BOX 1.1 Accelerating Private Investment

Private investment growth has slowed sharply from pre-pandemic averages in all South Asian countries, hampering the region’s efforts to meet development and climate objectives. Historically, sustained accelerations in private investment were most likely to occur when institutional quality was strong, the real exchange rate was competitive, and economies were more open to trade and capital flows.

Introduction

Private investment growth has slowed sharply from pre-pandemic (2015–19) rates in all countries in South Asia (figure B1.1.1). South Asia’s private investment weakness is part of a broader phenomenon in emerging markets and developing economies (EMDEs), although it is less pronounced in South Asia than elsewhere.

Thus far in the 2020s, South Asia’s private investment growth (3.5 percent per year) averaged about half its pace in the five years preceding the pandemic (7.2 percent per year during 2015–19). Notwithstanding this slowdown, South Asia’s private investment growth has remained above that in other EMDEs, where the deceleration has also been pronounced.

Although private investment has grown more quickly than elsewhere, it still makes up a smaller share of output in South Asia than in other EMDEs. Private investment has accounted for 23 percent of GDP since 2020, down from its pre-pandemic share of 24 percent and well below the 31 percent share of GDP among other EMDEs.

With weak private investment, several South Asian countries have relied heavily on public investment for growth (World Bank 2023a). This is unlikely to be sustainable given weak fiscal positions, with high debt-to-GDP ratios and poor revenue collection in most countries in the region.

The shortfall of private investment is an obstacle to achieving both development and climate goals. Achieving those goals will require substantial investment to accelerate fill infrastructure gaps, adapt to climate change, facilitate the energy transition, accelerate poverty reduction, catch up to advanced-economy incomes, and advance shared prosperity (G20 and IEG 2023; Rozenberg and Fay 2019; Stamm and Vorisek 2023; UNEP 2023b).

Private investment can lay the foundation for future growth. It increases the capital stock available to workers and it contributes to technological progress, as it often embodies productivity-enhancing technologies and facilitates the reallocation of resources toward more productive uses (Dieppe, Kilic Celik, and Okou 2021; Syverson 2011). Progress on these fronts is essential to raise labor productivity in South Asia, which is about one-third of other EMDEs. The region consumes twice as much energy per unit of output as the global average, in part because firms lag in adopting advanced energy-efficient technologies (World Bank 2023a).

A sustained acceleration of private investment should be a policy priority for South Asia. Investment accelerations are typically periods of rapid growth in output, employment, and productivity, accompanied by improvements in fiscal positions, poverty, and inequality (World Bank 2024a). This box investigates two questions.

• What have been the features of private investment accelerations?

• What have been the preconditions associated with starts of private investment acceleration?

Contribution. This box extends the analysis of aggregate investment accelerations in World Bank (2024a) to private investment, which is a more pressing concern for South Asia. Earlier research has examined output accelerations in event studies (Berg, Ostry, and Zettelmeyer 2012; Hausmann, Pritchett, and Rodrik 2005; Jones and Olken 2008; Jong-A-Pin and de Haan 2008) and the correlates of aggregate investment in panel regressions (Anand and Tulin 2014; Caselli, Pagano, and Schwivardi 2003; Kose et al. 2017; Qureshi, Diaz-Sanchez, and Varoudakis 2015; World Bank 2019). None of these studies has identified the correlates of private investment accelerations.

Main findings. The main findings of this box include the following.

• Private investment accelerations have lasted about eight years, with private investment growth

* This box was prepared by Patrick Kirby and Kersten Stamm.
Averaging 12 percent a year during these episodes. Hence, episodes of private investment acceleration have been somewhat shorter and shallower than episodes of total investment acceleration. Accelerations in South Asia have been somewhat stronger and shorter than those in the average EMDE.

- Most private investment accelerations in EMDEs have tapered off gently rather than ending in crisis. Only about one-tenth of private investment accelerations in EMDEs ended in financial crises and one-fifth in recessions (although mostly coinciding with global recessions).

- Private investment accelerations have been more likely to start when institutional environments were strong, when countries were more open to global trade and finance, and when real exchange rates were competitive.
BOX 1.1 Accelerating Private Investment (continued)

- The probability of initiating a private investment acceleration in South Asia could be almost two-thirds higher if the region moved to the EMDE average in its openness to global trade and finance and if its institutional quality was brought in line with the top quartile of EMDEs.

Data. Private investment is defined as real gross fixed capital formation by the private sector, as reported by the IMF. This study focuses on growth in private investment per capita because it parallels growth in GDP per capita, the most basic measure of growth in living standards and central to the analysis of long-term economic growth (Libman, Montecino, and Razmi 2019). The dataset covers up to 105 EMDEs over 1960–2022.

