

CHAPTER 6

Prospects, Risks, and Vulnerabilities

Growth in emerging market and developing economies (EMDEs) has generally disappointed since the 2009 global recession, with sizable forecast downgrades in most years, and 2019 is no different. EMDEs also face downside risks to this subdued growth outlook, which include heightened global policy uncertainty, trade tensions, spillovers from weaker-than-expected growth in major economies, and disorderly financial market developments. These risks are accompanied by region-specific risks, including geopolitical tensions, armed conflict, and severe weather events. If risks materialize, their impact on EMDEs depends on the magnitude of spillovers and domestic vulnerabilities. Since the 2009 global recession, external, corporate sector, and sovereign vulnerabilities have risen in most EMDEs, leaving them less well-prepared for future shocks. Low-income countries, in particular, face elevated vulnerabilities: about 40 percent of them are currently in debt distress. Over the longer run, EMDEs also face weakening potential growth, reflecting decelerations in capital accumulation and productivity growth, as well as demographic headwinds. These constraints are likely to hamper growth in the next decade unless they are mitigated by ambitious and credible reform agendas.

Introduction

Following the global recession of 2009, most analysts expected growth in emerging market and developing economies (EMDEs) to return to precrisis rates (chapter 3). After a strong rebound in 2010, subsequent growth outcomes, however, have generally disappointed. Comparing consensus forecasts prepared in January and June since 2009, over 70 percent of aggregated EMDE forecasts were downgrades and on average growth has been revised down by 0.2 percentage point. This year is no different, with a cumulative downgrade of 0.6 percentage point since January 2018. Growth for the year is now forecast to be at its weakest pace since 2015 and over a percentage point slower than average growth from 2000 to 2018. In addition to these repeated growth disappointments and forecast downgrades, downside risks to the outlook are rising.

Against this background this chapter addresses the following questions:

- What are EMDEs' growth prospects?
- What are the main global and regional risks to growth faced by EMDEs?
- How have external and domestic vulnerabilities evolved over the past decade and how do they compare to developments following previous crises?

Note: This chapter was prepared by Franz Ulrich Ruch.

Contributions to the literature. This chapter provides an up-to-date and comprehensive overview of the growth prospects, risks, and vulnerabilities facing EMDEs, including low-income countries (LICs). It contributes to the existing literature in several dimensions. First, the chapter updates earlier World Bank Group work on short- and long-term growth prospects, with granular regional and group perspectives (IMF 2019, World Bank 2018a). Second, it provides a comprehensive overview of vulnerabilities for the largest sample of EMDEs yet. Existing studies (for example, Chitu and Quint 2018, Dahlhaus and Lam 2018, IMF 2019, and Rojas-Saurez 2015) limit their analysis to a few, mainly large, EMDEs. In addition, this chapter is the first study that compares specific domestic and external vulnerabilities across a comprehensive list of almost 300 previous EMDE crises since 1980, building on the work of Laeven and Valencia (2018).¹

Main findings. The chapter presents the following findings. First, EMDE growth has generally disappointed in the past decade, with repeated and significant forecast downgrades—and 2019 is no different. Almost 40 percent of EMDEs are now expected to grow more slowly in 2019 than in 2018.

Sustained and robust per capita income growth, however, is needed for EMDEs to meaningfully reduce poverty, improve shared prosperity, and converge to advanced economy levels. Income gaps with advanced economies are expected to widen in 2019 in one-third of EMDEs, with more economies affected in the Middle-East and North Africa (MNA), Sub-Saharan Africa (SSA), and Latin America and the Caribbean (LAC). The prospects of today's LICs, which are increasingly clustered in SSA, for progression to middle-income levels are dimmer than before the global recession, in part because of a rising number of countries affected by fragility, conflict, and violence; the prospect of weaker demand for primary commodities; and higher vulnerability to extreme weather, especially in agriculture-dependent economies (World Bank 2019b).

Second, although a cyclical upturn is expected over the next two years, near- and long-term growth prospects will likely remain subdued, and growth is expected to be slower than in recent decades. Long-term growth prospects are weakening, as fundamental drivers lose momentum. In the mid-2000s, potential growth in EMDEs was 5.9 percent a year; however, it slowed to 4.7 percent a year in 2013-18 and, on current trends, is expected to decelerate further over the next decade. This slowdown reflected a sharp deterioration in capital accumulation and productivity growth amid pronounced investment weakness, and demographic headwinds. Weakening growth prospects do not bode well for poverty reduction efforts in EMDEs, with evidence that poverty reduction has already started to slow. To improve prospects for potential growth, EMDE policy makers need to undertake ambitious and credible reforms that boost human and physical capital accumulation, ensure appropriate factor allocation, and raise productivity.

¹ This chapter links both to the literature on quantifying vulnerabilities (for example, Ahmed, Coulibaly, and Zlate 2017; Dahlhaus and Lam 2018; Feyen et al. 2017; Fisher and Rachel 2017; Ghosh 2016; IMF 2018; Lee, Posenau, and Stebunovs 2017) and to the literature on early warning indicators of crises. See Chamon and Crowe (2012) and Frankel and Saravelos (2012) for extensive literature reviews, and Aziz and Shin (2015) or Berg et al. (1999) as examples.

Third, near-term risks to the growth outlook for EMDEs are tilted to the downside. At the global level, EMDEs face risks related to trade tensions between the United States and other major economies, especially China; broader threats to the international trade system; the risk of a disorderly exit process of the United Kingdom from the European Union (EU); and the possibility of financial market disruptions. At the regional level, some EMDEs face risks related to security, geopolitical tensions, and severe weather events.

