BOX 3.1 Sources of the growth slowdown in BRICS

BRICS growth has been slowing since 2010, increasingly because of moderating potential growth. Until 2013, the slowdown was predominantly driven by external factors, but the role of domestic factors has increased since 2014. Deceleration in productivity growth suggests that a return to pre-global crisis rates of BRICS growth is unlikely.

The so-called BRICS (Brazil, Russia, India, China, and South Africa) are the largest emerging markets, accounting for about two-thirds of emerging market GDP. BRICS growth has slowed from almost 9 percent in 2010 to about 4 percent in 2015. By 2015, three of the BRICS (China, Russia, South Africa) had been slowing for three or more consecutive years and Brazil was in a steep recession. Long-term growth expectations in these economies have been repeatedly downgraded since 2010.[1]

A country-specific Bayesian Vector Autoregression (BVAR) model helps quantify some of the sources of this slowdown (Didier et al. 2015).[2] The model explains BRICS growth as a function of domestic factors (domestic inflation, short-term interest rates, and the real exchange rate), and external factors (U.S. growth, 10-year bond yields, China's growth, the EMBI spread, and terms of trade).[3]

An unfavorable external environment—including a terms-of-trade deterioration and U.S. growth setbacks in 2013 and early 2014—appears to have been the main source of the slowdown between 2010 and the first quarter of 2014. However, since then, domestic factors—including rising short-term interest rates and, in China, real appreciations—have been the predominant cause (Figure 3.1.1). Underlying these short-term movements has been a steady decline in productivity growth. Although difficult to measure on a high-frequency and comparable cross-country basis, bouts of political uncertainty have dented investor sentiment in some BRICS.

This box addresses the following questions:

- What have been the external factors driving the BRICS slowdown?
- What have been the domestic factors driving the BRICS slowdown?

Note: This Box was prepared by Lei Sandy Ye.

[1]The average five-year ahead consensus growth forecast of Brazil, China, India, and Russia has decreased from 6.5 percent in 2010 to 4.7 percent in 2015.

[2]The Bayesian methodology follows Litterman (1986). The sample includes quarterly data for 1998Q1 to 2015Q2 for all BRICS economies.

[3]Estimates for China do not separately include its growth as an external factor.

External factors

Among the most important external factors are weak global trade, a steady decline in commodity prices since 2011, and tightening global financial conditions. The model indicates that such factors were predominant 2010Q1-2014Q1 (Figure 3.1.1).

Weak trade. During 2000-07, global trade grew at an average annual rate of about 7 percent. Since 2010, however, global trade growth has slowed. By 2014, global trade had fallen 20 percent short of its pre-crisis trend (World Bank 2015a). An outright contraction in the first half of 2015—the first since 2009—reflected falling import demand from emerging markets, including from Asia and Central and Eastern Europe. Five factors have contributed to the weakness in global trade.