Definitions and methodology. Following World Bank (2024a), an event study approach is used to identify private investment accelerations. The approach follows earlier studies on accelerations of output and capital, and imposes rules to ensure that the identified episodes feature sustained increases in private investment growth to a rapid rate. Each episode is defined by the following characteristics: 1) it must be sustained for at least six years; 2) average annual per capita growth of private investment in the acceleration must be at least 4 percent; 3) the average annual growth rate of private investment per capita must be at least 2 percentage points higher than the average of the previous six years to ensure that the episode is an acceleration; and 4) the private capital stock per capita at the end of the episode must exceed its pre-episode peak. These rules help exclude purely cyclical rebounds in investment growth (Barro and Sala-i-Martin 1992; Christiano and Fitzgerald 2003).


Features of private investment accelerations

EMDEs. The average private investment acceleration in EMDEs lasted 8.1 years, somewhat shorter than the average total investment acceleration (figure B1.1.2). During accelerations, private investment grew by 12.2 percent per year, on average—somewhat more slowly than during the average total investment acceleration. Private investment accelerations were often accompanied by strong public investment. Most accelerations tapered off smoothly; few ended in financial crises. Specifically, only 11 percent of the 187 private investment accelerations in the sample ended in a currency, banking, or debt crisis—as defined by Laeven and Valencia (2020)—within one year of the end of the episode. Nor did these episodes end in recessions: only one-fifth of private investment accelerations were followed by a recession in the two years following the end of the episode, with more than half of these recessions coincided with global recessions.

South Asia. Countries in South Asia have had more investment accelerations over the past 50 years than other EMDEs, experiencing an average of 2.4 acceleration episodes per country compared with 1.8 in other EMDEs. Although private investment accelerations became less common in EMDEs generally in the 2010s, they became more frequent in South Asia. In South Asia, as in EMDEs generally, private investment growth averaged 12.0 percent per year during acceleration episodes. Accelerations in South Asia tended to start stronger, but fade more quickly than in EMDEs generally—75 percent of accelerations in South Asia lasted 6–7 years, compared with 60 percent in EMDEs overall. As with EMDEs generally, private investment accelerations in South Asia rarely turned into crises: Only one of the 12 private investment accelerations in South Asia culminated in a banking, currency, or debt crisis in the following year—in line with the 11 percent of accelerations that ended in crisis in EMDEs generally.

Correlates of starts of private investment accelerations

A rich body of empirical research has shown that investment growth is affected by economic policies, including those related to the institutional environment, monetary frameworks, exchange rate competitiveness, and macroeconomic stability. An
**Econometric approach.** A panel logit regression is used to estimate the correlates of the onset of a private investment acceleration episode, including currency overvaluation (measured by the index developed by Rodrik 2008); institutional quality (as captured by the law and order index of the International Country Risk Guide ICRG); trade openness (measured as in Alesina and Rodrik 2008); and capital account openness (measured in Guide ICRG); trade openness (measured as in Alesina 2020); and capital account openness (measured in Guide ICRG); trade openness (measured as in Alesina 2020); and capital account openness (measured in Guide ICRG). These correlates are the same as those used to estimate the probability of an aggregate investment acceleration in World Bank (2024a). Table B1.1.1 shows the estimation results.

**Estimation results.** Private investment accelerations started in 4.5 percent of the country-year pairs in the sample; this can be interpreted as the unconditional probability of a private investment acceleration starting in the average country in an average year. Several factors increased this probability significantly.

- **Openness to trade and international capital.** A reduction in restrictions on trade or capital flows coincided with about 60 percent and 20 percent of the starts of private investment accelerations, respectively.

- **Institutional quality.** The probability of an investment acceleration starting in the average EMDE in the bottom quartile of ICRG’s law and order index (for example, Guatemala) was three-quarters that of the average EMDE in the top quartile (for example, Vietnam). Also, institutional quality amplified the benefits of trade openness (as captured by the interaction term in table B1.1.1).

- **Real exchange rates.** A larger deviation of the real exchange rate from its predicted level based on the cross-country pattern of per capita incomes—a larger “overvaluation” as measured by Rodrik (2008)—was associated with a statistically significantly lower probability that a private investment acceleration takes off in the subsequent year. For every 10 percentage-point deviation, the probability of the start of a private investment
BOX 1.1 Accelerating Private Investment (continued)

**FIGURE B1.1.3 Correlates of the probability of a private investment acceleration starting**

Weaker-than-average institutional quality and less trade and capital account openness reduce the likelihood of a private investment acceleration starting in South Asia. Reforms that open trade and capital accounts and improve institutional quality could make sustained private investment accelerations more likely.