Fourth, the vulnerabilities of EMDEs to adverse events have risen since the 2009 global recession. EMDEs that are most vulnerable to spikes in borrowing cost are those that are highly indebted, especially those with elevated foreign-currency-denominated debt, and those that rely on potentially volatile portfolio and bank flows to finance large current account deficits. Today's average EMDE also has higher government and private debt, wider fiscal deficits, and only slightly smaller current account deficits than the average EMDE before past financial crises. These vulnerabilities may be partly mitigated by greater exchange rate flexibility and more robust monetary, prudential, and fiscal policy frameworks, compared to previous crises, as well as by financial sector reforms and the expansion of country-specific, regional, and multilateral financial safety nets since the global recession.

Prospects for growth

A decade of disappointing growth. Since 2009, January and June consensus forecasts for global growth in the same year have been downgraded by an average of 0.1 percentage point at each forecast (figure 6.1). Almost 60 percent of same-year growth forecasts have been downgrades.² Downgrades affected both advanced economies and EMDEs; however, in EMDEs, the growth forecast was revised down more frequently and by a greater margin. Since 2009, EMDE growth has been revised down by an average of 0.2 percentage point for the current year forecast, relative to the preceding projection. Over 70 percent of same-year forecasts for EMDEs have been downgraded.³

Projections for 2019 were no different. In January 2018, EMDE output was expected to grow by 4.6 percent in 2019. By the January 2019 forecast, this estimate was revised down to 4.2 percent and further to 3.9 percent in June 2019. Similarly, 10-year-ahead EMDE growth forecasts have been repeatedly downgraded. This pattern of downward revisions to both short- and long-term EMDE growth projections points to both cyclical and structural factors weighing on EMDE growth.

Since 2016, there have been consistent downward revisions to growth projections for all EMDE regions, except East Asia and Pacific (EAP; figure 6.1).⁴ Regionally, the largest

² Forecasts published in the World Bank's *Global Economic Prospects* and the International Monetary Fund's *World Economic Outlook* showed more frequent downgrades to global growth.

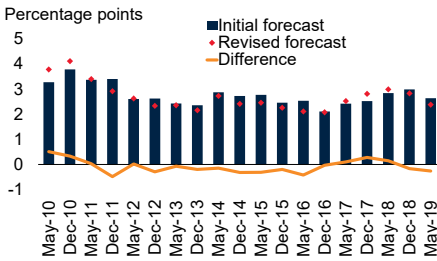
³ Forecasts for EMDEs by the International Monetary Fund, Consensus Forecasts, and the World Bank have seen a majority of forecasts downgraded in successive rounds, with the average revision since 2009 of similar magnitude.

⁴ Based on data from the World Bank's *Global Economic Prospects*.

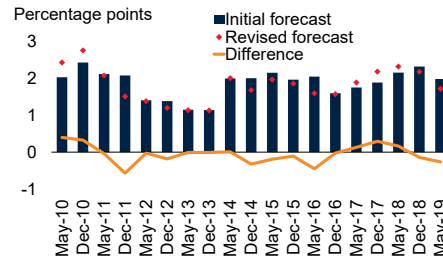
FIGURE 6.1 Growth forecast revisions since 2009

Revisions to global growth projections over the past decade have generally been downward. Growth projections for all EMDE regions, except East Asia and Pacific, have been revised down since 2016.

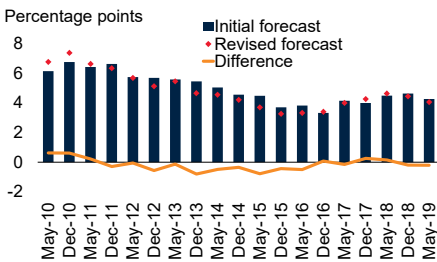
A. Global growth revisions



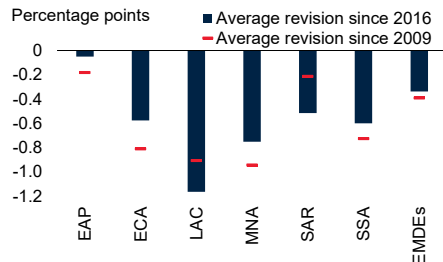
B. Advanced economy growth revisions



C. EMDE growth revisions



D. EMDE regional growth revisions



Sources: Consensus Economics; 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.

A-C. Output growth from the January and June consensus forecast publication of Consensus Economics since 2009. Revisions are the current forecast less the previous forecast for the current year. Weighted using constant 2010 U.S. dollar GDP for 2018.

D. Based on January and June forecasts of the World Bank's Global Economic Prospects, which achieves a better regional coverage than Consensus Economics.

revisions in this period have been to projections for LAC, with growth downgrades averaging 1.2 percentage points, amid falling commodity prices and recessions in some of LAC's largest economies in 2016 (World Bank 2019a). The second- and third-largest regional revisions since 2016 have been to growth in MNA and SSA, averaging 0.7 percentage point in both cases, with commodity-intensive countries suffering the largest downgrades.

In MNA, this downgrade reflected weak oil sector output and adjustments to lower oil prices, and more recently the intensification of U.S. sanctions on the Islamic Republic of Iran (World Bank 2019a). In SSA, oil exporters were also affected by the oil price fall whereas the region's largest economies struggled with idiosyncratic challenges. By contrast, downgrades since 2016 have been modest for South Asia (SAR), where growth has remained robust at or above its longer-term average rate since 1990 (World Bank

2019a). The absence of growth surprises in EAP reflects the steady slowing and rebalancing of growth in China, actively managed and broadly in line with official growth projections, and resilience of growth in Indonesia.

