CHAPTER 3

Macroeconomic Developments

Emerging market and developing economies (EMDEs) weathered the 2009 global recession relatively well, but the impact of the recession varied across economies. EMDEs with stronger precrisis fundamentals—such as large foreign exchange reserves, sound fiscal positions, and low inflation—suffered milder growth slowdowns, in part because of their greater capacity to engage in monetary and fiscal stimulus. Low-income countries were also resilient, because foreign aid and inflows of remittances remained relatively stable. In contrast, EMDEs that were heavily dependent on short-term capital flows—such as portfolio investment and cross-border bank lending—fared less well, especially those in Europe and Central Asia. A key lesson for EMDEs is the need to strengthen macroeconomic frameworks and create policy space to prepare for future global downturns.

Introduction

Just over a decade ago, the world economy experienced the most severe recession of the post-World War II period. In 2009, global output contracted by 1.8 percent, global trade collapsed by 9.9 percent, and investment declined by 9.0 percent, after robust expansions in output, trade, and investment in 2007 (of 4.3 percent, 7.3 percent, and 5.0 percent, respectively). The recession in advanced economies was particularly pronounced, with activity declining by 3.4 percent in 2009. Despite unprecedented stimulus, the postcrisis recovery in advanced economies was anemic.

Although the crisis originated in the United States, the subsequent collapse in global trade and capital flows affected emerging market and developing economies (EMDEs) as well. That said, EMDEs on the whole managed the global recession relatively well, especially those that were less dependent on external trade and finance, and those with strong precrisis fundamentals. Overall, EMDE output grew at a lower rate (at 1.6 percent) in 2009 but did not contract. This resilience partly reflected precrisis policies that reduced the vulnerabilities of EMDEs to external shocks and allowed the use of countercyclical policy stimulus during the crisis. The postcrisis decade, however, was marked by slowing or weak EMDE growth amid a series of financial and commodity price shocks and weakening fundamental drivers of growth.

Because advanced economies were more adversely affected by the financial crisis, the role of EMDEs increased in the global economy. By 2018, the share of EMDEs in the global economy had increased to 39 percent of global gross domestic product (GDP), from 31 percent in 2007, at 2010 market exchange rates. EMDEs' share of global trade also increased, to 36 percent during 2011-18 from 30 percent during 2002-07. In 2018, the seven largest EMDEs (EM7) alone accounted for 20 percent of global trade, compared

Note: This chapter was prepared by Wee Chian Koh and Shu Yu.

to 15 percent in 2007.[1] EMDEs continued to be the largest source of commodity demand growth (Baffes et al. 2018). During 2008-16, the EM7 accounted for almost all of the increase in global consumption of metals and energy and a sizeable share of the increase in consumption of grains (corn, rice, wheat; Baffes et al. 2018).

Given the growing role of EMDEs in the world economy, major economic disruptions are more likely to be felt by developing countries today than during the global recession. This risk coincides with a subdued outlook for EMDEs amid weak investment, rising debt and heightened policy uncertainty. A valuable lesson from the global recession is the importance of strong economic fundamentals, prudent financial systems, and sufficient policy room for governments and central banks to act when their economies are hit by shocks. Many EMDEs, however, have not yet rebuilt the policy buffers that were deployed successfully during the 2009 global recession. In order to enhance their resilience to shocks and lift long-term growth prospects amid subdued global growth, EMDEs urgently need to restore policy space.

Against this backdrop, this chapter reviews macroeconomic developments in EMDEs before, during, and after the 2009 global recession by addressing the following questions:

- How strong were economic fundamentals in EMDEs before the global recession?
- How did EMDEs fare during the global recession and in its aftermath?
- What explains the sluggish postrecession recovery in EMDEs?

Contributions to the literature. Chapter 3 makes several contributions to a growing literature drawing lessons from the global financial crisis and the 2009 global recession. First, the chapter expands on earlier studies of the global recession by introducing an EMDE focus and extending the horizon of the discussion. Previous studies examined the initial impact of the global financial crisis on EMDEs but did not reach far into the postcrisis period (Berkmen et al. 2012; Blanchard, Faruqee, and Das 2010; World Bank 2009a). Some studies focused on the international transmission of the crisis with an advanced-economy focus (Arestis and Karakitsos 2013; Blinder 2013; Imbs 2010; Mishkin 2011). Other studies examined the transmission from the financial crisis to the real economy in advanced economies (Ball 2014; Bernanke 2018; Gertler and Gilchrist 2018; Perri and Quadrini 2018) and the lasting nature of the macroeconomic effects of the financial crisis (Chen, Mrkaic, and Nabar 2019; IMF 2018). Second, the chapter delves deeper into developments in specific EMDE regions and the largest emerging markets (boxes 3.1 and 3.2). Third, it draws lessons from the experience of the global recession that are relevant for today's policy challenges.

Main findings. This chapter reports the following findings. First, before the 2009 global recession, EMDEs benefitted from broad-based and rapid growth, supported by strong domestic demand and a benign external environment. On the eve of the global financial

[1] The EM7 are Brazil, China, India, Indonesia, Mexico, the Russian Federation, and Turkey.

crisis, EMDEs accounted for almost one-third of global output and global exports, up from about one-quarter in 2001. EMDEs became a key source of global saving during the precrisis period. Gross saving in EMDEs rose by 10 percentage points of GDP between 2001 and 2007, while benign financing conditions encouraged strong investment growth. During this period, EMDEs accumulated sizeable current account surpluses, reduced fiscal deficits, lowered debt, and built foreign exchange reserves.

Second, EMDEs weathered the global recession relatively well, particularly those with strong fundamentals that allowed the use of countercyclical (expansionary) policy tools and those that were less exposed to global trade and finance. EMDEs that had built central bank credibility, established low inflation, and secured sound fiscal positions had space to engage in monetary and fiscal stimulus and thus fared better during the crisis, as did those that had accumulated ample foreign reserves that could be used to stabilize exchange rates. EMDEs that were heavily reliant on more volatile financing sources (such as portfolio investment and cross-border bank lending), especially those in Europe and Central Asia, suffered steeper recessions.

Third, although well above growth in advanced economies, EMDE growth slowed steadily after the global recession, from a peak of 6.5 percent in 2011 to a trough of 3.8 percent in 2015, continuing at a moderate 4.3 percent a year during 2017-18. This slowdown had both cyclical and structural origins. It reflected weaker growth in advanced economies; the phasing out of policy stimulus in several large EMDEs and advanced economies; a slowdown in potential growth in many EMDEs, including China; China's shift toward a more balanced growth model; a sharp decline in commodity prices in 2012; bouts of financial stress in major EMDEs; and episodes of policy uncertainty that dampened confidence and weighed on investment.

Fourth, over the next two years, growth is expected to stabilize somewhat but to remain subdued. EMDE growth is expected to average 4.4 percent a year in 2019-21 compared to the precrisis average of 6.7 percent a year in 2002-07 (World Bank 2019a). This short -term outlook is subject to considerable risks, predominantly on the downside, including the possibility of escalating trade tensions and elevated financial market stress. A further slowdown is expected over the longer term. Population dynamics in many EMDEs reached a turning point in 2010 when the share of the working-age population stabilized after several decades of rapid increase. Productivity growth is expected to remain lackluster as diminishing growth prospects weigh on investment. Developments in the drivers of potential growth will contribute to an expected slowdown of about 1.6 percentage points from precrisis rates, to an annual average of 4.3 percent in 2019-27 (World Bank 2018a, 2019b).

Finally, solid policy buffers, sound institutions, and international policy coordination helped mitigate the impact of the 2009 global recession. The window of opportunity for rebuilding resilience before the next shock materializes may be narrowing, which in turn highlights the urgent need to rebuild policy space to enhance the resilience of those EMDEs with eroded policy buffers.

The rest of the chapter is organized as follows. First, the chapter describes the period of strong growth in EMDEs before the global recession. Subsequently, it shows how

EMDEs fared during the global recession, followed by a discussion of the challenging postrecession decade. Finally, the chapter concludes with a summary and policy lessons.

Before the global recession: Strong growth

During 2002-07, in a benign external environment, EMDEs witnessed broad-based and rapid growth, averaging 6.7 percent a year—more than twice as fast as during the preceding two decades (figure 3.1). EMDEs' growth in this period is surpassed only by their growth spurt in the early to mid-1970s (7.2 percent a year, on average). Rapid, export-driven growth amid a commodity price boom allowed many EMDEs to accumulate sizable current account surpluses, reduce fiscal deficits, and build foreign exchange reserves (World Bank 2018c).

Benign external environment. A cyclical upturn in advanced economies, where output growth strengthened from 1.5 percent in 2001 to 2.6 percent in 2007, coincided with the integration of China into global trade networks after its World Trade Organization (WTO) accession in 2001, a wave of new or recently agreed free trade agreements, and the rapid expansion of global value chains. These developments fueled global trade and commodity demand and exploration (Khan et al. 2016). Global trade volumes grew by 6.7 percent a year in 2002-07, in part reflecting a rebound from tepid growth following the Asian financial crisis of 1997-98 (World Bank 2015a). EMDE exports grew from 27 percent of EMDE output in 2001 to 34 percent in 2007.[2] Rapid growth in China contributed to a doubling of energy and metals prices and a 1.7-fold increase in agricultural commodity prices. This increase buoyed activities in commodity exporters, which account for almost two-thirds of EMDEs.

In addition to their growing importance in global trade, EMDEs also became a key source of global savings during this period. Gross savings in EMDEs rose by 10 percentage points of GDP between 2001 and 2007 (figure 3.1). In particular, China's saving rate reached 51 percent of GDP in 2007, outpacing domestic investment and contributing to the widening of its current account surplus to 9.9 percent of GDP in 2007 from 1.3 percent in 2001. By contrast, in Europe and Central Asia (ECA), gross investment exceeded gross saving by a wide margin as economies transformed from centrally planned to market economies, resulting in large current account deficits (box 3.2).

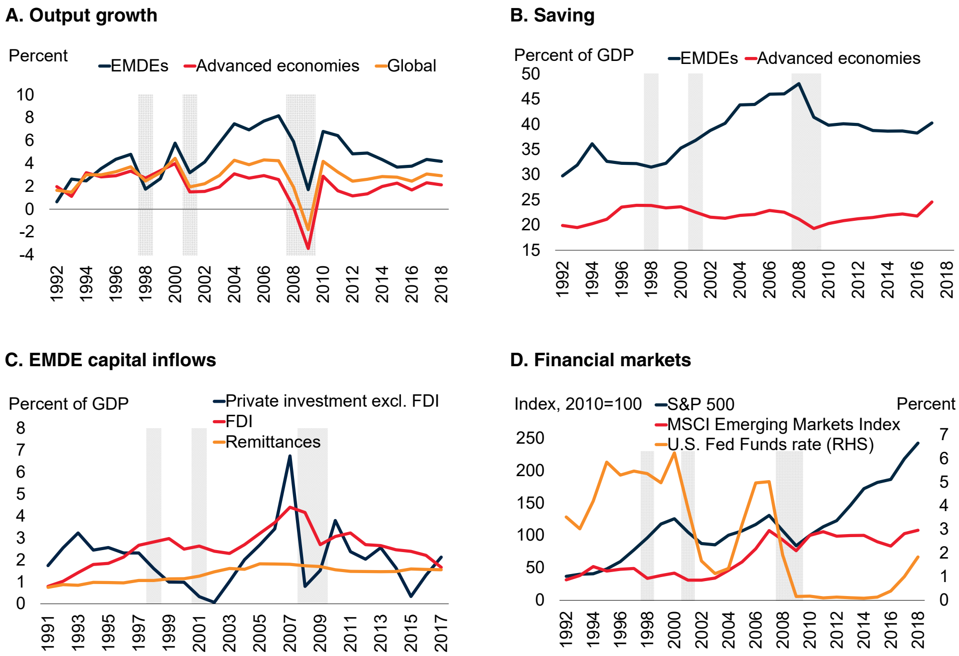
Prolonged accommodative monetary policy in major advanced economies and rapidly growing savings in some major EMDEs helped maintain low global real interest rates and encouraged capital flows to EMDEs (Bernanke 2005; Hall 2017; Lin 2008).[3] Partly in search of yield, gross capital inflows to EMDEs (excluding foreign direct investment

[2] All EMDE regions except Europe and Central Asia increased their share of exports in GDP during 2001-07. The East Asia and Pacific and Middle East and North Africa regions had the largest increases.

[3] After the "dot-com" crash, the U.S. federal funds rate was cut repeatedly, from 6.5 percent in December 2000 to 1.0 percent in June 2003, and then maintained at this low level until May 2004. The European Central Bank also reduced its primary interest rate from 3.75 percent in October 2000 to 1.0 percent in June 2003-November 2005.