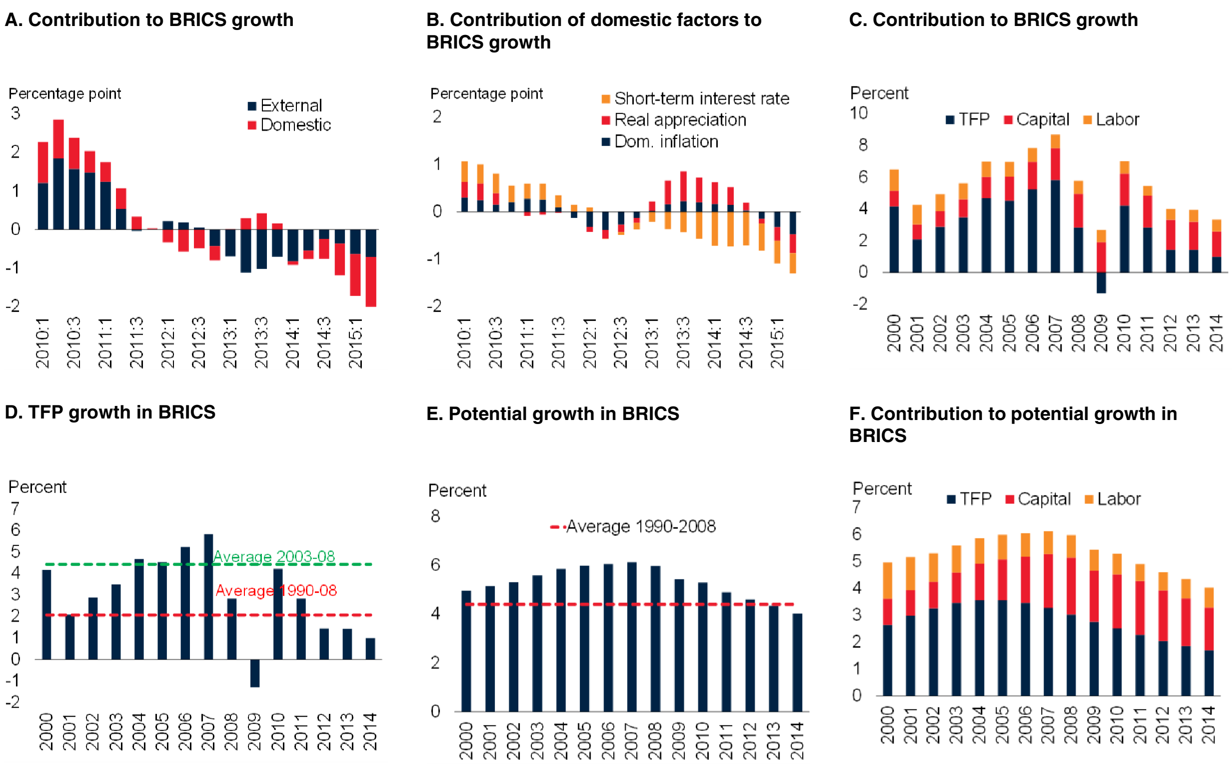
- Advanced markets, which constitute about 60 percent of world import demand, have been growing at a rate of less than 2 percent. By 2014, real GDP in the United States and the Euro Area was 8-13 percent below the pre-crisis trend level, and import demand was 22-23 percent below the pre-crisis trend.
- Investment demand in advanced markets has been particularly weak. Since capital goods are typically the most import-intensive component of aggregate demand, the switch in composition has reduced the income elasticity of trade.
- The maturation of global value chains has further reduced the elasticity of trade flows to activity and exchange rates (Ahmed, Appendino, and Ruta 2015).
- Higher capital requirements and tightened financial regulations have reduced banks' willingness to extend trade finance (World Bank 2015a).
- The pace of trade liberalization has slowed since the crisis.

Easing commodity prices. A steady decline in commodity prices has set back growth in commodity-exporting BRICS (Russia, Brazil, and South Africa). Prices of oil and metals have declined by 50-60 percent from their 2011 peaks and are expected to remain low for the next decade (World Bank 2015b, Baffes et al. 2015). Agricultural prices are

BOX 3.1 Sources of the growth slowdown in BRICS *(continued)*

FIGURE 3.1.1 Sources of the growth slowdown in BRICS

Since 2010, the drivers of the BRICS growth slowdown have pivoted from external to domestic factors. External drivers included weak global trade and commodity prices and bouts of financial market turmoil. Domestic factors included slowing productivity growth, rising domestic policy uncertainty and eroding buffers that have constrained the use of accommodative policies. TFP growth and potential growth in BRICS have slipped to below pre-global crisis averages.



Source: Didier et al. (2015).
A. B. Each bar shows the percentage point deviation of growth from the sample mean. External factors include U.S. growth and 10-year bond yields, Chinese growth, EMBI spreads, and terms of trade. Domestic factors include domestic inflation, the real exchange rate, and short-term interest rates. Unweighted average contribution to BRICS growth, including China. Based on Bayesian VAR (Didier et al. 2015). The last observation is 2015:2.
C.D.E.F. Unweighted averages.

about 30 percent below their 2011 peaks. This has sharply worsened the terms of trade of Brazil, Russia, and South Africa. Slowing growth in commodity-importing BRICS (China, India) itself contributes to softening commodity prices (World Bank 2015b).

Tighter financing conditions. Net capital flows to BRICS have undergone bouts of volatility, culminating in sharp and sustained capital outflows in the first half of 2015. The decline in net capital flows largely reflected developments in China: in the first half of 2015, portfolio outflows from China rose ten-fold and net other investment inflows fell by four-fifths from the second half of 2014. Remittance inflows to BRICS have also slowed sharply, from a rate of increase of 15.4 percent in 2010 to under 3 percent in 2015.