<table>
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<tr>
<th>A. Trade and capital account openness, latest data</th>
<th>B. Institutional quality and average annual ten-year real depreciation, 2022</th>
<th>C. Difference in marginal probability of private investment acceleration starting, had South Asia ranked higher among EMDEs</th>
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<td><strong>Percent of GDP</strong></td>
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Sources: Haver Analytics; WDI (database).
Note: SAR = South Asia. EMDEs = emerging market and developing economies.
A. Latest available data are from 2022 for trade in percent of GDP and from 2021 for capital account restrictions.
B. Latest available data are from 2022. Blue bars show the pace of average annual real effective exchange rate depreciation (“Depreciation”) from 2013 to 2022, as measured by the deviation of the logarithm of the real exchange rate from its predicted value in a cross-country regression on the logarithm of per capita GDP (in percentage points).
C. Panel based on regression results shown in table B1.1.1. “Inst. quality” = institutional quality. Bars show the impact of improvements in economic policies on the probability of these accelerations. Countries have often transitioned from poverty to wealth through a series of sustained accelerations, during which per capita GDP grows and poverty declines rapidly as entire sectors are transformed.

Implications for South Asia. On average, South Asian countries rank below the average EMDE in trade and capital account openness and in the ICRG’s law and order index (figures B1.1.3). The estimation results suggest that private investment accelerations might be more likely to start in South Asia if the region was more open to trade and finance, and had stronger institutional quality.

- **Trade and capital account openness.** Were South Asia to move to the level of trade and capital openness of the average EMDEs, it would have a 1.9-percentage-point higher probability of sparking a private investment acceleration in any year, over a decade.

- **Institutional quality.** Were the average South Asian country’s law and order index at the level of the best-rated quartile among EMDEs, a private investment acceleration would be 5.7 percentage points more likely to start.

Because of limited data, the econometric exercise examined only a subset of factors. Beyond this perimeter of the regression, the probability of starting an investment acceleration in South Asia would likely be higher still if combined with public investment in physical and human capital, regulatory streamlining, reduced government support for state-owned enterprises, and improved access for the private sector to credit. For example, public infrastructure projects—such as the construction of the Padma Bridge in Bangladesh and various railways and road projects in India—can spur private investment and economic activity more broadly in the surrounding area (World Bank 2023b, 2023c).

**Conclusion**

Economic development is rarely a smooth, linear process. Countries have often transitioned from poverty to wealth through a series of sustained accelerations, during which per capita GDP grows and poverty declines rapidly as entire sectors are transformed. Increasing the probability of these accelerations can help
BOX 1.1 Accelerating Private Investment (continued)

fill infrastructure gaps, enable adaptation to climate change, facilitate the energy transition away from fossil fuels, accelerate poverty reduction, and advance shared prosperity. Several policy options are available to increase the likelihood of a private investment acceleration.

Supportive institutions. Public institutions also tend to attract more private investment and foreign direct investment (Ali, Fiess, and MacDonald 2010; Gwartney, Holcombe, and Lawson 2006; Heilbron and Whyte 2019). Surveys of firms regularly show that policy and regulatory uncertainty, followed by taxation and burdensome regulations, are the most critical barriers to private sector investment (OECD 2015). Public institutions can also provide critical complementary services to enable efficiently functioning markets and allow greater scope for competition that can help unleash private investment.

Business environment. Spurts of reforms to improve the investment climate, especially in EMDEs, have been associated with an increase in real investment growth of about 6 percentage points per year (Stamm and Vorisek 2023). In Pakistan, tax policies discourage investment in the tradable sector, and investment laws discriminate against foreign investors (World Bank 2023d). Reducing subsidies or budgetary support to state-owned enterprises in Bhutan, Nepal, and Pakistan could allow greater private sector participation, while also increasing the room in state budgets for other programs (World Bank 2022a, 2023d, 2023e). Similarly, in Pakistan, state-owned enterprises tend to have low investment rates, while consuming government resources equivalent to about 23 percent of the fiscal deficit in FY2023 (World Bank 2023f). Better governance of state-owned enterprises and a more level playing field could improve the allocation of capital (World Bank 2023g).

Other factors. In addition to the variables identified by the regression, other factors are likely to facilitate private investment, in particular improved access to finance or land. Adverse liquidity shocks caused by troubled banks can hinder investment (Kalemli-Ozcan, Kamil, and Villegas-Sanchez 2016). Unclear or difficult-to-enforce ownership rights to assets such as land can limit the collateral available to potentially successful small companies, which could be an important engine of vigorous private investment growth (Zhang et al. 2020).