FIGURE 3.1 Global developments, 1991-2018

EMDEs grew rapidly in 2002-07, the period immediately before the global recession and after China joined the World Trade Organization, which helped fuel global trade and commodity demand. EMDEs became a key source of global saving. Capital inflows to EMDEs surged, partly owing to low interest rates in advanced economies.



Sources: Araujo et al. (2015); Haver Analytics; International Monetary Fund; U.S. Federal Reserve Economic Data; World Bank.
Note: Shaded bars indicate global recessions and slowdowns. EMDEs = emerging market and developing economies; FDI = foreign direct investment; MSCI = Morgan Stanley Capital International.
C. Private investment flows comprise portfolio investment, other investment, and financial derivatives.

[FDI]) swelled to 6.5 percent of EMDE GDP in 2007, from less than 1 percent in 2001. FDI in EMDEs also rose, from 2.5 percent to 4.3 percent of GDP between 2001 and 2007; and remittances from EMDE nationals working in foreign countries increased from 1.3 to 1.8 percent of EMDE output during the same period.

Rapid reserve accumulation. International reserve holdings in EMDEs averaged 20 percent of GDP in 2007. This reserve accumulation reflected precautionary demand against balance-of-payment shocks and, by some estimates, support for competitiveness.[4] The reserve buildup was most pronounced in East Asia and Pacific (EAP) and Latin America and the Caribbean (LAC), largely accounted for by China and Brazil. The

[4] The precautionary motive was more important following the emerging market crises of the 1990s and the Asian financial crisis of 1997-98, but undervaluation of exchange rates that supported export-led growth was more important in the 2000s (Aizenman and Lee 2007; Dooley, Folkerts-Landau, and Garber 2003; Ghosh, Ostry, and Tsangarides 2012).

BOX 3.1 EM7 performance during the global recession

This box presents a summary of macroeconomic developments and policy measures in the seven largest emerging market economies (EM7) during the global financial crisis and recession. Some EM7 countries weathered the crisis considerably better than others, in part by implementing a swift and large policy stimulus made possible by greater policy space accumulated before the crisis. Closer trade links to relatively resilient economies also helped EM7 countries weather the crisis. Those that fared less well generally had deeper trade and financial links with economies that experienced steep recessions and had less effective policy responses.

Introduction

Emerging market and developing economies (EMDEs) as a whole weathered the 2009 global recession well, although their economic growth slowed significantly.[a] On average, growth in the seven largest EMDEs (EM7)—Brazil, China, India, Indonesia, Mexico, the Russian Federation, and Turkey—slowed by 3.9 percentage points, from 4.6 percent in 2008 to 0.7 percent in 2009. This slowdown caused considerable spillovers to EMDEs more broadly. On average, a 1-percentage-point slowdown in EM7 growth is associated with a 0.8-percentage-point decline in overall EMDE growth in the subsequent year (Huidrom et al. 2019).

Some EM7 countries, however, fared much better than others during the global recession (figure B3.1.1). The heterogeneity in the experiences of the EM7 also affected their respective trading and financial partners. China's resilience supported growth around the world, whereas a severe recession in Russia exacerbated the effects of the global financial crisis and recession on its regional trading partners. On average, for every 1-percentage-point growth pickup in China, growth in other EMDEs was higher by 0.6 percentage point in the following year (World Bank 2016c). Developments in Russia also had sizable growth spillovers in the Europe and Central Asia (ECA) region, and those in Brazil affected some of its neighbors; but developments in the other EM7 economies had limited spillovers.

Against this backdrop, this box describes developments during the global financial crisis and recession in each of the EM7. Those that did better had above-average fiscal stimulus implemented swiftly (China, India) or were close trading partners of China (Brazil, Indonesia). Those that fared less well were close trading partners of the United States (Mexico) or the European Union (Russia, Turkey), or experienced sharp capital flow reversals (Russia, Turkey), or were heavily dependent on the oil sector for fiscal and export revenues, which suffered from a plunge in oil prices (Mexico, Russia).

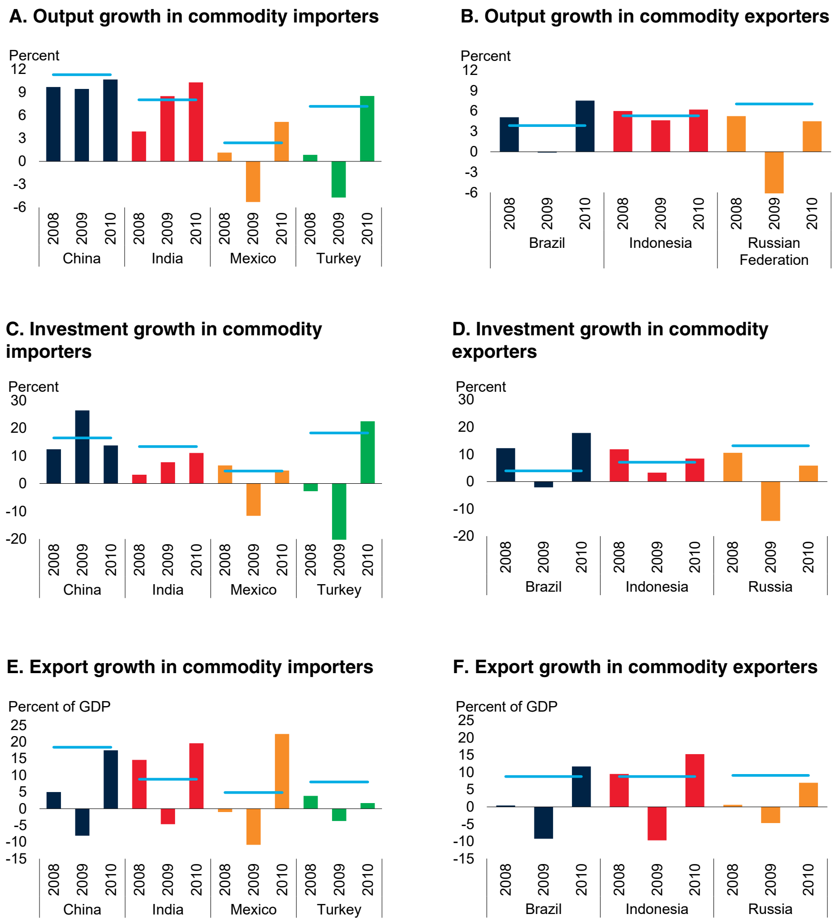
Note: This box was prepared by Wee Chian Koh.

a. The seven economies account for more than one-quarter of global output (at market exchange rates) and more than half of global output growth during 2010-15 (Huidrom et al. 2019).

BOX 3.1 EM7 performance during the global recession *(continued)*

FIGURE B3.1.1 EM7 macroeconomic developments

East Asian countries weathered the crisis well despite steep contractions in exports. The Russian Federation and Turkey suffered large output and investment contractions, partly owing to sharp capital flow reversals. As a result of China's resilience and strong recovery, Brazil and Indonesia, with their close trade links to China, were also more resilient. Mexico, Russia, and Turkey, which had deeper ties with the United States or the European Union, fared less well.



Source: World Bank.
Note: The EM7 are the seven largest emerging market economies.
A-D. Blue horizontal lines are 2002-07 averages.

BOX 3.1 EM7 performance during the global recession *(continued)*

Commodity-importing EM7: China, India, Mexico, and Turkey

In those commodity-importing EM7 economies that were less exposed to global financial stress (China, India) and global trade (India), growth continued, but at reduced rates, during the 2008-09 global financial crisis and recession. In contrast, those that were highly open to global financial markets (Mexico, Turkey) and heavily reliant on trade with the United States, the epicenter of the crisis (Mexico), or with the European Union (EU), which also experienced deep downturns (Turkey), suffered severe output contractions notwithstanding large monetary and fiscal stimulus (figure B3.1.2).

China. Growth slowed from an average of 11.3 percent a year during 2002-07 to 9.5 percent a year in 2008-09 before recovering to 10.6 percent in 2010. This robust growth performance reflected large-scale policy stimulus to mitigate severe export weakness as well as China's limited exposure to the global financial market turmoil.

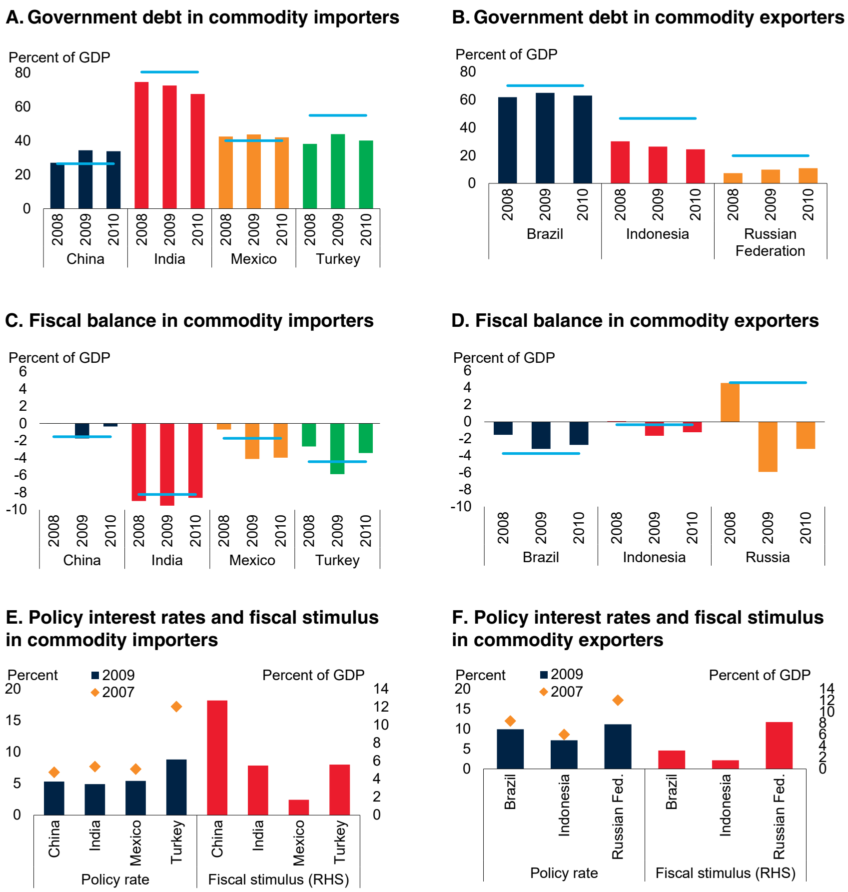
After joining the World Trade Organization (WTO) in late 2001, China's exports grew from 21 percent of gross domestic product (GDP) in 2001 to 36 percent of GDP in 2007. This export-led growth was accompanied by large foreign direct investment (FDI) inflows (90 percent to the manufacturing sector), which grew from 3.5 percent to 4.4 percent of GDP over the same period. By 2007, China had become the world's second-largest exporter of merchandise goods and the largest FDI recipient among EMDEs. During the crisis, China's export-oriented industries, especially capital and technology-intensive industries, suffered a severe contraction. Export growth collapsed from 18.4 percent per year, on average, in 2002-07 to -8.1 percent in 2009. In contrast to its export-oriented industries, China's financial system was largely insulated from global financial stress by strict capital flow restrictions (Yang and Huizenga 2010). China faced currency appreciation pressures instead, and the central bank engaged in foreign exchange intervention to maintain the exchange rate at competitive levels; the renminbi appreciated by 6 percent in effective terms during September 2008-March 2009.

China's policy response to the global recession was swift and large (IMF 2010a). The government announced a fiscal stimulus package for 2009-10 that amounted to 12.7 percent of GDP. The three largest components of the package focused on development of public transport infrastructure, reconstruction after the earthquake in the Sichuan Province, and construction of public housing in urban areas. The authorities also raised tax rebates, reduced export insurance premium rates, and established an export financing guarantee system to promote exports. Monetary policy was eased, beginning in September 2008: by the end of the year, the People's Bank of China's benchmark interest rate had been reduced from 7.5 percent to 5.3 percent. The required reserve ratios of banks in China were also

BOX 3.1 EM7 performance during the global recession *(continued)*

FIGURE B3.1.2 Debt, deficits, and policy measures in EM7

All EM7 countries loosened monetary policy to stimulate aggregate demand during the global recession. China and India also took swift and large fiscal stimulus measures.