Subdued short-term outlook in EMDEs. EMDE growth is expected to stabilize at 4.4 percent over the forecast horizon (2019-21), marginally up from the average for 2016-18, but well below the more than 6 percent during 2000-08 (World Bank 2019a; figure 6.2). This outlook is premised on the dissipation of earlier financial pressures and policy uncertainties that have affected some large EMDEs and on global financing conditions remaining benign.

Many large commodity-exporting EMDEs face the lingering effects of recent financial stress and idiosyncratic headwinds (such as sanctions), postponing the expected recovery. As these effects fade, commodity-exporting EMDEs are expected to grow by 2.7 percent in 2019-21, significantly better than rates achieved in 2016-18 but still more than 1 percentage point below the average since 2000. In commodity-importing economies excluding China, growth is expected to slow to 4.7 percent in 2019-21, only slightly below the precrisis average although firmly below the average of the past three years (5.1 percent during 2016-18). Weakness among commodity importers has been most visible in Europe and Central Asia (ECA) where financial stress has undermined growth in Turkey, and binding domestic capacity constraints have particularly affected countries in Central Europe.

Still-robust prospects in low-income countries. LICs that export energy and metals commodities tend to have more volatile growth. Since 2016, they have enjoyed a recovery led by rising industrial metals prices, although it partially stalled in 2019. Other LICs have been able to maintain robust growth in a slowing global environment thanks to a combination of robust construction activity, urbanization, and expanding services sectors. For 2019-21, growth is forecast at 5.8 percent, somewhat higher than the 5.3 percent over 2016-18 (World Bank 2019a; figure 6.3). This forecast, however, represents a downgrade from earlier vintages, in part reflecting unexpectedly weak external demand from major trading partners, extreme weather events that dampened activity in several countries, and an earlier-than-expected normalization of agricultural production in some large LICs after strong recoveries from drought in previous years.

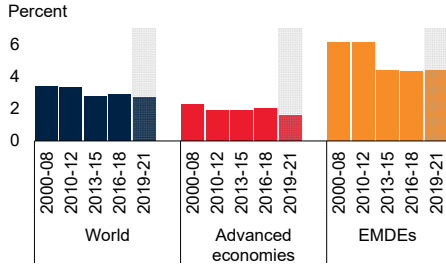
Several LIC economies are facing severe strains. LICs experiencing fragility, conflict, and violence have not seen any improvement in per capita incomes in 2016-18, which undermines efforts to reduce poverty (figure 6.3). Southern and East Africa were hit by two devastating tropical cyclones—Idai and Kenneth—in March and April 2019 that took a heavy human toll and caused severe damage to social and economic infrastructure in these economies.

Weaker longer-term growth prospects in EMDEs. Over the longer term, challenges relating to demographics, productivity growth, and investment point to weakening long-term growth in EMDEs (Diao, McMillan, and Rodrik 2019; McMillan, Rodick, and Sepúlveda 2016; World Bank 2018a; figure 6.4). Thus, potential output growth is

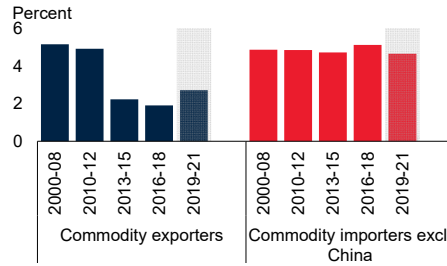
FIGURE 6.2 EMDE growth prospects

Following a further deceleration in 2019, output growth in EMDEs is expected to recover in 2020-21, because headwinds are assumed to dissipate in a number of key economies.

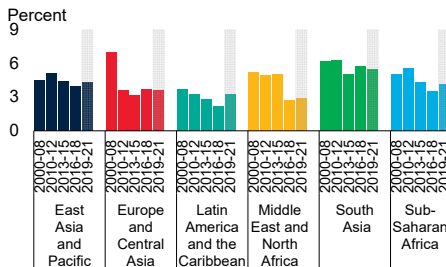
A. Growth



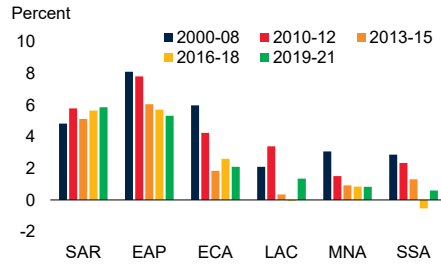
B. Growth



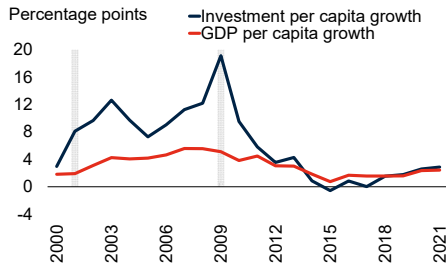
C. Growth



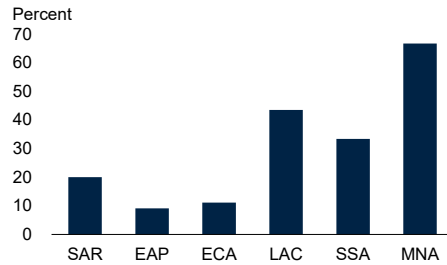
D. Per capita growth



E. Per capita growth differential between EMDEs and advanced economies



F. Share of EMDEs with widening per capita income gaps



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.

A.-D. Aggregate growth rates are calculated using constant 2010 U.S. dollar GDP weights. Shaded areas indicate forecasts.

C. Unweighted average regional growth is used to ensure broad reflection of regional trends across all countries in the region.

