



### **HIGHLIGHTS from Chapter 3: Harnessing the Benefits of Public Investment**

#### **Key Points**

- *Public investment can be a powerful policy lever to help ignite growth, including by catalyzing private investment and boosting productivity. The positive effects of public investment are stronger in countries with ample fiscal space and efficient government spending.*
- *To maximize the impact of public investment, emerging market and developing economies (EMDEs) should undertake wide-ranging policy reforms to improve public investment efficiency and expand fiscal space. The global community can facilitate these reforms through financial and technical assistance—especially critical for low-income countries.*

**EMDEs face significant investment gaps amid a broad-based slowdown of investment.** EMDEs need to invest an estimated \$2.4 trillion per year to meet the Sustainable Development Goals. Low-income countries (LICs) have especially hefty investment gaps: by some estimates, to meet climate change objectives and other development goals, they require an average annual investment of 8 percent of GDP through 2030 (figure 1.A). Compounding this challenge, investment has been in a prolonged slump since the global financial crisis, decelerating from about 10 percent per year in the 2000s to 5 percent in the 2010s.

**Public investment can be a powerful policy lever to help ignite growth.** However, public investment growth in EMDEs also experienced a broad-based decline and halved from an average of 10 percent per year in the 2000s to about 5 percent in the 2010s (figure 1.B). In EMDEs with ample fiscal space and efficient government spending, scaling up of public investment by one percent of GDP can increase output by up to 1.6 percent over five years, on average (figure 1.C). Public investment can catalyze private investment and boost productivity, promoting long-run economic growth. In response to an increase in public investment by one percent of GDP, private investment can increase by up to 2.2 percent and total factor productivity by up to 0.8 percent, raising potential output by 1.1 percent over the medium run (figure 1.D).

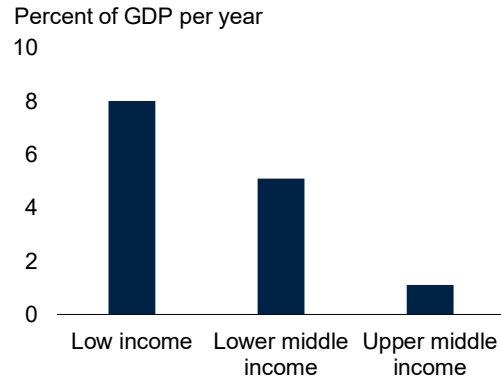
**Boosting public investment and maximizing its macroeconomic effects requires a comprehensive policy effort.** While specific policy interventions depend on individual country circumstances, three overarching policy priorities relevant for all EMDEs—the “Three Es”—include reforms focusing on the *expansion of fiscal space, efficiency of public investment, and enhanced global support*. The latter is critical for developing countries with deep structural challenges, vast infrastructure gaps, and limited fiscal resources and capacity to undertake the necessary comprehensive reforms. Coordinated financial support and technical assistance are both imperative for accelerating structural reforms and improving investment prospects in these countries.



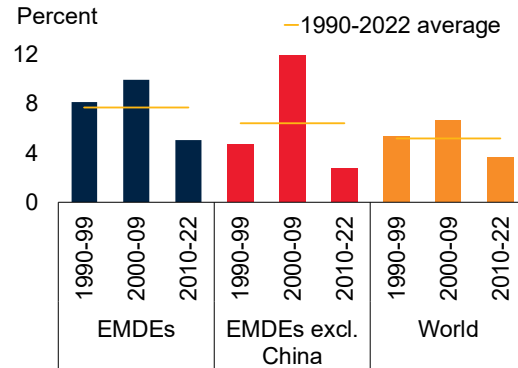
**Figure 1. Public Investment in EMDEs: Trends and Impacts**

*Emerging market and developing economies (EMDEs) face significant investment gaps to meet development goals. Public investment can be a powerful policy lever to help ignite growth, including by catalyzing private investment and boosting productivity. However, public investment in EMDEs has experienced a historic slowdown in the past decade. The positive effects of public investment are stronger in countries with ample fiscal space and efficient public investment. Wide-ranging policy reforms are needed to maximize the macroeconomic effects of public investment by improving public investment efficiency and expanding fiscal space.*

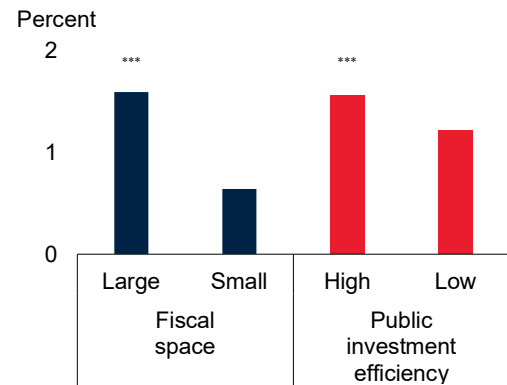
**A. Investment needs for a resilient and low-carbon pathway**



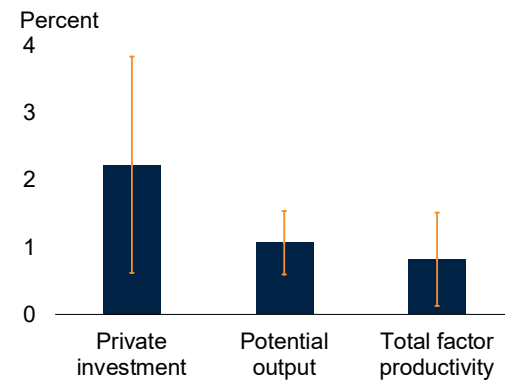
**B. Public investment growth**



**C. Impact of public investment on output**



**D. Macroeconomic effects of public investment**



Sources: Haver Analytics; Investment and Capital Stock Dataset (IMF 2021a); Rozenberg and Fay (2019); WDI (database); World Bank.

Note: EMDEs = emerging market and developing economies. Public investment refers to general government gross fixed capital formation.

A. Estimates of the annual investment needs to build resilience to climate change and put countries on track to reduce emissions by 70 percent by 2050. Depending on data availability, estimates include investment needs on transport, energy, water, urban adaptations, industry, and landscape.

B. Average annual public investment growth. Public investment growth is calculated with countries' public investment in constant international dollars as weights. Sample includes up to 162 economies, of which 126 are EMDEs.

C. Responses of real GDP over the five-year horizon (cumulative change relative to the year before a shock, in percent) to a public investment shock equivalent to one percent of GDP, based on local projections. \*\*\* indicate statistical significance at the one percent level. Large-fiscal space and small-fiscal space responses are based on local projections with the smooth transition function that uses public-debt-to-GDP ratio as the conditioning variable. Large fiscal space corresponds to the transition function value of 1, reflecting historically lowest debt ratio for a country, and small fiscal space corresponds to the transition function value of 0, reflecting the highest debt ratio for a country in public investment shock years. High-efficiency and low-efficiency samples are based on the top and bottom quartiles of the IMF (2021b) public infrastructure efficiency index. Sample includes up to 129 EMDEs.

D. Responses of macroeconomic variables (peak cumulative change over the five-year horizon relative to the year before a shock, in percent) to a public investment shock equivalent to one percent of GDP, based on local projections. Whiskers indicate 90 percent confidence intervals. Private investment refers to gross fixed capital formation by the private sector. Sample includes up to 129 EMDEs.