Sources: Bank for International Settlements; International Monetary Fund; World Bank.
Note: The EM7 are the seven largest emerging market economies. Russian Fed. = Russian Federation.
A-D. Blue horizontal lines are 2002-07 averages.

lowered to encourage banks to expand lending in support of the fiscal stimulus package.

Although fiscal and monetary stimulus helped China weather the global recession, in the postrecession period China has been confronted with large debt buildups. Stimulus during the recession, combined with two additional rounds of stimulus

BOX 3.1 EM7 performance during the global recession *(continued)*

spending in 2015-16 and 2018-19, have virtually doubled government debt in China as a proportion of GDP, from 26 percent on average during 2002-07 to 50 percent in 2018, and more than tripled the fiscal deficit-to-GDP ratio from 1.5 percent to 4.8 percent over the same period. Meanwhile, corporate debt rose from 108 percent of GDP in 2006 to 158 percent of GDP in 2017, before dropping slightly to 152 percent of GDP in 2018.

India. The economy managed the recession well, despite a sharp contraction in exports. Growth slowed from 7.2 percent a year on average in 2002-07 to 3.1 percent in 2008, but rebounded to 7.9 percent in 2009 and 8.5 percent in 2010. The rebound was supported by resilient FDI and remittance inflows, and swift policy stimulus (figure B3.1.3).

At the time the global financial crisis erupted, India had become significantly more integrated into the global economy than a decade earlier, with the ratio of exports to GDP having doubled to 21 percent in the decade to 2007 and the ratio of gross capital flows to GDP having doubled to 8 percent in the same period. During the global recession, export growth collapsed from 18.4 percent a year on average in 2002-07 to -4.8 percent in 2009. Capital inflows (excluding FDI) fell from 7.8 percent of GDP in 2007 to 4.1 percent of GDP on average in 2008-09. The decline in non-FDI capital inflows was accompanied by a mild currency depreciation (3 percent) in effective terms during September 2008-March 2009. FDI inflows continued to increase, however, and remittance inflows continued to grow strongly through the recession.

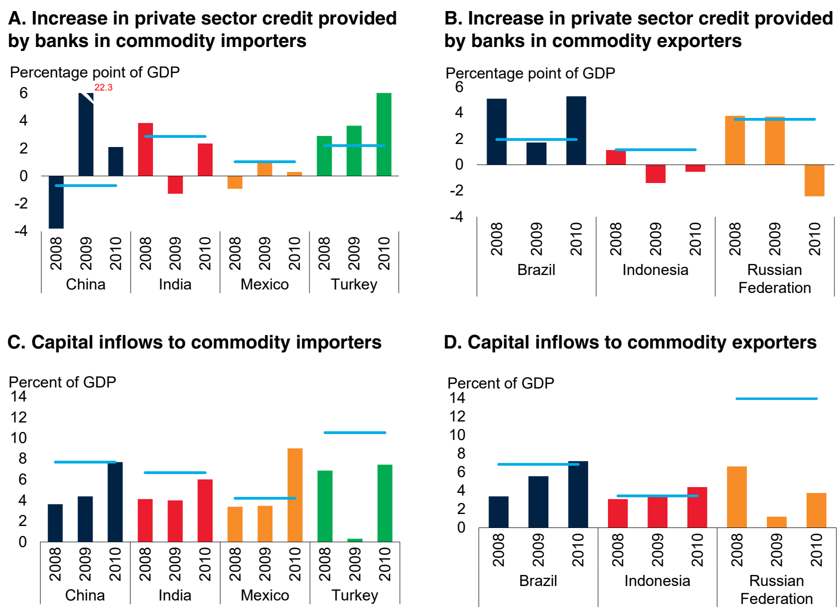
The authorities responded with large fiscal stimulus, monetary policy loosening, and large-scale foreign exchange market intervention (IMF 2009a). In February 2008, right before the financial crisis, the government had already planned a fiscal stimulus of 3.5 percent of GDP. In the three months starting in December 2008, the government announced three additional fiscal stimulus packages amounting to 2 percent of GDP for 2009-10 that included government-guaranteed funds for infrastructure, tax cuts, salary hikes for public servants, and credit to small and medium enterprises and exporters (Kumar and Vashisht 2009). The Reserve Bank of India lowered the cash reserve ratio from 9 percent in October 2008 to 5 percent in March 2009, the policy repo rate from 9 percent in September 2008 to 4.75 percent in June 2009, and the reverse repo rate from 6 percent to 3.25 percent over the same period. The Indian rupee depreciated in a controlled manner as the central bank intervened in foreign exchange markets by drawing down 13 percent of reserves between September 2008 and March 2009.

After the 2009 global recession, fiscal and monetary stimulus by the central government were only partially unwound, and in 2016 policy loosening resumed. Nevertheless, in 2018, the fiscal deficit fell back below precrisis levels, to 6.7 percent of GDP, compared with an average deficit of 8.2 percent of GDP during

BOX 3.1 EM7 performance during the global recession *(continued)*

FIGURE B3.1.3 Credit and capital inflows to EM7

EM7 central banks provided liquidity to support their domestic banking sectors. Capital inflows to EM7 increased with the exceptions of the Russian Federation and Turkey.



Sources: Araujo et al. (2015); International Monetary Fund; World Bank.
Note: The EM7 are the seven largest emerging market economies.
A.B. Percentage point of GDP change over previous year. Blue horizontal lines are 2002-07 averages. Bank credit to the private sector in China surged 22 percentage points of GDP in 2009.
C.D. Capital inflows comprise direct investment, portfolio investment, other investment, and derivatives. Blue horizontal lines are 2006-07 averages.

2002-07. Government debt also declined, from 80 percent of GDP on average during 2002-07 to 70 percent of GDP in 2018.

Mexico was the hardest-hit country in Latin America, in part because it was the most exposed to the U.S. economy, the epicenter of the financial crisis. It suffered its worst recession in six decades. Output contracted by 5.3 percent in 2009 after growing 2.4 percent a year in 2002-07; however, the economy rebounded sharply, with 5.1 percent growth in 2010, following the implementation of monetary and fiscal stimulus measures and large liquidity injections into foreign exchange and credit markets.

The crisis hit Mexico hard and fast. Exports fell by 1.0 percent in 2008 and 10.9 percent in 2009 as demand from the United States, which accounted for four-fifths of Mexican exports, collapsed. Declining prices and production in the oil

BOX 3.1 EM7 performance during the global recession *(continued)*

sector, the largest source of government revenue, exacerbated fiscal and balance-of-payments pressures. Capital inflows declined from 6.0 percent of GDP in 2007 to 3.4 percent of GDP in 2008 and 3.5 percent of GDP in 2009, but remittances held up well, falling by only 0.3 percentage point of GDP to 2.3 percent in 2008. As investors rebalanced their portfolios away from EMDEs, Mexico experienced a run on the peso, which caused a steep depreciation of 25 percent in effective terms between September 2008 and March 2009. The depreciation caused severe U.S. dollar liquidity shortages for large corporations that had engaged in complex derivative operations.

The Bank of Mexico intervened swiftly to restore orderly functioning of financial markets. It carried out U.S. dollar auctions, paid interest on U.S. dollar deposits at the central bank to disincentivize the liquidation of positions, and made use of a swap arrangement with the U.S. Federal Reserve. Between September 2008 and March 2009, the central bank drew down 14 percent of its foreign reserves. It also expanded the range of eligible assets that could be used as collateral to support funding for domestic banks. In the first half of 2008, the policy focus was to contain inflation and mitigate the impact of higher food prices (IMF 2009b). The central bank raised the policy rate by 0.75 percentage point over the summer months but subsequently loosened its policy stance, lowering its policy rate from 8.25 percent in December 2008 to 4.50 percent in August 2009. The government also increased credit lines with the World Bank, International Monetary Fund, and Inter-American Development Bank. Notwithstanding sharply lower government revenues from the oil sector, in 2009 the government implemented a fiscal stimulus package amounting to 1.7 percent of GDP, which expanded infrastructure spending, energy subsidies, and social safety nets (Celasun et al. 2015).

After the global recession, the fiscal stimulus was only partially unwound, leaving a fiscal deficit of 2.3 percent of GDP in 2018, down from 4.1 percent in 2009 but higher than the average of 1.7 percent in the precrisis years 2002-07. By end-2018, government debt had increased by about 14 percentage points of GDP from the precrisis average of 40 percent of GDP.

Turkey suffered a severe output contraction during the 2009 global recession. Growth faltered from 7.1 percent a year on average in 2002-07 to 0.8 percent in 2008 and -4.7 percent in 2009. It rebounded strongly to 8.5 percent in 2010, reflecting the resilience of the Turkish banking system as well as aggressive policy stimulus.

Capital-intensive goods—motor vehicles, electrical machinery, ferrous metals, petroleum products, and industrial machinery—have constituted the bulk of Turkey's exports (70 percent in 2008). As demand for durable goods from the European Union (Turkey's largest export market) collapsed during the recession,

BOX 3.1 EM7 performance during the global recession *(continued)*

export growth declined from an average of 8 percent a year in 2002-07 to 3.8 percent in 2008 and -3.7 percent in 2009. Capital inflows plunged virtually to zero (0.3 percent of GDP in 2009) from 9.2 percent of GDP in 2007. The Turkish lira depreciated by 19 percent in effective terms between September 2008 and March 2009.

Turkey's banking system remained resilient because it had limited exposure to cross-border financing, wholesale funding, and foreign currency-denominated liabilities (IMF 2010b). As shares of total liabilities in 2008, funding from customer deposits was stable at 62 percent whereas foreign currency liabilities had declined to 35 percent from 45 percent in 2003. Turkish banks also had solid profitability and low levels of nonperforming loans, which had decreased from 11.5 percent of total loans outstanding in 2003 to 3.7 percent in 2008.

The Central Bank of Turkey took various measures to ensure the orderly functioning of foreign exchange and credit markets. It used foreign reserves to support the foreign exchange liquidity needs of the banking system, acted as an intermediary in the foreign exchange deposit market, and doubled the export rediscount credit limit to facilitate lending to various industries. Between September 2008 and March 2009, the central bank drew down 13 percent of its foreign reserves. The central bank cut the policy rate from 16.75 percent in October 2008 to 6.50 percent in December 2009 and also lowered reserve requirement ratios. Turkey's fiscal balance had greatly improved in the years before the crisis, which allowed the government to implement a sizable fiscal stimulus package for 2009-10 equivalent to 5.6 percent of GDP, including increased infrastructure spending, reductions in social security contributions, salary hikes for public servants, and temporary tax cuts (Rawdanowicz 2010).

Since 2009, Turkey has been struggling to curb its rising spending and maintained negative real policy interest rates. This situation has resulted in double-digit inflation and rapid credit growth since 2017. The fiscal deficit decreased from 5.9 percent of GDP in 2009 to 3.6 percent in 2018. Government debt has declined from 44 percent of GDP to 29 percent over the same period.

Commodity-exporting EM7: Brazil, Indonesia, and Russia

The EM7 commodity exporters that were close trading partners of China—Brazil and Indonesia—benefitted from China's resilience through the 2009 global recession. Brazil and Indonesia also entered the recession with ample policy room and so were able to provide decisive policy stimulus, whereas Russia's policy response was delayed, constrained by high inflation and a rapidly deteriorating fiscal position.

Brazil. Output contracted marginally, by 0.1 percent, in 2009, following robust growth of 3.9 percent in 2002-07—a contraction much less severe than in the

BOX 3.1 EM7 performance during the global recession *(continued)*

1980s debt crisis. Growth rebounded swiftly to 7.5 percent in 2010. This resilience reflected strong recovery of demand from China (Brazil's largest export destination) as well as the use of foreign exchange intervention and monetary and fiscal stimulus.

As a large commodity exporter with highly open and internationally integrated financial markets, Brazil is vulnerable to external shocks. Export growth collapsed from an average of 8.8 percent a year in 2002-07 to 0.4 percent in 2008 and -9.2 percent in 2009. Capital inflows also dropped sharply, from 8.9 percent of GDP in 2007 to 3.4 percent of GDP in 2008 and rebounded slightly to 5.6 percent of GDP in 2009. The decline in commodity prices and drop in capital inflows led to a depreciation of the Brazilian real by 15 percent between September 2008 and March 2009. Although this depreciation was moderate compared to previous crises, it magnified the effects of corporate sector exposure to foreign currency debt. Brazil also faced a severe U.S. dollar liquidity squeeze.