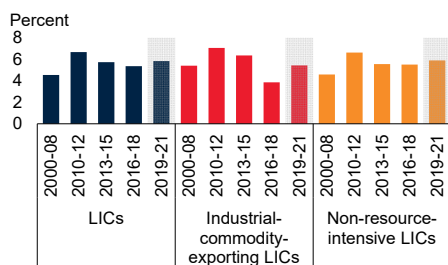
E. Weighted based on real GDP and investment in 2010 U.S. dollars. "Investment" refers to public and private real gross fixed capital formation. Sample consists of 50 EMDEs. Shaded areas indicate global recessions and slowdowns.

F. Economies with a widening income gap are those with per capita GDP growth that is at least 0.1 percentage point lower than advanced economy per capita GDP growth in 2019.

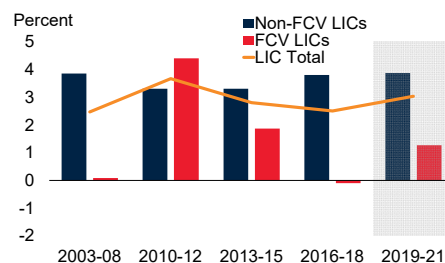
FIGURE 6.3 Growth prospects for low-income countries

Growth in LICs is expected to remain robust in 2019 and accelerate in 2020 as industrial-commodity-exporting LICs continue to recover from a low in 2016. Despite this expectation, per capita growth will not be sufficient to markedly reduce income gaps with advanced economies, which are likely to widen in LICs experiencing fragility, conflict, and violence.

A. Growth



B. Per capita growth



Source: World Bank.

Note: Based on low-income countries (LICs) as defined in 2018 and includes 28 economies. Shaded areas indicate forecasts.

A. Aggregate growth rates calculated using 2010 U.S. dollar GDP weights. Industrial commodity-exporting countries include energy and metal exporting-economies.

B. FCV = fragility, conflict, and violence. Weighted averages of country groups.

expected to decline to 4.3 percent a year on average in 2019-27, well below the 5.9 percent a year during 2003-07. Sixty percent of EMDEs are expected to experience a slowdown.

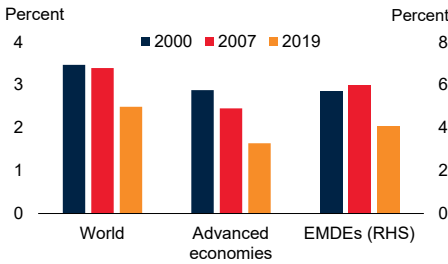
The slowdown is being driven by a combination of factors (box 6.1). Productivity growth has moderated as the growth of productivity-enhancing investment has slowed, precrisis gains in factor reallocation (notably including the migration of labor from agriculture to manufacturing and services activities) have been largely depleted, and growth in global value chains has moderated. Slower investment growth, partly driven by policy-guided rebalancing in China, has also tempered capital accumulation. Since 2010, the share of the working-age population has stabilized in the average EMDEs after more than four decades of rapid increases. Many of these factors will continue to constrain potential output growth in the period ahead. To counteract them, policy makers should undertake ambitious, credible reform agendas that boost human and physical capital accumulation and improve productivity. Sustained robust per capita income growth is needed for EMDEs to meaningfully reduce poverty (see Dollar, Kleineberg, and Kraay 2013; Dollar and Kraay 2002; Foster and Szekely 2008; Ravallion and Chen 1997; Santo, Dabus, and Delbianco 2019; World Bank 2018b, 2018c).

Slowing convergence with advanced economies. During 2000-08, per capita growth in EMDEs averaged 4.7 percent a year, up from 1 percent a year in the 1990s. Since the 2009 global recession, however, per capita growth has slowed, and is expected to reach 3.2 percent in 2019-21. Substantial differences, however, have been observed across regions (figure 6.2).

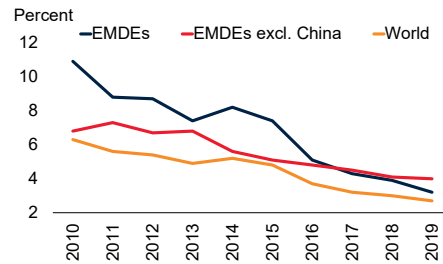
FIGURE 6.4 Long-term growth prospects of EMDEs

EMDE long-term growth and investment prospects slowed substantially in 2018 from the precrisis period. Potential growth is also expected to slow in the next decade.

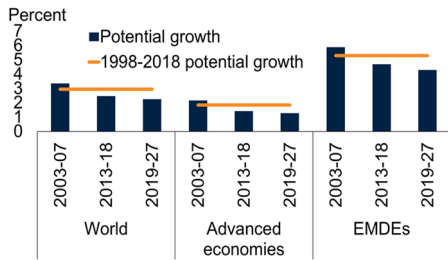
A. Long-term consensus forecasts: Output growth



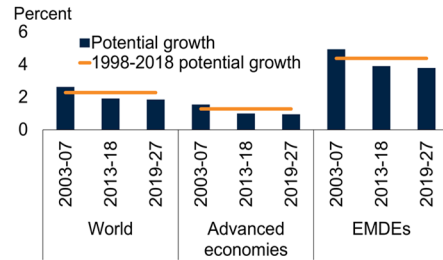
B. Long-term consensus forecasts: Investment growth



C. Potential output growth



D. Potential per capita output growth



Sources: Consensus Economics; Haver Analytics; Penn World Table; UN Population Prospects; World Bank.

Note: EMDEs = emerging market and developing economies.

A. Bars show long-term (10 years ahead) average annual growth forecasts surveyed in respective years. Sample comprises 38 countries—20 advanced economies and 18 EMDEs—for which consensus forecasts are consistently available during 1998-2019. Aggregate growth rates calculated using constant 2010 U.S. dollar GDP weights.

