and negative TFP growth was a major drag for most of the 50+ year period.

The research also assesses the evidence from growth regressions, allowing for a wider range of pro-productivity drivers to be analysed, including the role of human capital, innovation, trade, macro-policy factors, policies and regulations, as well as structural and micro-economic factors.

Capital deepening: the increase in contribution of capital (machinery, equipment and structures) per working hour.

Total Factor Productivity: the growth in output beyond the contributions of labour and capital input, resulting from efficiency gains and technological change.

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Conventional mechanisms to drive productivity through technological change and innovation (whether stemming from scientific progress, technologies embodied in new machinery and equipment, or better business practices) have not been working as well since the 2010s. This raises the question of whether pro-productivity policies, as applied in previous decades, are still applicable today.

A typology of pro-productivity policies

The policy analysis identifies four categories of pro-productivity policies:

- 1. The accumulation of the factors of production (e.g. policies focused on stimulating investment or strengthen education and skills)
- 2. Markets and resource allocation (e.g. policies focused on improving the functioning of product and labour markets)
- **3. Technological and structural change** (e.g. policies focused on strengthening innovation)
- **4. Internationalisation** (e.g. policies to enhance openness to trade or foreign direct investment)

Notably, a more in-depth analysis of four G-20 cases (Brazil, India, South Korea and the UK) suggests that there are different pathways to productivity growth and countries need to develop their own strategies linked to their individual starting points and economic structures.

Policy lessons for the productivity slowdown

Policies for both investment and technological change need to be strengthened to support a revival of productivity growth. The three most important lessons from the analysis are:

- Science and technology policies should be more explicitly linked to the diffusion of knowledge and the strengthening of absorption capacity of companies.
- 2. Investment-related policies should concentrate more on the productivity benefits from **intangibles and public investment**.
- **3.** Policies to strengthen human capital remain crucial in enabling workers to adjust to the structural changes associated with rapid technological change, especially as the workforce in many G-20 countries is rapidly ageing.

New directions for pro-productivity policies

Improving and shaping the functioning of markets (nationally and globally) remain crucial to ensure an efficient allocation of what mostly are scarce resources, including skilled labour, sources of finance and organisational capabilities. A new approach to innovation and industrial policies is required, built on policy learnings over the past decades. There is also a need for greater consideration towards inclusive and sustainable aspects of productivity growth. The creation of institutions and the building of capabilities for productivity growth are vital and further learning about pro-productivity policies across countries and over time is essential.

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