Unlike in previous crises, Brazil entered the 2009 global recession with ample policy space. It had accumulated large foreign reserves (75 percent of external debt in 2007) and narrowed the fiscal deficit to 1.8 percent of GDP in 2007. The Central Bank of Brazil drew on its reserves to intervene heavily in foreign exchange markets to stabilize the exchange rate and to facilitate export financing and corporate debt rollover. It sold U.S. dollars in the spot market and in repo auctions, introduced foreign exchange loan auctions for banks to support trade finance, and offered foreign exchange swaps to Brazilian companies to roll over foreign currency debt. Between September 2008 and February 2009, the Central Bank drew down 9 percent of its foreign reserves. In October 2008, it established a currency swap arrangement with the U.S. Federal Reserve. The Central Bank reduced the policy interest rate from 13.75 percent in December 2008 to 8.75 percent in August 2009, and also lowered reserve requirements. Fiscal stimulus in 2009 amounted to 3.2 percent of GDP. This stimulus was partly channeled through the Brazilian Development Bank—which doubled its balance sheet between 2007 and 2009—to ease credit conditions. The stimulus package also included support for social programs, expansion of unemployment insurance, and provision of low-cost housing (Celasun et al. 2015).

Failure to unwind fiscal stimulus after its effective use in 2010 resulted in an erosion of policy space, contributing to the recession in 2015-16 and increasing the buildup of debt. The fiscal deficit has deteriorated markedly since the recession, widening from 3.2 percent of GDP in 2009 to 10.2 percent in 2015, before a limited improvement to 6.8 percent in 2018. Government debt has also been on the rise, increasing from 65 percent of GDP in 2009 to 88 percent in 2018.

BOX 3.1 EM7 performance during the global recession *(continued)*

Indonesia emerged from the global recession largely unscathed. Output grew by 6.0 percent in 2008—above its 2002-07 annual average of 5.3 percent—and merely slowed to 4.6 percent in 2009 before rebounding to 6.2 percent in 2010. This resilience reflected strong precrisis economic fundamentals as well as timely policy stimulus and the rapid rebound in China, Indonesia's largest export destination.

After the 1997-98 Asian financial crisis, Indonesia had vastly improved its macroeconomic framework. By 2007, it had a current account surplus and large foreign reserves, and it had trimmed external debt considerably, reduced financial sector vulnerabilities, and adopted a flexible exchange rate regime. Exports fell sharply, by 9.7 percent, in 2009, but capital inflows in 2008-09, at 3.3 percent of GDP, moderated only slightly compared to 2007, when they stood at 4.0 percent of GDP.

The central bank took proactive measures to address liquidity concerns during 2008-09. It lowered the overnight repurchase rate by 2.5 percentage points, lengthened the tenor of foreign exchange swaps from seven days to one month, and reduced the minimum reserve requirements for both rupiah and foreign exchange deposits. It lowered the policy interest rate from 9.5 percent in November 2008 to 6.5 percent in September 2009, in contrast to the hike in rates needed to defend the rupiah during the Asian crisis. The government also executed spending measures in a timely way (IMF 2009c). In contrast to fiscal consolidation during the Asian crisis, the Indonesian government had fiscal space that allowed it to undertake stimulus in 2009 amounting to 1.5 percent of GDP, including both tax cuts and social safety net expansion (Doraisami 2011).

Since the 2009 global recession, Indonesia has been struggling to unwind the fiscal stimulus undertaken during the crisis. Government debt has increased, though only slightly, from 26 percent of GDP in 2009 to 29 percent in 2018.

Russia. As a result of the dual shocks of declining oil prices and capital flow reversals, Russia was hardest hit by the global recession and its repercussions among the EM7 countries. Output growth collapsed from 7.0 percent a year, on average, in 2002-07 to -7.8 percent in 2009—a steeper contraction than occurred in the country's 1998 crisis. Growth rebounded to 4.5 percent in 2010, significantly below its prerecession rate. Russia's subdued recovery reflected its undiversified economy and high dependence on oil, weak banking system, poor governance and low business confidence, and limited effectiveness of policy stimulus.

Russia is a major oil producer, accounting for 12 percent of global oil production in 2007. Oil exports fell by 5 percent in 2009, as demand weakened and oil prices declined. Capital inflows dried up quickly, declining from 16.6 percent of GDP in

BOX 3.1 EM7 performance during the global recession *(continued)*

2007 to 6.6 percent of GDP in 2008 and 1.2 percent of GDP in 2009. This drop in capital inflows, combined with the weak domestic banking system, resulted in a credit crunch for Russian corporations. The Russian ruble depreciated by 19 percent in effective terms between September 2008 and March 2009, despite heavy central bank intervention in foreign exchange markets.

The initial policy response was aimed at avoiding a disorderly currency depreciation and maintaining financial sector stability (IMF 2009d). The Central Bank of Russia resisted sharp depreciations of the ruble by drawing down one-third of its foreign reserves between September 2008 and March 2009, but eventually allowed more flexible adjustments to take place. It also delayed monetary policy easing until inflation and capital outflows had somewhat stabilized, reducing the policy rate from 13.00 percent in March 2009 to 7.75 percent in June 2010. The fiscal policy response was constrained by a rapidly deteriorating fiscal position resulting from the drop in oil revenues and by rising inflation as a result of the depreciation. The initial fiscal stimulus was modest, at 1.8 percent of GDP, and consisted of the mobilization of funds for state-owned banks to extend credit to corporations in the natural resources sector and metal industries to repay external debt. In 2009, the government announced a larger stimulus package amounting to 6.4 percent of GDP, which prioritized tax cuts and transfer payments to affected households and sectors, but had limited effects in stimulating the economy (Ponomarenko and Vlasov 2010). The fiscal balance deteriorated from a surplus of 6.2 percent of GDP in 2007 to a deficit of 5.2 percent of GDP in 2009.

After 2009, Russia successfully unwound its large fiscal stimulus, with the fiscal balance restored to a surplus of 2.8 percent of GDP in 2018. Government debt rose from 10 percent of GDP in 2009 to 14 percent in 2018, but it remains comparatively small.

sterilized interventions of EMDEs in foreign exchange markets prompted accusations of protectionism (Dadush and Stancil 2011; Portes 2010).

Robust domestic demand growth. Low global borrowing costs, combined with accommodative monetary policy, supported EMDE financial markets and domestic demand (figure 3.1). Benefitting from a broad-based global decline in inflation, almost half of EMDEs had interest rates that were negative in real terms in at least one year during 2002-07.[5] EMDE equity market valuations, as reflected by the Morgan Stanley

[5] Based on data for 135 EMDEs.

Capital International (MSCI) index, more than quadrupled during 2002-07; EMDE bond spreads, as captured by the J.P. Morgan Emerging Market Bond Index (EMBI), and sovereign credit default swap (CDS) spreads in major EMDEs more than halved between January 2005 and June 2007. Benign financing conditions encouraged strong investment growth (12 percent a year, on average, during 2002-07) in EMDEs. More than one-quarter of EMDEs witnessed an investment surge in at least one year during 2002-07.[6] Most of these investment surges were fueled by credit booms (Ohnsorge and Yu 2016). Meanwhile, private consumption growth remained robust (6.3 percent a year, on average, during 2002-07) as household incomes grew and employment opportunities expanded.

Faster-than-expected decline in global poverty. In September 2000, the international community adopted the Millennium Development Goals. Among them was the goal to halve the share of the global population living on less than $1.25 a day between 1990 and 2015. As a result of rapid EMDE growth, the goal was achieved five years earlier than targeted, in 2010. China's rapid expansion accounted for about three-fifths of this decline in global poverty, and the remainder mostly reflected progress in Brazil, India, Indonesia, and Pakistan (World Bank 2016b). The number of low-income countries (LICs) declined to 49 in 2007 from 64 in 2001. Rapid LIC growth (4.6 percent a year, on average, during 2001-07), supported by several factors—such as the commodity price boom, debt relief, receding armed conflicts, and trade integration—facilitated their transition to middle-income status (World Bank 2019a).

During the global recession: Resilience

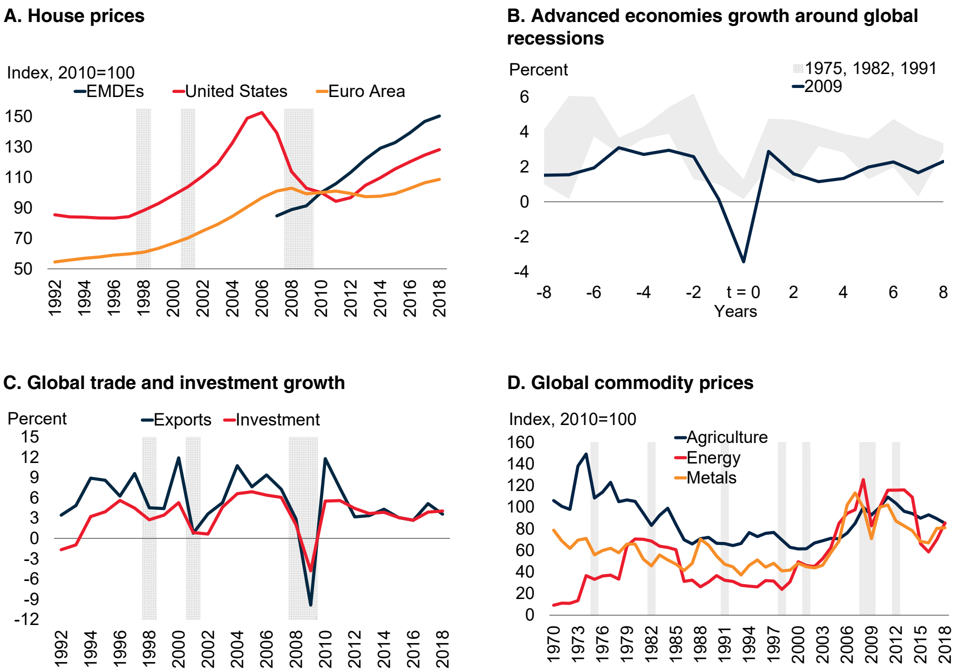
The global recession affected EMDEs through trade and financial channels. In many EMDEs, trade collapsed. The plunge in commodity prices weighed on growth in commodity-exporting countries, and reversals of financial flows, especially portfolio investment and cross-border bank lending, led to severe credit crunches. That said, EMDEs weathered the recession better than advanced economies did. First, EMDEs' linkages with the financial institutions and markets at the center of the crisis in advanced economies were limited. Second, services trade and flows of FDI, remittances, and foreign aid were resilient. Third, swift policy actions were taken to stabilize financial systems and stimulate aggregate demand.

Global financial crisis and global recession. Triggered by defaults in the U.S. subprime mortgage market, the U.S. financial system came under increasingly severe stress in the second half of 2007 and early 2008, culminating in a collapse in housing prices in late 2008 (figure 3.2). The bankruptcy of Lehman Brothers in September 2008 triggered a run on key funding markets. This situation exposed the fragility of banks that were dependent on short-term wholesale funding, which had been essential to the rapid growth of securitization, and also reflected inadequate regulatory oversight (Duffie 2019).

[6] Based on data for 132 EMDEs. An investment surge is defined as an episode during which the real gross fixed investment-to-GDP ratio is at least one standard deviation above the Hodrick-Prescott-filtered trend (Ohnsorge and Yu 2017; World Bank 2016a).

FIGURE 3.2 Developments around global recessions and downturns

Advanced economies were hit hard by the global financial crisis, which was triggered by problems in the subprime mortgage market in the United States. The recession in advanced economies spilled over to emerging market and developing economies through trade and financial linkages.



Sources: International Monetary Fund; World Bank.
Note: EMDEs = emerging market and developing economies.
A.C.D. Shaded areas indicate global recessions and slowdowns.
B. Shaded areas are the range of output growth in previous global recessions as defined by Kose and Terrones (2015).

Amid heightened concerns about the solvency of the financial system, credit markets froze as liquidity dried up in interbank funding markets; some banks experienced deposit runs. A severe U.S. recession ensued, during which U.S. output contracted by 4.0 percent between 2008Q3 and 2009Q2—more than in any other U.S. recession in the post-World War II period. Growth in advanced economies dropped from 2.6 percent in 2007 to -3.4 percent in 2009, resulting in a global recession. Global per capita GDP contracted by 2.9 percent in 2009—more than in any previous global recession since the end of World War II (Bolt et al. 2018).

EMDEs generally proved remarkably resilient, however, in part because some of them had limited vulnerabilities to global shocks and effectively used the policy room accumulated before the global recession for countercyclical policies. Among the EM7, growth remained robust during the global recession in China and India, supporting activity in their trading partners Brazil and Indonesia, but output contracted sharply in Mexico, the Russian Federation, and Turkey (box 3.1).