B. 10-year-ahead forecasts surveyed in indicated year. Aggregate growth rates are calculated using constant 2010 U.S. dollar investment weights. Sample comprises 23 advanced economies and 20 EMDEs.

C,D. Period average of annual GDP-weighted averages. Estimates based on production function approach. World sample comprises 50 EMDEs and 30 advanced economies.

- *SAR and EAP.* Four of the five economies with the most rapid per capita growth were in SAR and EAP, where per capita growth averaged more than 5.7 percent in 2016-18 and is expected to remain above 5 percent growth in the next three years. SSA and LAC, however, lagged behind other regions.
- *SSA.* In SSA, where most of the world’s poor live, average per capita output contracted in 2016-18 and is expected to remain near zero (0.6 percent) in 2019-21. SSA’s three largest economies have witnessed negative per capita growth since 2015-16. Some metal exporters and countries affected by fragility, conflict, and violence have also had weak per capita growth. In contrast, other SSA economies have maintained robust per capita income growth.

BOX 6.1 Long-term growth prospects in emerging and developing economies

Since 2011, potential growth has slowed in emerging market and developing economies. This downward trend is expected to continue over the next decade. In the absence of a major reform push to reverse this trend, another crisis could cause further lasting damage to potential growth. This box looks at the sources of the potential growth slowdown and finds that it is due to weaker capital deepening and productivity growth, as well as a declining share of working-age population.

Introduction

Slowdown in potential growth. During 2013-18, emerging market and developing economies (EMDEs) growth averaged 4.2 percent a year, well below its average pace of 7.2 percent a year in 2003-07. Similarly, EMDE potential growth—the growth rate that can be sustained at full employment and full capacity—slowed to 4.7 percent a year on average during 2013-18, compared with 5.9 percent during 2003-07 (World Bank 2018a; figure B6.1.1). Postcrisis growth weakness in EMDEs is both cyclical and structural in nature. Structurally it reflects a sharp slowdown in capital accumulation and productivity growth amid pronounced weakness in investment, as well as demographic headwinds.

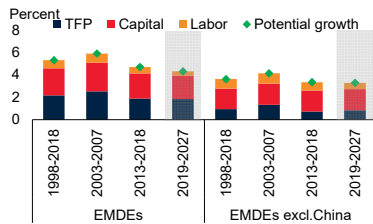
- *Weak productivity growth.* Precrisis gains from factor reallocation (notably including the migration of labor from agriculture to manufacturing and services) have increasingly been exhausted, the expansion of global value chains has moderated, and productivity-enhancing investment growth has slowed. In EMDEs, trend total factor productivity growth slowed to 1.9 percent a year in 2013-18, down from 2.5 percent a year in 2003-07, and below its long-term average of 2.2 percent.
- *Slow investment growth.* Several factors have weighed on investment growth: China's policy-guided rebalancing away from investment, declining commodity prices, lower foreign direct investment inflows, policy uncertainty, and lower long-term growth expectations. EMDE investment growth has slowed sharply from double-digit annual rates in the immediate wake of the global financial crisis to a decade-low 3.3 percent in 2015. Despite a recovery since 2016, investment growth remains subdued in commodity exporters and well below long-term averages among commodity importers.
- *Demographic headwinds.* In 2010, EMDEs as a whole passed a demographic turning point that advanced economies had already passed in the mid-1980s: after rising steadily for four decades, working-age population shares stabilized. As a result, working-age population growth has slowed since 2010, with the

BOX 6.1 Long-term growth prospects in emerging and developing economies (continued)

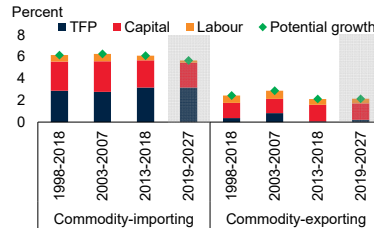
FIGURE B6.1.1 Drivers of potential growth in EMDEs

Potential growth has slowed in many EMDEs and is expected to weaken further over the next decade as productivity growth declines further and demographic headwinds intensify. Long-term growth forecasts have consequently also been revised down.

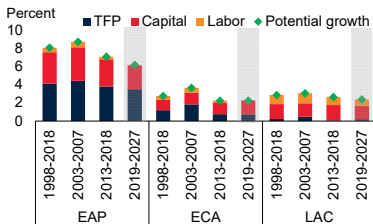
A. Contributions to EMDE potential growth



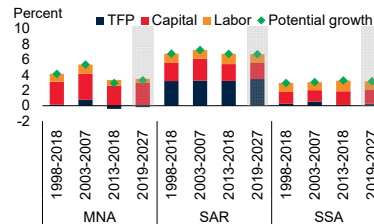
B. Contributions to EMDE potential growth



C. Contributions to EMDE regional potential growth



D. Contributions to EMDE regional potential growth



Sources: Penn World Table; United Nations; World Bank.

Note: Decomposition of the share of potential growth contributed by labor, capital, and total factor productivity (TFP). 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.

slowdown most pronounced in Eastern Europe and Central Asia and the Middle East and North Africa.

Prospects for long-term EMDE growth

Growth prospects over the next decade remain challenging for EMDEs. Potential growth is expected to decline further, to 4.3 percent a year in 2019-27 (World Bank 2018a). This slowdown is expected to be broad-based, affecting 60 percent of EMDEs, with potential growth likely to be below long-term averages in almost two-thirds of them. It is reflected in the continued downgrade of 10-year-ahead growth forecasts (Kose, Ohnsorge, and Sugawara, forthcoming).

