HIGHLIGHTS from Chapter 3:
Fading Promise: How to Rekindle Productivity Growth

Key Points

- A broad-based slowdown in labor productivity growth has been underway since the global financial crisis.
- In emerging markets and development economies (EMDEs), the slowdown has been due to weaker investment and efficiency gains, dwindling sectoral reallocation, and slowing improvements in key drivers of productivity, such as the pace of improvement in education and institutional quality.
- To rekindle productivity growth, a comprehensive approach is necessary. Depending on country circumstances, policymakers can facilitate investment in physical, intangible, and human capital; encourage reallocation of resources towards more productive sectors; foster firm capabilities to reinvigorate technology adoption and innovation; and promote a growth-friendly macroeconomic and institutional environment.

Broad-based slowdown: a fading promise of convergence. Since the global financial crisis, global labor productivity growth has slowed, from 2.3 percent in 2003-08 to 1.8 percent in 2013-18 (Figure 1A). The post-crisis productivity growth slowdown has been broad-based, affecting nearly 70 percent of advanced economies and EMDEs which account for over 80 percent of the global extreme poor, and has affected all EMDE regions. In EMDEs, labor productivity growth has slowed particularly steeply to 3.5 percent in 2013-18 from 5.3 percent in 2003-08. Average output per worker in EMDEs is less than one-fifth of that in the average advanced economy. In low-income countries (LICs), that figure drops to just 2 percent of advanced economy (Figure 1B).

Accounting for the slowdown: slowing investment and reallocation. In EMDEs, subdued investment and slowing total factor productivity growth (TFP) have accounted, in approximately equal measure, for the post-crisis productivity growth slowdown (Figure 1C). Also in almost equal measure, the slowdown in EMDEs has reflected fading gains from the reallocation of resources towards more productive sectors and slowing within-sector productivity gains (Figure 1D).

Outlook for EMDE productivity: challenging. Since the global financial crisis, improvements in many key correlates of productivity growth have slowed or gone into reverse (Figure 1E). Working-age population growth has slowed, educational attainment has stabilized, and the pace of expansion into more diverse and complex forms of production has lost momentum as the growth of global value chains stalled. At the firm level, large and export-oriented EMDE firms are closest to the productivity frontier, suggesting that continued global trade weakness and loss of momentum for global integration could be particularly damaging to productivity growth in EMDEs.

Policy implications: broad package required. The broad-based nature of the labor productivity growth slowdown can be addressed with a comprehensive set of policies. Labor productivity can be improved by stimulating private and public investment and improving human capital; fostering firm productivity, including by upgrading workforce skills; exposing firms to trade and foreign investment; facilitating the reallocation of resources towards more productive and a more diversified set of sectors; and, creating a generally growth-friendly macroeconomic and institutional environment (Figure 1F).
A broad-based slowdown in productivity growth has been underway since 2010, affecting the majority of advanced economies and EMDEs. Productivity levels in EMDEs are less than 20 percent of the advanced-economy average, and just 2 percent in LICs. The productivity slowdown has coincided with smaller gains from sectoral reallocation and a slowdown in improvements in many correlates of strong productivity growth. A reform package that combines investment, human capital and adoption of new technologies could lift productivity growth by about 0.6 percentage points.

A. Global, advanced-economy, and EMDE productivity growth

B. EMDE productivity levels, 2013-18

C. Contributions to productivity growth in EMDEs

D. Within and between sector contributions to productivity growth

E. Share of EMDEs with a post-crisis slowdown in the growth of underlying drivers of productivity

F. EMDE productivity reform scenario


A,B,C Productivity defined as output per worker. Aggregate growth rates calculated using GDP weights at 2010 prices and exchange rates. Data for 29 advanced economies and 74 EMDEs, of which 52 are commodity exporters and 22 EMDE are commodity importers.

D. Growth “within sector” shows the contribution to aggregate productivity growth of each sector holding employment shares fixed. The ‘between sector’ effect shows the contribution arising from changes in sectoral employment shares. Median of the country-specific contributions.

E. Post-crisis slowdown defined as the share of economies where improvements in each underlying driver of productivity during 2008-2018 was less than zero or the pace of improvement during the pre-crisis period 1998-2007.

F. The reform scenario assumes: (1) Fill investment needs: the investment share of GDP increases by 4.5 percentage points as in the Rozenberg and Fay (2019) “preferred” infrastructure scenario. The increase is phased in linearly over 10 years (2) Boost human capital: average years of education increases in each EMDE at its fastest cumulative 10-year pace during 2000-08; (3) Reinvigorate technology adoption: economic complexity (Hidalgo & Hausmann 2009) increases at the same pace as its fastest 10-year rate of increase during 2000-08.