BOX 3.2 Regional developments during the global recession

This box documents how the six regions of emerging markets and developing economies (EMDEs) fared during the global financial crisis and recession. Although EMDEs as a whole weathered the global recession well, the effects varied across regions (figure B3.2.1). Most countries in Europe and Central Asia (ECA) suffered severe output contractions, particularly those that were highly dependent on cross-border financing. Countries that were heavily reliant on commodity export receipts for fiscal revenues also fared relatively badly, such as countries in Latin America and the Caribbean (LAC) and in Middle East and North Africa (MNA). Elsewhere, EMDEs withstood the crisis better because they were less exposed to the financial turmoil and recession in advanced economies, and also because they pursued countercyclical policies.

East Asia and Pacific (EAP) continued to expand throughout the recession, although at reduced rates (7.7 percent in 2009 compared to 12.2 percent in 2007). This growth contrasts sharply with EAP's experience a decade earlier during the Asian financial crisis, partly thanks to lessons learned for macroeconomic policy management (Rhee and Posen 2013). In particular, this resilience reflected the heavy use of stabilization policies to support activity in the region's large economies, which had been made possible by the policy room accumulated before the more recent crisis, and also limited exposure to risks in international financial markets.

Although growth in China and Indonesia slowed in 2009, it was still relatively high, at 9.4 percent and 4.6 percent, respectively, and near precrisis rates. Growth in both countries had remained high thanks to robust consumption and investment growth, supported by fiscal and monetary loosening. In countries dependent on capital- and technology-intensive exports, such as Malaysia and Thailand, output contracted by 1.5 percent and 0.7 percent, respectively, as global demand for consumer durables collapsed (Goldstein and Xie 2009). Compared to similar export-oriented countries in ECA (Turkey) and LAC (Mexico), these output declines were mild because the financial systems in these countries were less integrated into U.S. and euro area financial systems and so avoided financial distress. In Myanmar and Vietnam, growth remained robust in 2009, at 10.6 percent and 5.4 percent, respectively, because their principal exports (clothing, garments, and textiles) characterized by labor-intensive production and income-inelastic demand, declined only moderately.

ECA took the largest hit, with regional output contracting by 5.2 percent in 2009, following a 7.3 percent expansion in 2007. The withdrawal of Western European banks had a notable effect, causing a severe credit crunch (Tong and Wei 2009; World Bank 2011). Developments in ECA during the 2009 global recession resembled some of the features of EAP economies after the Asian

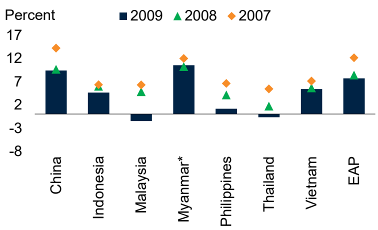
Note: This box was prepared by Wee Chian Koh.

BOX 3.2 Regional developments during the global recession *(continued)*

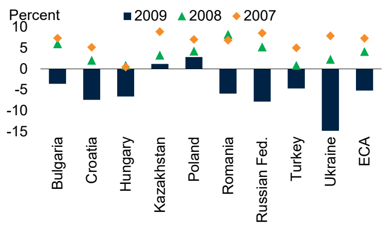
FIGURE B3.2.1 Growth in EMDE regions

Europe and Central Asia experienced the largest growth setback during the recession, partly owing to a sharp withdrawal of cross-border bank financing. Latin America and the Caribbean also experienced a decline in regional output as exports collapsed amid the plunge in commodity prices. East Asia and Pacific and South Asia fared much better thanks to swift policy stimulus implemented in the largest economies in these regions. In Middle East and North Africa and Sub-Saharan Africa, relatively weak trade and financial linkages with economies in deep recessions limited the impact of the crisis on growth.

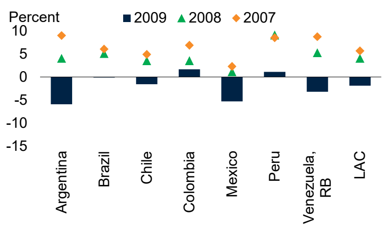
A. East Asia and Pacific



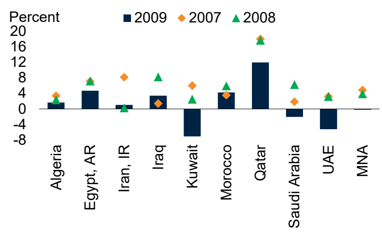
B. Europe and Central Asia



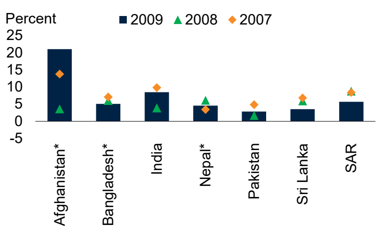
C. Latin America and the Caribbean



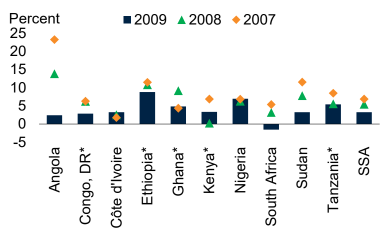
D. Middle East and North Africa



E. South Asia



F. Sub-Saharan Africa



Source: World Bank.

Note: * denotes classification as a low-income country in 2009. Congo, DR = Democratic Republic of Congo; EAP = East Asia and Pacific; ECA = Europe and Central Asia; Egypt, AR = Arab Republic of Egypt; Iran, IR = Islamic Republic of Iran; LAC = Latin America and the Caribbean; MNA = Middle East and North Africa; Russian Fed. = Russian Federation; SAR = South Asia; SSA = Sub-Saharan Africa; UAE = United Arab Emirates.

BOX 3.2 Regional developments during the global recession *(continued)*

financial crisis in 1998 (World Bank 2018b). Countries in ECA had relied much more heavily on loans from foreign banks (especially Western European banks) than other EMDE regions had (Balakrishnan et al. 2009). Contractions were particularly severe in Bulgaria, Croatia, Romania, and Ukraine, with growth rates falling by more than 10 percentage points between 2007 and 2009. Ukraine, which registered the largest growth decline of 14.8 percent in 2009, experienced a collapse in exports (by 22 percent) and sharp capital flow reversals; in particular, cross-border claims on Ukraine fell by 8.7 percentage points of gross domestic product (GDP). Meanwhile, Bulgaria, Croatia, and Romania were exposed to large currency and maturity mismatches (Ranciere, Tornell, and Vamvakidis 2010).

Hungary, which had a strong export orientation, particularly in car manufacturing, with a concentration of exports to the euro area, experienced an output contraction of 6.6 percent in 2009 owing to a collapse in exports (ECB 2010). In the Russian Federation, output contracted by 7.8 percent in 2009 as a result of deep recessions in trading partners and exacerbated by a temporary plunge in oil prices. Kazakhstan continued to grow, but at a much reduced pace because of lower oil revenues. Alone in the European Union, Poland avoided a contraction, in part because of fiscal stimulus (largely infrastructure spending) that had been approved before the global financial crisis.

LAC, a region heavily dependent on commodity exports, saw its regional output contract by 1.9 percent in 2009 after a solid expansion of 5.7 percent in 2007, largely because of adverse terms of trade shocks. GDP declined by 5.9 percent in Argentina and by 3.2 percent in Republica Bolivariana de Venezuela amid collapses in commodity exports. Similarly, in Chile, Colombia, and Peru, growth slowed or turned negative owing to falls in commodity exports. These countries fared better than Argentina and República Bolivariana de Venezuela, thanks to better macroeconomic policies, including independent monetary policies delivering low inflation and flexible exchange rate regimes (De Gregorio 2014). Mexico's economy contracted by 5.3 percent in 2009 as manufacturing exports to the United States, which accounted for four-fifths of its total exports, plunged. Brazil averted a contraction largely owing to supportive policy measures, including large-scale foreign exchange interventions that were made possible by exceptionally large reserves accumulated during 2001-07 (equivalent to 60 percentage points of total external debt; Ocampo 2009).

MNA experienced only a small regional output contraction, of 0.2 percent, in 2009, compared to a robust expansion of 4.8 percent in 2007. This small contraction, however, masks a wide difference between oil exporters and importers. Growth in oil-exporting countries slowed markedly as declines in

BOX 3.2 Regional developments during the global recession *(continued)*

global oil consumption and prices were only partially offset by large fiscal stimulus. The steepest growth declines in 2009 were registered in Kuwait (-7.1 percent), the United Arab Emirates (-5.2 percent), and Saudi Arabia (-2.1 percent) despite expansionary fiscal policies. In contrast, oil-importing countries continued to grow moderately in 2009 (for example, the Arab Republic of Egypt by 4.7 percent, and Morocco by 4.2 percent), reflecting limited international financial and trade integration of this part of the region (World Bank 2016a).

South Asia was relatively sheltered from the adverse effects of the global recession because the region had less integrated trade and financial linkages with countries that suffered steep recessions. Regional growth merely slowed to 5.7 percent in 2009 from 8.4 percent in 2007. India's growth remained robust at 8.5 percent in 2009, reflecting resilient financial inflows (FDI and remittances) as well as large policy stimulus. In Bangladesh, Pakistan, and Sri Lanka, growth declined only moderately owing partly to high intraregional trade and the composition of exports, which consists mainly of goods like cotton, textiles, and apparels characterized by labor-intensive production and income-inelastic demand. Remittance inflows to these countries also remained resilient during the crisis, as did official development assistance (ODA).

Sub-Saharan Africa (SSA), home to 29 of the 40 low-income countries in 2009, continued to grow, although more slowly than before the global recession (5.4 percent growth in 2008 and 3.3 percent in 2009, compared to 6.9 percent in 2007). The recession came on top of food and energy price spikes through mid-2008, putting severe pressure on food- and oil-importing countries (Laborde, Lakatos, and Martin 2019). The subsequent plunge in commodity prices led to a growth slowdown in most commodity-exporting countries (World Bank 2015d). Nonetheless, the region displayed strong resilience, in part due to its low level of international financial integration (Louis, Léonce, and Taoufik 2009). Only eight out of the 48 countries in SSA registered an output decline in 2009 (and only four in 2008). Trade was one of the key channels through which the crisis affected the region. In Botswana, the Democratic Republic of Congo, Nigeria, and South Africa, exports fell by more than 15 percent in 2009. In other countries, such as Lesotho, Liberia, São Tomé and Príncipe, and Sierra Leone, declines in ODA or remittance inflows contributed to slower growth. Countries that had the capacity to implement fiscal stimulus packages, such as Gabon, Kenya, Nigeria, and Tanzania, escaped the crisis relatively unscathed (Osakwe 2010). The fiscal injections were mostly used to finance infrastructure and other public investments.

Global trade collapse. The contraction in global output was accompanied by a collapse in global trade, with export growth dropping from 7.3 percent in 2007 to -9.9 percent in 2009 (figure 3.2). The countries that showed the most pronounced export contractions were those most heavily reliant on manufacturing exports of goods with high income elasticities of demand, especially in the electronics and motor vehicle sectors, because spending on consumer durables plunged in advanced economies (Goldstein and Xie 2009). The trade collapse was also particularly pronounced in those countries that relied heavily on arm's length trade rather than intrafirm trade (Lakatos and Ohnsorge 2017). Thus, EMDEs in EAP (Indonesia, Malaysia, Thailand), ECA (Hungary, Ukraine), and Mexico that exported capital- and technology-intensive products experienced double-digit export collapses (box 3.2).

In contrast, export declines were more modest (below 5 percent) in South Asia (SAR; for example, Bangladesh and India), because these EMDEs relied more on exports of nondurable consumer goods with lower income elasticities of demand. The global trade collapse was compounded by shrinking trade finance. In LAC, for instance, in the first quarter of 2009, banks renewed just 50-60 percent of the previous year's trade credit lines (BIS 2009). Amid this trade collapse, EMDE manufacturing sectors shed large numbers of jobs (Banerji et al. 2014). Services exports of EMDEs were considerably more resilient than goods exports, although a decline in tourism dampened activity in EMDEs such as those in the Caribbean islands and some Sub-Saharan African (SSA) countries (Mauritius, Seychelles) where tourism is important.