BOX 6.1 Long-term growth prospects in emerging and developing economies (*continued*)

Many of the drivers of the potential growth slowdown in EMDEs are likely to persist over the next decade. In commodity exporters, weaker expectations for the long-term profitability of resource-based projects, amid a deceleration in global demand for industrial commodities as China's rebalancing continues, is expected to weigh on investment. Fading policy stimulus and tighter financing conditions will further weigh on investment growth and slow capital deepening, constrained by elevated public and private debt levels in many EMDEs. With the exception of South Asia and Sub-Saharan Africa, demographic trends are expected to turn from tailwinds to headwinds. Thus, over the next decade, countries with still-rising working-age population shares are expected to account for 38 percent of EMDE output, down from 98 percent in the mid-2000s. Many countries will have to contend with the fiscal cost of aging populations. The effects of climate change and new disruptive technologies could compound these challenges.

Ambitious, credible reform agendas that improve productivity and boost human and physical capital are needed to raise potential growth. Productivity-enhancing reforms entail removing barriers to the reallocation of resources toward higher-productivity firms and sectors, and stimulating the creation, innovation, and upgrades of individual firms. Investing in human capital and infrastructure could help unlock growth dividends and improve resilience to disruptive technologies and climate change.

Potential growth during contractions

Financial crises or severe economic contractions affect potential output in several ways: reduced productivity-enhancing research and development spending because of weak profitability; more limited funding for technology absorption because of reduced credit supply; less access to bank lending for creative firms; a legacy of obsolete capacity; self-fulfilling expectations of weak growth prospects; human capital loss and reduced job search activity among the long-term unemployed; and lower labor productivity after financial crises (World Bank 2018a).

Output contractions leave a legacy of weaker potential growth for at least the following half-decade. Two years following a contraction, potential annual growth is, on average, 1.2 percentage points less than in the year preceding the contraction. The effect is stronger in EMDEs than in advanced economies. Four to five years after the onset of the contraction, potential growth remains lower by about 1 percentage point a year. Over the past half-century, the global economy has been disrupted by a financial crisis of varying breadth and severity in every decade. If this pattern is repeated and if another crisis occurs in the near future, it would cause lasting damage to potential growth.

- *MNA*. Average per capita growth is expected to remain near zero (0.8 percent) over the next three years. In the region's two largest economies, the weakness of the last three years will remain. In the Islamic Republic of Iran, U.S. sanctions will weigh on growth. In Saudi Arabia, Organization of Petroleum Exporting Countries (OPEC) restrictions on oil production constrain prospects.

The weakness in EMDE growth in the past five years has set back convergence with per capita incomes in advanced economies. In 2019, per capita income gaps with advanced economies are expected to widen in about one-third of EMDEs overall, and in about two-thirds and one-half in MNA and LAC, respectively.

Poverty targets likely out of reach. The world has made significant strides in reducing the number of poor and the severity of poverty over the past two decades (World Bank 2018b). In 1999, 1.729 billion people lived on \$1.90 or less per day (the international extreme poverty line), concentrated in EAP, SAR, and SSA (figure 6.5). In 2015, the latest available data point, their number had declined by more than half to 736 million. Much of the success in eradicating global poverty came from China and India. In China, the number of extreme poor fell from 503 million in 1999 to under 10 million by 2015. As a result, the share of extreme poor in EAP declined to just 2.3 percent of the population in 2015, from 38 percent of the population in 1999. In India, too, the number of people living in extreme poverty declined by 260 million to 176 million in 2015. As a result, the share of extreme poor in South Asia declined to 12.4 percent of the population in 2015 from 39 percent of the population in 1999.

In contrast, in MNA and SSA, rapid population growth has swelled the number of extreme poor, even though, in SSA, they now account for a smaller portion of the total population. In SSA, the number of poor rose by 14 million since 2008 and 32 million since 1999. The countries with the largest increases in the absolute number of extreme poor since 2008 are South Sudan, Madagascar, Nigeria, Malawi, and South Africa. In SSA, where 41 percent of the population live in extreme poverty, this share is five times as high as in other EMDEs, on average.

Since the global recession, there is evidence that the rate of poverty reduction has slowed further (World Bank 2018b).⁵ Between 2011 and 2013, poverty declined by 1.25 percentage points per year but by only 0.6 percentage point between 2013 and 2015. Forecasts for these trends to 2018 suggest a further slowdown to 0.5 percentage point per year. The pace of reduction slowed particularly in ECA, which was hard-hit by the global recession and subsequent euro area crisis, and reversed in countries that experienced steep recessions (Habib et al. 2010; chapter 3).

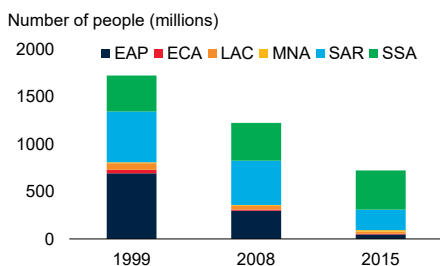
In 2015, half of the 736 million people living in extreme poverty could be found in just five countries, two of which are classified as LICs: India, Nigeria, the Democratic

⁵ Studies that looked at the negative impact of the global recession include Chen and Ravallion (2010); Development Committee (2010); Grosh, Bussolo, and Frejie (2014); Narayan and Sánchez-Páramo (2012); Tingson et al. (2010); World Bank (2009).