The volatility of capital flows to BRICS has weighed on investment. Since 2010, investment growth in BRICS has slowed from 16 percent in 2010 to 5 percent in 2014. A series of country-specific factors have contributed to this, including political and geopolitical uncertainty, structural bottlenecks and uncertainty about major reform initiatives. The slowdown in remittances may directly impact consumption in these economies (World Bank 2015a).

Domestic factors

Domestic factors include a sustained productivity slowdown and bouts of policy uncertainty. The BVAR results suggest that since 2014Q1 these have overtaken external factors as the main contributors to decelerating BRICS output (Figure 3.1.1).

BOX 3.1 Sources of the growth slowdown in BRICS *(continued)*

Productivity growth slowdown. Domestic factors accounted for a sizable share of the slowdown in BRICS, especially since early 2014. These included a productivity slowdown. Using a production function approach, GDP growth may be decomposed into the contributions of total factor productivity (TFP), and the individual factors of production (Didier et al. 2015). Based on this decomposition, slowing BRICS growth has mostly reflected slowing TFP growth (Figure 3.1.1). Since 2012, TFP growth in BRICS has been below its historical average during 1990-2008. Slowing TFP growth has also been reflected in declining potential growth.

Uncertainty. Bouts of uncertainty in BRICS have weighed on investment. This was associated with periods of stock market and currency volatility. Looking ahead, if heightened policy, and especially political, uncertainty persists, it may constrain policymakers' ability to support growth. Counter-cyclical fiscal and monetary policies may be harder to implement when investors focus on rising uncertainty or widening vulnerabilities or both. Capital outflows and depreciations amidst weakening confidence may limit the effectiveness of counter-cyclical policies in lifting activity. Structural reforms also often stall amidst political uncertainty.

Eroding policy buffers. Since the crisis, the fiscal positions of BRICS have deteriorated considerably. On average, their fiscal balance has weakened from near-balance in 2007 to -4 percent of GDP in 2014. In South Africa, debt has increased by about 19 percentage points of GDP since 2007, and Brazil and India's debt levels are in excess of 60 percent of GDP. Monetary policy space has diverged between commodity exporters and importers. In Brazil and Russia, monetary policy is constrained by above-target inflation, partly as a result of depreciation. In contrast, low oil prices have reduced inflation and increased room for rate cuts in China and India. However, this room may diminish if inflation rebounds once oil prices stabilize.

Conclusion

The factors driving the growth slowdown in BRICS are likely to remain in place, although sharp recessions in Brazil and Russia are expected to begin to ease in 2016. The external environment is likely to remain challenging for emerging markets. As global supply chains mature, the advanced market recovery remains fragile, and emerging market growth remains reliant on government support, trade is likely to remain weak. Large investments world-wide in commodity production over the past decades are likely to keep downward pressure on commodity prices.

Domestic policy environments may become increasingly constrained as weak growth erodes the resilience of private and public balance sheets. Aging populations may dampen potential growth. Weak growth prospects are likely to continue to weigh on investment, which may, in turn, slow the technological progress required to sustain high productivity growth. A combination of countercyclical policies and structural reforms are needed to reinvigorate growth.

push could help lift growth prospects and, to the extent it encourages investment, support domestic demand, as well as help improve investor sentiment and capital flows. This would be especially useful for countries that have limited room for expansionary fiscal and monetary policies.

What are the key channels of spillovers from the major emerging markets?

A growth slowdown in emerging markets, in particular in one or several of the BRICS, could have significant spillover effects given their share of global output and growth. They have become important export markets and significant sources of remittances. Some of them also supply foreign direct investment (FDI) and official development assistance (ODA) to other emerging markets, frontier markets, and low-income countries (LIC) as well as advanced markets.

Global output and growth. Since 2000, emerging markets have accounted for much of world growth. During the pre-crisis years of 2003-08, emerging market growth averaged 7.1 percent, well above its long-term average of about 5 percent. During the crisis, global activity was shored up by emerging markets, despite a sharp slowdown in 2008. Partly as a result of large-scale