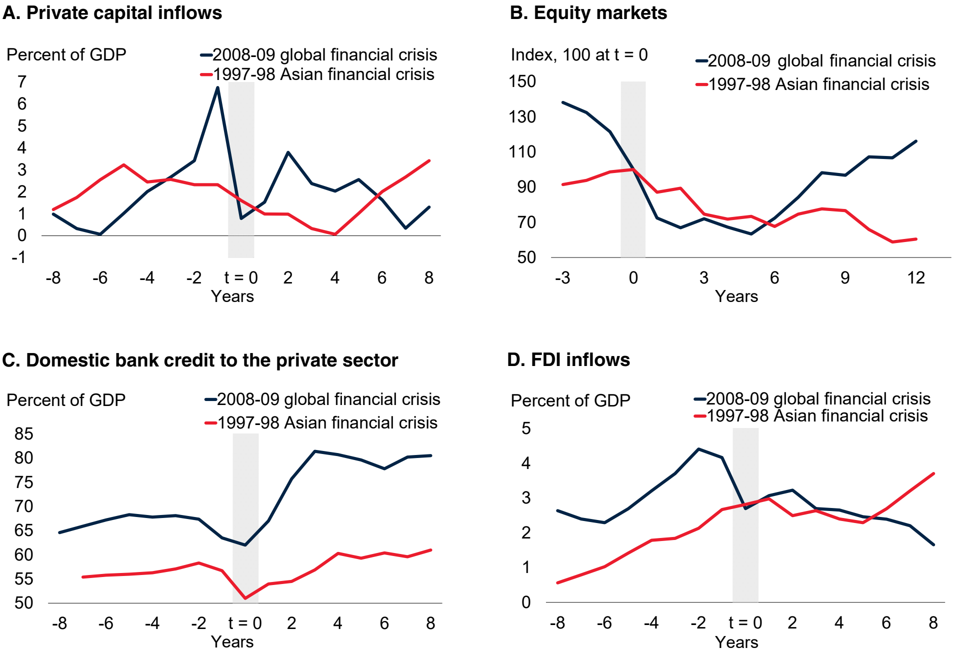
Commodity price collapse. The global recession was accompanied by a short-lived collapse in commodity prices, particularly for energy and industrial metals. Commodity exporters, especially those that lack economic diversification, faced sharp drops in export revenues and deteriorations in their external and fiscal positions. In major oil-exporting countries such as Saudi Arabia, Nigeria, Russia, and República Bolivariana de Venezuela, the value of exports declined by more than one-third in 2009. Saudi Arabia's current account surplus narrowed by 20 percentage points of GDP; Russia's fiscal position flipped from a surplus of 5.6 percent of GDP in 2008 to a deficit of 5.2 percent of GDP in 2009. In part as a result of the commodity price collapse, headline inflation in EMDEs fell abruptly, averaging 4 percent in 2009 compared to 10 percent in the previous year.

Financial market turmoil and sudden stops. Portfolio investment and foreign lending flows to EMDEs fell steeply in 2008, reflecting a broad-based flight to safety in response to U.S. financial stress (Tong and Wei 2009; figure 3.3). In the fourth quarter of 2008, cross-border lending to EMDEs from banks declined by more than 60 percent of the cumulative inflows during the preceding three quarters (BIS 2009).[7] Between June 2007 and December 2008, the EMBI bond spread rose nearly 600 basis points, the MSCI equity market index halved, and average CDS spreads in major EMDEs increased by

[7] Cross-border bank lending to EMDEs had been dominated by Western European banks whereas portfolio investments were primarily from investors in North America. In European EMDEs, loans from foreign banks accounted for more than 50 percent of GDP, compared to an average of 20 percent of GDP in other EMDE regions (Balakrishnan et al. 2009).

FIGURE 3.3 Financial developments in EMDEs

Capital flows to EMDEs dropped sharply during 2008-09 and 1997-98, with portfolio and other investment flows being particularly volatile. Equity prices in EMDEs plunged. However, domestic bank credit remained resilient.



Sources: Araujo et al. (2015); Bank for International Settlements; Haver Analytics; International Monetary Fund; World Bank.
Note: EMDEs = emerging market and developing economies; FDI = foreign direct investment.
A. Private capital flows include portfolio investment, other investment, and financial derivatives. t = 0 in the crisis episodes are 1998 and 2008.
B. t = 0 in the crisis episodes are July 1997 and September 2008.
C.D. t = 0 in the crisis episodes are 1998 and 2009.

375 basis points. Particularly affected by rising financing costs and reduced external finance were countries with large current account deficits, especially in ECA, where the sudden decline in capital flows led to sharp exchange rate depreciations. During September 2008-March 2009, the currencies of several of these EMDEs (Hungary, Mexico, Poland, Ukraine) depreciated by more than 20 percent in effective terms.

Severe liquidity and solvency pressures, exacerbated by currency and maturity mismatches, also afflicted financial systems in EMDEs, particularly those dependent on cross-border credit from European banks and short-term borrowing in foreign currencies, such as Bulgaria, Croatia, and Romania (Binici and Yörükoğlu 2011; Ranciere, Tornell, and Vamvakidis 2010).[8] In EMDEs with more robust external

[8] By contrast, EAP and LAC had limited currency and maturity mismatches (Goldstein and Xie 2009). Taking lessons from previous crises, they also accumulated large foreign reserves to insure against worsening external financing conditions.

positions, such as Brazil, Malaysia, and South Africa, capital flow declines significantly affected the corporate sector: corporations that had borrowed heavily in international debt and credit markets faced difficulties in rolling over their debt.

Resilient domestic bank credit. Despite sharp declines in cross-border bank lending, EMDE domestic bank credit to the private sector continued to grow, albeit at reduced rates. At the peak of the crisis—between the fourth quarter of 2008 and the first quarter of 2009—year-on-year credit growth still averaged 6.7 percent. Domestic bank credit rose swiftly thereafter, reaching 80 percent of GDP by the end of 2009, higher than the precrisis average of 64 percent of GDP in 2002-07 (figure 3.3). Domestic credit growth in EMDEs was supported by monetary policy accommodation as well as by generally resilient EMDE banking systems that entered the crisis with solid profitability, high regulatory capital ratios (exceeding the 8 percent Basel I threshold), and low non-performing loan ratios.

Moderation in longer-term capital flows. FDI inflows into EMDEs, in relation to GDP, declined moderately in 2008 but remained higher than during the Asian financial crisis. FDI fell more sharply in 2009 and, after a brief rebound, continued to decelerate during the past decade (figure 3.3). Remittance inflows to EMDEs fell less than other financial inflows, but the decline dampened activity in the EMDEs most reliant on remittances.[9] Although stable in most EMDEs, official development assistance (ODA) flows to a few ODA-dependent countries (Liberia, São Tomé and Príncipe, Sierra Leone) dropped by more than 9 percentage points of GDP as some donors allocated fewer resources to aid (Allen and Giovannetti 2011).

Expected crisis impact on EMDEs: De-coupling. At the onset of the crisis, some analysts and commentators expected EMDEs to be largely spared its adverse effects (Akin and Kose 2007; IMF 2007). Many EMDEs entered the crisis with ample foreign exchange reserves, moderate debt and deficits, room for countercyclical policies, improved banking systems, and growing intraregional trade. With business cycles already less synchronized between advanced economies and EMDEs, despite rapid trade and financial integration, there seemed to be a prospect of "de-coupling" of EMDEs from advanced economy stress (Imbs 2010; Kose and Prasad 2010). Although the financial market stress and recession in advanced economies did spill over to EMDEs through trade and financial linkages, and to LICs through reduced remittances and aid, EMDEs were surprisingly resilient during the global recession.

Impact on EMDEs: Relatively moderate growth slowdown. EMDE output growth slowed from 8.2 percent in 2007 to 5.9 percent in 2008 and 1.7 percent in 2009 (figure 3.4). Although steep, this slowdown was somewhat milder than during some previous

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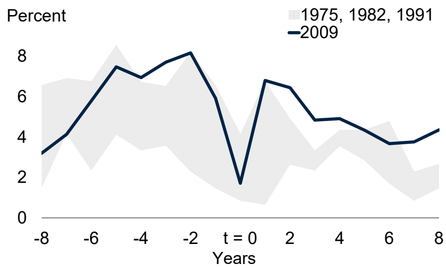
[9] For example, in LAC, a sharp domestic currency depreciation dampened the impact of slowing dollar-denominated remittances (Ocampo 2009). The countries that experienced marked declines in remittances in 2007-09 were Bosnia and Herzegovina, El Salvador, Jamaica, Lesotho, Liberia, the Marshall Islands, and the Republic of Yemen. Remittances account for between 10 and 25 percent of GDP in these economies.

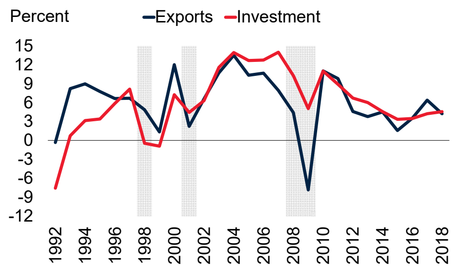
FIGURE 3.4 EMDE growth during the global recession

EMDEs weathered the global recession relatively well. Countries with stronger precrisis macroeconomic fundamentals and those with more aggressive countercyclical policies experienced milder slowdowns.

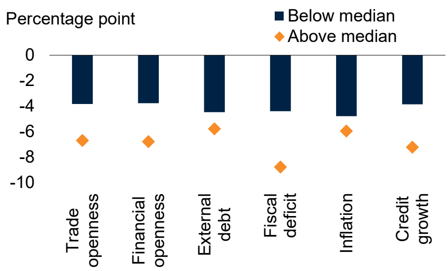
A. EMDE growth around global recessions



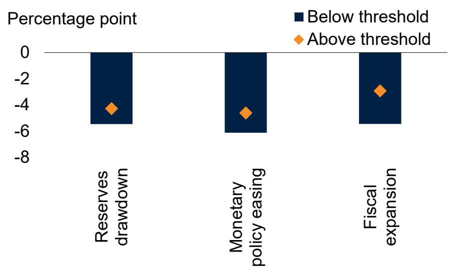
B. EMDE trade and investment growth



C. EMDE growth slowdowns in 2007-09, by precrisis structural indicators



D. EMDE growth slowdowns in 2007-09, by policy intervention



Sources: Chinn and Ito (2006); Haver Analytics; World Bank.

Note: EMDEs = emerging market and developing economies.

A. Shaded areas are the range of output growth in previous global recessions (that is, t = 0 for year 1975, 1982, and 1991) as defined by Kose and Terrones (2015). t = 0 shown in the blue line is for year 2009.

B. Shaded bars indicate global recessions and slowdowns.

C. Growth slowdown is the GDP growth differential between 2007 (precrisis) and 2009. Trade openness is proxied by trade as a share of GDP, and financial openness is based on the Chinn-Ito index. External debt and fiscal deficit are in percent of GDP. Inflation is the annual change in the consumer price index. Credit growth is the annual change in domestic credit to the private sector.

D. Growth slowdown is the GDP growth differential between 2007 (precrisis) and 2009. The threshold for reserves drawdown is 30 percentage points of the reserve-to-debt ratio. Monetary easing refers to the lowering of interest rates, with a 0.5-percentage-point threshold. Fiscal expansion refers to growth in real government consumption expenditure, with a 10-percentage-point threshold.

C.D. Depending on data availability for each indicator, the number of EMDEs ranges from 80 to 154.

global recessions, with three-fifths of EMDEs avoiding output contractions.[10] Exports shrank by 7.9 percent in 2009, in a sharp reversal from their robust 10 percent average annual growth in 2002-07, and investment growth slowed. Broadly speaking, countries with stronger fiscal positions, lower inflation, more sound financial sectors, or less dependence on external demand and foreign finance, fared better, as did those that used countercyclical policies decisively to support activity.

[10] For instance, during the Asian financial crisis, growth in the EAP region fell from 7.1 percent to 1.7 percent in 1997-98 whereas, in the global financial crisis, growth slowed from 8.4 percent to 7.7 percent in 2008-09. Similarly, in the Latin America debt crisis, LAC growth fell from 6.3 percent to 0 percent in 1980-81 whereas, in the global financial crisis, growth decreased from 4.1 percent to -0.1 percent in 2008-09.

The impact of the crisis varied across EMDE regions (box 3.2). ECA took the largest hit because the withdrawal of Western European banks caused a severe credit crunch. Output in LAC also contracted as commodity exports collapsed, accompanied by a plunge in commodity prices. Elsewhere, expansions continued although at reduced rates. In EAP, MNA, and SAR, this expansion reflected the heavy use of monetary and fiscal stimulus in large economies to support activity (World Bank 2009b, 2010a, 2010b). SSA had limited exposure to risks in international financial markets.