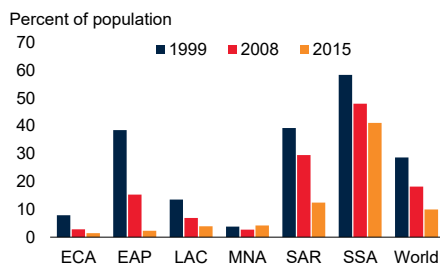
FIGURE 6.5 Poverty

The number of global poor has more than halved since 1999. In 2015, they were concentrated in a few countries, notably India, Nigeria, Bangladesh, and across low-income countries. Countries with slower growth see less poverty reduction, and current growth projections would be insufficient to achieve the goal of reducing global extreme poverty to 3 percent.

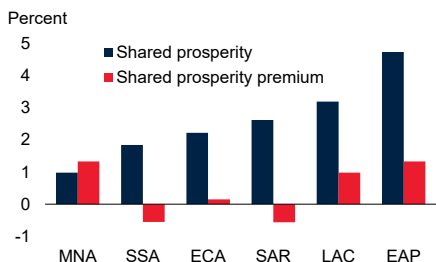
A. Global poor



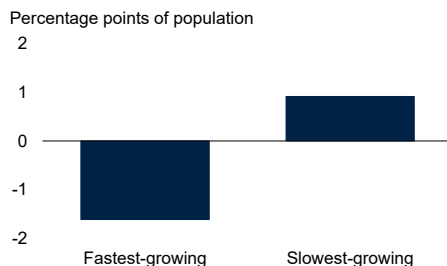
B. Poverty rates



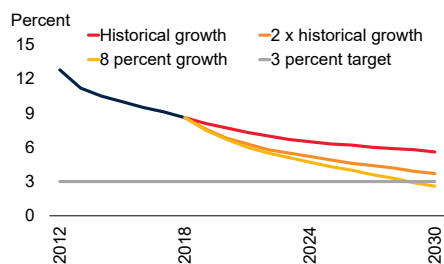
C. Shared prosperity



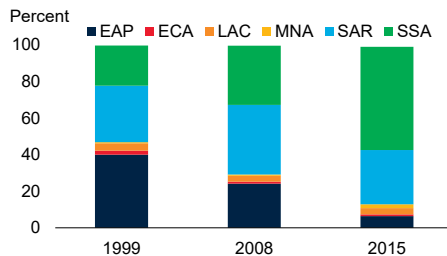
D. Change in poverty rates, by GDP growth



E. Projections of global extreme poverty



F. Distribution of poverty



Sources: World Bank's PovcalNet.

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.

A,B,F. Regional aggregation based on 2011 purchasing power parity and \$1.90 per day poverty line.

C. Shared prosperity is the average growth in household per capita income or consumption of the bottom 40 percent between 2010 and 2015. The shared prosperity premium measures the difference between income growth of the poorest 40 percent of households and the average household income growth.

D. Unweighted average of the average annual change in poverty headcount rates between two poverty estimates in each group of countries. "Fastest-growing" includes the quartile of EMDE country-year pairs with the highest average annual real GDP per capita growth between two poverty estimates; "slowest-growing" includes the quartile with the slowest average annual real GDP per capita growth. Based on data available from 1981.

E. Data based on global real per capita growth; 8 percent growth assumes average annual growth in per capita incomes of 6 percent for all countries, with incomes of the poorest 40 percent of households growing at 8 percent and those of the richest 60 percent growing at 4.7 percent.

Republic of Congo (LIC), Ethiopia (LIC), and Bangladesh.⁶ Most of the other half are concentrated in other LICs, such as Kenya, Madagascar, Mozambique, Tanzania, and Uganda, each of which is home to at least 15 million people living in poverty. In total, LICs and four lower-middle-income countries (India, Nigeria, Bangladesh, and Indonesia) account for over 80 percent of global poverty. The countries with the highest poverty rates are all in Sub-Saharan Africa (and LICs): the Central African Republic (77), Madagascar (77 percent), Burundi (75 percent), South Sudan (73 percent), and the Democratic Republic of Congo (72 percent). Poverty rates are also rising in economies affected by fragility, conflict, and violence (World Bank 2019a).

Longer-run growth trends in EMDEs suggest that the 2030 poverty target is likely out of reach. Even if historical growth trends between 2005-15 are projected forward, the world will not be able to reach the 3 percent global poverty rate target set for 2030. If current trends continue, the share of global poor living in SSA will increase to 87 percent by 2030. In order to reach the 2030 goal of reducing the global poverty rate to 3 percent, SSA would need to grow by 6 percent per capita per year, with 8 percent income growth among the bottom 40 percent of the population. In contrast, during 2017-19, per capita growth in SSA has been near zero and only a small and declining proportion of EMDEs has achieved such growth in any year since 2009 (World Bank 2019a).

Shared prosperity. Rapid growth in incomes of the poorest 40 percent of households are key to “shared prosperity.” During 2010-15, incomes of the poorest 40 percent of the population grew particularly rapidly (4.7 percent) in EAP but most slowly in MNA and SSA. In about half of EMDEs, incomes of the poorest 40 percent “caught up” by growing faster than average incomes since 2010. This catching up was particularly pronounced in EAP and MNA (1.3 percentage points faster)—in MNA notwithstanding slow income growth among the poorest 40 percent—and in LAC (1 percentage point faster; World Bank 2018b; figure 6.5). In contrast, in more than half of EMDEs in SSA, incomes of the poorest 40 percent have grown more slowly than average incomes, thus widening income inequality in the average SSA country (especially in Mozambique and Zambia)—with important exceptions such as Burkina Faso.

Global income inequality. Income inequality in EMDEs has fallen since the global financial crisis, continuing a trend that began in the late 1990s or early 2000s (Bourguignon 2017; World Bank 2016c, 2018a). In EMDEs, the average Gini coefficient declined from 41.4 in 2008 to 39.8 in 2017. The downward trend since the global recession has been broad-based: in more than half of EMDEs with available data for 2005-07 and 2015-17, the Gini coefficient has declined over the decade. On average, income distributions are most equal in ECA and least equal in LAC and SSA (World Bank 2016c).