Resilience of LICs. LICs continued to grow during the crisis, although more slowly (4.9 percent in 2008 and 5.3 percent in 2009, compared to 6.0 percent in 2007), because domestic demand was supported by public investment in part financed by robust FDI and remittances and broadly stable foreign aid (World Bank 2019a). FDI inflows to LICs averaged 3.3 percent of GDP during 2008-09 compared to 2.5 percent of GDP during the precrisis period (2002-07). Remittances into LICs averaged 5.9 percent of GDP during 2008-09, an increase of 1.3 percentage points over the precrisis average. ODA to LICs declined marginally to 9.2 percent of GDP from 10.3 percent of GDP over the same period. Exports were also less adversely affected. In the median LIC, exports rose by 2.2 percent in 2009, compared to -6.1 percent in other EMDEs.

Slowing poverty reduction during the global recession. The pace of poverty reduction slowed or poverty increased in some EMDEs with steep recessions (Habib et al. 2010).[11] In ECA, following a large growth setback during the global recession, the proportion of people living in extreme poverty declined, on average, by only 0.2 percentage point a year in 2008-10, compared to the average decline of 0.7 percentage point a year in 2005-08.[12] In LAC, where output also contracted during the global recession, the average improvement in the proportion of people living in extreme poverty slowed to 0.4 percentage point a year in 2008-10 from 1.0 percentage point a year in 2005-08. More broadly for EMDEs, because of strong growth in EAP and SAR during the global recession, poverty declined by 1.2 percentage points a year in 2008-10. Previous studies show that the impact of economic crisis varies across income groups, often resulting in rising income inequality (Habib et al. 2010; Ravallion 2009). In regions such as MNA and SSA, the average Gini coefficient, a commonly used measure of inequality, increased during the global recession.

After the global recession: Protracted weakness

An easing in global fiscal and monetary policy promoted a rapid growth rebound in 2010. The following year, however, was the start of a decade of protracted weakness in the global economy. Global trade growth slowed sharply from prerecession rates, and

[11] It was initially estimated that the global financial crisis would add 64 million people to the population living under $2 a day (Ravallion and Chen 2009). For advanced economies, there is evidence of adverse impacts of the 2009 global recession on poverty and health (Bitler, Hoynes, Kuka 2017; Schwandt and von Wachter 2019; Seeman et al. 2018).

[12] People living in extreme poverty are those living on less than $1.90 a day at 2011 purchasing power parity. Data are obtained from https://databank.worldbank.org/source/poverty-and-equity-database.

commodity prices fell. The euro area plunged into a debt crisis in 2010-11. In 2013, as financial markets began to anticipate the reduction of large-scale asset purchases by the U.S. Federal Reserve, financing conditions tightened for EMDEs. This sluggish and volatile external backdrop coincided with country-specific challenges in some major EMDEs. Meanwhile, the weakness of investment that accompanied the global downturn and less favorable demographic trends continued eroding potential growth (that is, the growth rate an economy can sustain at full employment and capacity utilization).

Sharp, stimulus-driven initial rebound. In 2010, supported by stimulus in the largest advanced economies and EMDEs, global trade rebounded, commodity prices rallied, and financial conditions eased with many interest rates reaching historic lows. Capital flows returned to EMDEs but remained below peaks reached before the global recession. Stock markets rallied, and sovereign bond spreads retreated: by end-2010, the MSCI and EMBI spreads had already nearly returned to their prerecession levels (mid-2007).

Growth in EMDEs rebounded swiftly to 6.8 percent in 2010, from 1.7 percent in 2009. Even in the worst-affected regions (ECA, LAC), output rose above prerecession peaks in 2010. This rebound was sharper than after previous global recessions and EMDE crises. For instance, it had taken Indonesia about five years to reach its precrisis output levels following the 1997-98 Asian financial crisis. It had taken Mexican output about six years to recover to its precrisis level following the debt crises in Latin America in the 1980s. The initial 2010 rebound was followed by protracted weakness in the global economy.

Weak global trade growth. Since 2011, global trade growth has slowed to 4.1 percent a year on average, well below the prerecession average of 7.6 percent a year during 2002-07. This weakness appears to reflect five main factors: weak demand growth in advanced economies, a shifting composition of global demand, weakness in arm's-length trade, the maturation of global supply chains, and slowing momentum in trade liberalization and increased trade tension (World Bank 2015a).

- *Anemic demand growth in advanced economies.* Advanced economies account for about 60 percent of global import demand and are the destinations for about half of EMDE exports. Import growth in advanced economies averaged 3.6 percent a year in 2011-18 compared with 6.0 percent a year in 2002-07. A series of adverse events set back growth in the United States, the euro area, and Japan during 2011-18 (Didier et al. 2015; Lin and Volker 2012; Stocker et al. 2018).[13]

- *Changing composition of global demand.* The composition of global demand shifted toward less trade-intensive sectors (Obstfeld 2015). In advanced economies, growth in investment—which tends to be more trade-intensive than other components of

[13] The events included the euro area debt crisis of 2010-12, which raised questions about the area's viability; the 2014-16 oil price collapse that disrupted the rapidly growing U.S. shale oil sector; and concerns about the effectiveness of the expansionary strategy known as "Abenomics" in Japan.

demand—remained below long-term averages during 2011-16 (World Bank 2015b). In China, the rebalancing of the economy from exports, investment, and manufacturing toward consumption and services also reduced import demand growth from 18.5 percent a year in 2002-07 to 7.8 percent a year in 2011-18. Demographic change (population aging) has also contributed to the shift in demand toward services (health care, recreation, so on).

- *Postcrisis weakness in arm's-length trade.* Arm's-length trade—trade between unaffiliated firms—accounts disproportionately for the overall postrecession trade slowdown (Lakatos and Ohnsorge 2017). This is partly because arm's-length trade depends more heavily on EMDEs than intrafirm trade does, where output growth has slowed sharply from elevated prerecession rates, and on sectors with rapid prerecession growth that boosted arm's-length trade prerecession but that have languished postrecession. Compounding such compositional effects, arm's-length trade is also more sensitive to changes in demand and real exchange rates.

- *Maturing supply chains.* The pace of expansion of global supply chains, which strongly supported trade growth prerecession, has slowed. In particular, Chinese imports of parts and components have declined from their peak of 60 percent of merchandise exports in the mid-1990s to 35 percent of merchandise exports in 2012, reflecting the progressive substitution of domestic inputs for foreign ones (Constantinescu, Mattoo, and Ruta 2016; Kee and Tang 2016).

- *Slowing momentum in trade liberalization, and increased trade tensions.* The pace of easing impediments to trade has slowed since the global recession. Nontariff barriers have increased, and several countries have put trade restrictions in place (UNCTAD 2010; WTO 2018). Since 2017, increased trade tensions between the United States and several other countries, particularly China, have also weighed on global trade growth (World Bank 2019a).

Steep commodity price slide. The 2002-07 global expansion had been accompanied by surging demand for primary commodities, particularly metals, in part because of rapid demand growth in China (World Bank 2015b; Baffes et al. 2018). Between 2000 and 2010, China accounted for 89 percent of the increase in global demand for industrial metals, 54 percent of the increase in global energy demand, and 17 percent of the increase in global demand for food. The resulting prerecession surge in commodity prices encouraged commodity exploration and discovery, leading to rapid expansion in mining capacity and unconventional energy extraction, especially for shale and offshore oil and gas (World Bank 2015b, 2015c; Khan et al. 2016).

Metal prices reached a peak in early 2011 and then began to decline sharply, reaching a trough in early 2016. A moderate recovery followed. The decline reflected both slowing demand growth, including in China, and increased supply after a period of rapid global resource investment. Although Organization of Petroleum Exporting Countries (OPEC) policy initially supported stable oil prices despite surging U.S. oil production, a shift in OPEC policy in mid-2014 triggered an oil price plunge during 2014-16 that caused widespread disruption to oil-exporting countries.[14] At end-2018, energy prices were 32 percent below their 2001Q1 levels, industrial metals prices 37 percent below, and agricultural commodity prices 35 percent below. The broad-based decline in commodity prices weighed heavily on growth in the almost two-thirds of EMDEs that are commodity exporters.[15]

Intermittent spikes in EMDE borrowing costs. The postrecession period was marked by considerable volatility in capital flows to EMDEs and, from mid-2013, occasional spikes in borrowing costs. Following the rebound, global capital flows declined, with sharp outflows in 2013Q3, 2015Q3, and 2018Q2 related to episodes of heightened uncertainty in financial markets.[16] During these episodes, on average, the EMBI spread rose by about 50 basis points, the MSCI declined by 7.7 percent, capital inflows to EMDEs slowed sharply, and EMDE currencies depreciated (figure 3.5). From end-2015, after the U.S. Federal Reserve had started to tighten monetary conditions, the EMBI spread fell as U.S. long-term bond yields rose, before a partial reversal in early 2018 amid deteriorating growth prospects and heightened global uncertainty. From their trough of 0.3 percent of GDP in 2015, capital flows to EMDEs recovered to 2.1 percent of GDP in 2017 but slowed again in 2018.

Whereas portfolio and other short-term investment flows to EMDEs underwent bouts of reversals, FDI flows and remittances remained more stable (De et al. 2019; Eichengreen, Gupta, and Masetti 2017; Ratha, Mohapatra, and Silwal 2011; World Bank 2015a). FDI inflows declined only moderately to 2.2 percent of GDP in 2011-18 from 3.1 percent of GDP in 2002-07.[17] Remittance flows to EMDEs averaged 1.6 percent of GDP in 2018, broadly in line with the 2011-18 average (1.5 percent of GDP) and the prerecession average (1.7 percent of GDP, 2002-07).

Protracted EMDE growth weakness. Whereas growth in advanced economies recovered steadily from a trough in 2012, EMDE growth slowed continuously from 2010 to a trough of 3.7 percent in 2016 (which coincided with the trough in commodity prices) before a modest recovery took hold (figure 3.6). The growth differential between

[14] The oil price plunge had both supply- and demand-related origins: increased efficiency in U.S. shale oil production, weak global demand, U.S. dollar appreciation, less-than-expected supply disruptions from geopolitical uncertainty, and OPEC's policy change to target market share instead of oil prices (Baffes et al. 2015). A detailed analysis of sources and implications of the oil price collapse is available in Baffes et al. (2015) and World Bank (2015a, 2018a, 2018c).

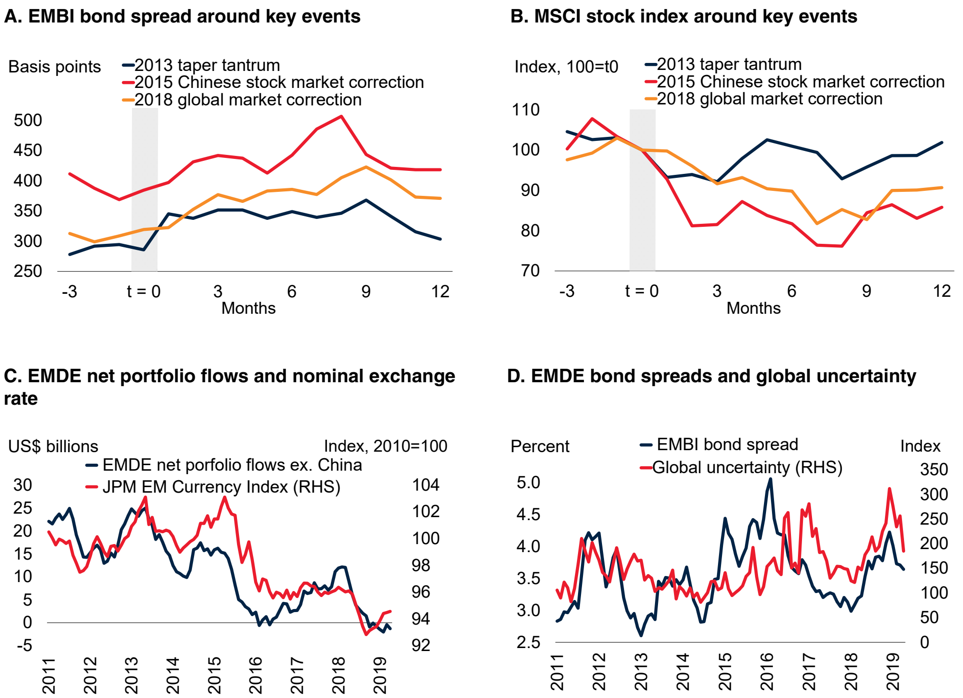
[15] In particular, Brazil (iron ore, soybeans), Chile (copper ore, refined copper), Guinea (aluminum ore), the Philippines (nickel ore), Qatar (liquefied natural gas), Saudi Arabia (crude oil), and Thailand (rice) account for more than one-fifth of global exports of these commodities.

[16] In May 2013, the Chairman of the U.S. Federal Reserve Board, in testimony to U.S. Congress, noted that a robust U.S. economy might warrant a tapering of asset purchases; this policy change led to the "taper tantrum" (Arteta et al. 2015). In June 2015, a period of turbulence began in the Chinese stock market: by mid-July the Shanghai Stock Exchange had lost one-third of its value, and in August it dropped by more than 20 percent in a week, triggering widespread concerns about financial stability and growth in China. In March 2018, investor sentiment shifted to expectations of rising inflation and tightening monetary policy in the U.S., and this was followed by sharp capital outflows from EMDEs.

[17] The decline in part reflected lower rates of return as well as slowing expansion of global value chains (UNCTAD 2018).

FIGURE 3.5 EMDE financial markets since the global recession

Bouts of policy uncertainty since the global recession have triggered volatility in EMDE financial markets and borrowing costs.



Sources: Araujo et al. (2015); Davis (2016); Haver Analytics; Institute of International Finance; International Monetary Fund; J.P. Morgan; World Bank.

Note: EMDEs = emerging market and developing economies.

A.B. t = 0 for the 3 events are May 2013, June 2015, and March 2018. MSCI = Morgan Stanley Capital International.

C. Net portfolio flows are 12-month moving averages. The nominal exchange rate is based on the J.P. Morgan Emerging Market Currency Index (labeled JPM EM Currency Index).

D. EMDE bond spread is based on the J.P. Morgan's Emerging Market Bond Index Plus (EMBI+). Global uncertainty is based on the Global Economic Policy Uncertainty Index developed by Davis (2016), where 100 = mean of 2007 (or first year).

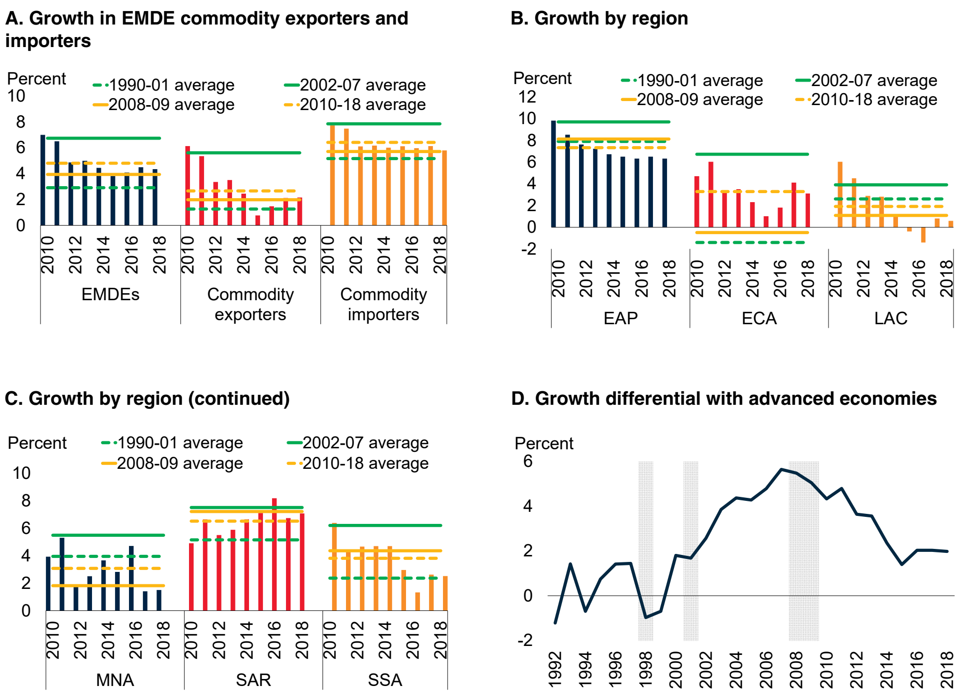
C.D. Last observation is April 2019.

EMDEs and advanced economies has since narrowed to about 2 percentage points, the smallest since the early 2000s. The growth slowdown during 2011-16 was synchronous (affecting more than three-fifths of EMDEs) and protracted, with the steepest slowdowns in LAC and the mildest in SAR (Didier et al. 2015). In the 20 largest EMDEs, growth in 2016 was, on average, 3.1 percentage points lower than in 2011. In LICs, growth slowed from 6.3 percent in 2012 to a trough of 3.2 percent in 2016.

Most components of EMDE demand slowed concurrently (Kose et al. 2017). Investment and export growth suffered especially sharp declines, falling to less than half their prerecession rates. Gross fixed investment growth averaged 5.2 percent a year in 2011-18 compared to 11.9 percent a year in 2002-07. Export growth declined to 4.8

FIGURE 3.6 EMDE growth since the global recession

A synchronous and persistent slowdown has been underway in EMDEs since the postcrisis rebound of 2010, notwithstanding a modest recovery in 2017-18. As a result, the growth differential between EMDEs and advanced economies has narrowed.



Source: World Bank.
Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; EMDEs = emerging market and developing economies; LAC = Latin America and the Caribbean; MNA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa.
D. EMDE growth minus advanced economy's growth. Shaded bars indicate global recessions and slowdowns.

percent from 10.0 percent between the same periods. The weakness of investment growth reflected subdued global trade growth, low commodity prices, moderating FDI inflows, considerable policy uncertainty in major economies, and tightening financial conditions (Kose et al. 2017; Vashakmadze et al. 2017; World Bank 2017). This investment weakness has contributed to an EMDE total factor productivity growth slowdown from 2.5 percent a year on average in 2003-07 to 1.7 percent in 2018, with particularly pronounced declines in ECA, LAC, and MNA.

Weak global economic growth coincided with country-specific challenges in some large EMDEs. Episodes of political uncertainty, social tensions (especially in MNA), geopolitical events, civil wars, and unorthodox policy decisions triggered bouts of sharply weaker confidence (World Bank 2016c, 2017, 2018a). In China, recession-related policy stimulus was unwound intermittently, and policies guided the economy away from investment-driven growth toward more balanced growth. The growth slowdown in China, from 11.3 percent a year on average during 2002-07 to 6.3 percent in 2018, has hindered growth in its trading partners and in commodity exporters (Huidrom et al. 2019; World Bank 2016c).

The erosion of policy buffers employed during the global recession made it difficult to stem the growth slowdown through countercyclical policies. The large drop in commodity prices in 2014-16 further dampened growth in EMDE commodity exporters, with growth 2.8 percentage points lower than in 2011-13, on average (figure 3.6). It was exacerbated by procyclical policy tightening. As government revenues from the resources sector fell sharply and fiscal positions deteriorated, several EMDEs (Angola, Ecuador, Nigeria, Saudi Arabia) undertook fiscal consolidation despite weak growth. Adverse terms of trade movements also led to sharp currency depreciations (Angola, Azerbaijan, Colombia, Russia), prompting central banks to raise policy rates, intervene in foreign exchange markets, or allow greater exchange rate flexibility. In commodity-importing EMDEs, the growth benefits from rising real incomes due to falling prices of oil and other commodities did not materialize; instead, growth slowed by 0.6 percentage points between 2011-13 and 2014-16. Nonetheless, inflation subsided, and fiscal and current account balances improved in several countries (India, Poland, Romania, Thailand; World Bank 2015c).[18]

Recent growth trends and short-term outlook. Many EMDEs saw a mild cyclical recovery in 2017, led by growth in exports and investment as global manufacturing and trade picked up. Energy and metal prices rebounded from their lows in early 2016, but have been volatile since the second half of 2018 amid bouts of intensifying trade and geopolitical tensions. Growth in global trade is projected to weaken in 2019 to the slowest pace since the global recession, from 5.5 percent in 2017. EMDE growth is forecast to remain weak at 4.4 percent on average in 2019-21, from 4.5 percent in 2017 (World Bank 2019a).

The subdued short-term growth outlook is, in addition, subject to heightened downside risks. A further escalation in trade tensions could trigger a sharper-than-expected slowdown in global trade and activity and could threaten the stability of the rules-based multilateral trading system. Sharper-than-expected slowdowns in the United States, the euro area, and China—which together account for more than half of global GDP—could generate adverse spillovers for EMDEs through trade, financial, commodity, and confidence channels. A rise in borrowing cost could trigger financial stress in EMDEs with elevated debt or large financing requirements.

EMDE long-term growth prospects remain clouded by the confluence of demographic headwinds, rising debt levels, volatile financing conditions, limited policy space, elevated policy uncertainty and trade tensions, slowing capital accumulation and productivity

[18] EMDE commodity importers' current account balances improved from an average deficit of 0.3 percent of GDP in 2011-13 to an average surplus of 0.8 percent of GDP in 2014-16. By contrast, in EMDE commodity exporters, the average current account balance deteriorated from 2.3 to -1.1 percent of GDP over the same period.

growth, and lackluster reform progress that weakens potential growth.[19] Moreover, the prospects for progression of today's LICs to middle-income levels are dim compared to those in the precrisis period because of a larger prevalence of countries affected by fragility, conflict, and violence; geographical disadvantages in external trade; weaker commodity demand as China shifts toward less resource-intensive sectors; and higher vulnerability to extreme weather that threatens livelihoods in agriculture-dependent economies (World Bank 2019a).

Conclusion

Strong domestic demand and a benign external environment supported broad-based and rapid growth in EMDEs before the global recession. During 2002-07, EMDEs grew by 6.7 percent per year—twice as fast as during the previous two decades and surpassed only by their growth spurt during the early to mid-1970s. As a result, the share of EMDEs in global GDP increased to 31 percent in 2007 from 26 percent in 2001. In turn, favorable economic conditions allowed EMDEs to accumulate sizeable current account surpluses and foreign exchange reserves and to reduce fiscal deficits and government debt.

Triggered by defaults in the U.S. subprime mortgage market, the U.S. financial system came under severe stress in the second half of 2007 and early 2008. Heightened concerns about the solvency of the financial system, the shortage of liquidity in interbank funding markets, and deposit runs at some U.S. banks triggered a financial crisis followed by a severe U.S. recession. During 2008Q3-2009Q2, U.S. output contracted by 4.0 percent—more than in any other U.S. recession since World War II. Given the size and international connectedness of the U.S. economy, the spillovers to the rest of the world were sizeable. Although the global financial crisis originated in the United States, EMDEs were adversely affected by the collapse in global trade and finance. On the whole, however, EMDEs weathered the crisis relatively well: EMDE growth slowed to 1.6 percent in 2009, but output did not contract.

Some EMDEs withstood the crisis better than others. Countries that were less dependent on external trade and finance, had stronger precrisis fundamentals, and were able to implement swifter and more aggressive stimulus policies suffered milder growth slowdowns. China and India were among the fastest to recover, in part because of swift policy responses. LICs were also resilient because foreign aid, remittances, and FDI flows remained broadly stable. In contrast, EMDEs that were heavily dependent on short-term and potentially volatile capital flows—such as portfolio investment and cross-border bank lending—fared less well, especially those in ECA.

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[19] These structural factors have also been postulated as the drivers of the "secular stagnation" in global growth (see Bernanke 2015; Eggertsson, Lancastre, and Summers 2018; Eggertsson, Mehrotra, and Robbins 2019; Rachel and Summers 2019; Rogoff 2015; and Summers 2014). The "secular stagnation" theory further posits that with historically low global real interest rates (negative in many advanced economies, including Japan, Sweden, Switzerland, and the euro area), expansionary monetary policy has limited effectiveness in stimulating aggregate demand.

Since the 2009 global recession, EMDE growth has slowed, from a peak of 6.5 percent in 2011 to a trough of 3.8 percent in 2015, continuing at a moderate 4.3 percent during 2017-19. This still-robust, albeit slowing, growth in EMDEs, combined with the sluggish postrecession recovery in advanced economies, has resulted in a growing role of EMDEs in the global economy. By 2018, the share of EMDEs increased to 39 percent of global GDP, compared with 31 percent in 2007. Given the increasing importance and international connectedness of EMDEs, an adverse shock originating in any part of the world economy could generate greater spillovers to EMDEs than those associated with the 2009 global recession.

The global recession was a reminder of the importance of resilience during times of severe financial stress, as well as the importance of early policy intervention, in international policy coordination, to dampen global shocks. Measures to strengthen resilience include improving debt management, maintaining adequate reserves, designing appropriate macroprudential policies, diversifying export and financing structures, and strengthening monetary and fiscal frameworks. Framework-strengthening measures include enhancing central bank credibility, adopting more flexible exchange rate regimes where appropriate, and ensuring sustainable public finances through fiscal rules. The window of opportunity for rebuilding resilience before the next shock materializes may be narrowing. Separately, that the global economy remains weak postcrisis despite unprecedented policy stimulus illustrates the limitations of cyclical stimulus. It is a reminder of the need for reforms that foster growth led by the private sector and driven by productivity.

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