Improving income inequality is about more than reducing extreme poverty because it affects the most vulnerable in society, women and children, and is associated with

⁶ Some non-LIC countries in this list (Bangladesh, India, Nigeria) were LICs until recently. India became a lower-middle-income country in 2009, Nigeria in 2008, and Bangladesh in 2014.

greater fragility and instability (World Bank 2016c). For example, rich children are four times more likely to be enrolled in primary education, creating a significant gap in economic opportunity later in life. More equal societies are more conducive to political and institutional stability, and greater social cohesion helps mitigate threats from extremism. Inequality can therefore aggravate output volatility but can also rise with greater volatility (Atkinson and Morelli 2010; Fang, Miller, and Yeh 2015; Stiglitz 2012). Its impact on growth depends on the source of inequality.⁷ Whereas income inequality can create incentives for productivity growth, inequality brought about by lack of opportunity—access to health care, credit, and education—stifles productivity growth.

Downside risks to growth prospects

EMDEs face significant downside risks to growth over the next few years, including policy uncertainty, trade tensions, financial market disruptions, spillovers from weaker-than-expected growth in major economies, and geopolitical risks. Some risks, if they materialize, could have profound repercussions for long-run growth prospects.

Policy uncertainty. Global policy uncertainty has risen to its highest level in over three decades in 2019 (Davis 2016; figure 6.6). This rise partly reflects heightened trade tensions between the United States and its largest trading partners, uncertainty related to the exit of the United Kingdom from the EU, and idiosyncratic developments in several large economies (including Brazil, France, and Italy). Heightened risks and uncertainty can lower growth and investment by depressing the expected value, and increasing the variance, of prospective future returns on long-term investment, and also by encouraging precautionary savings (Baker, Bloom, and Davis 2016; Jurado, Ludvigson, and Ng 2015; World Bank 2017a). For example, policy uncertainty in the euro area has been found to have had a statistically significant impact on investment outcomes in ECA EMDEs (World Bank 2017a).

Trade tensions. Much of the growth in trade since World War II has been due to the removal of protectionist measures including tariffs (Baier and Bergstrand 2001; Goldberg and Pavcnik 2016; Krugman, Cooper, and Srinivasan 1995). The commitment to trade liberalization and multilateralism has weakened recently amid growing trade restrictions. New import-restrictive measures imposed in the eight months to May 2019 were three-and-a-half times the average seen since May 2012 (WTO 2019).

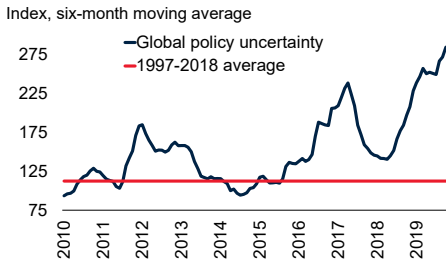
Trade tensions between the United States and China have escalated, with import tariffs imposed in 2018 and raised in 2019 (figure 6.6). There are indications that recent tariff increases have reduced real incomes in both the United States and China, with the costs to consumers outweighing the additional government revenue (Amiti, Redding, and Weinstein 2019; Fajgelbaum et al. 2019). These trade tensions, combined with recent

⁷ See Ferreira et al. (2014) and World Bank (2006) for a survey of the literature.

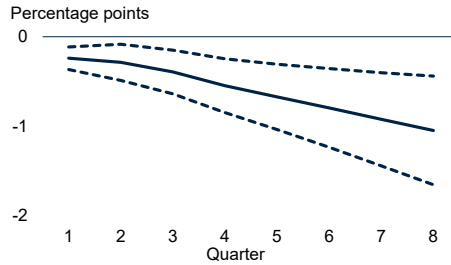
FIGURE 6.6 Risks to EMDE growth prospects: Policy uncertainty and trade tensions

Risks to the growth outlook for EMDEs are rising and mainly to the downside. They include heightened global policy uncertainty and trade disputes.

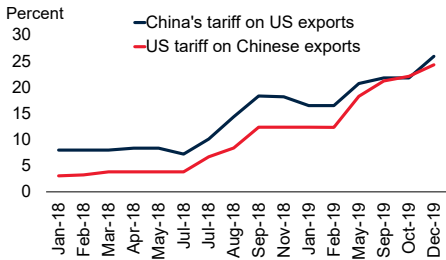
A. Global policy uncertainty



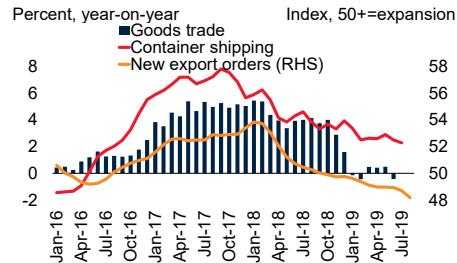
B. Impact of euro area policy uncertainty on investment in ECA



C. Import tariffs



D. Goods trade, container shipping, and export orders



Sources: CPB Bureau for Economic Policy Analysis; China Ministry of Finance; Davis (2016); Freund et al. (2018); Haver Analytics; Institute of Shipping Economics and Logistics; International Trade Centre; United States Trade Representative; World Bank.

A. See Davis (2016) for details. Last observation is October 2019.

B. Vector autoregressions are used for estimation on a sample of aggregate emerging market and developing economy (EMDE) variables for 1998Q1-2016Q2. The model includes the Economic Policy Uncertainty for the euro area, emerging market stock price (euro area) index, emerging market bond index, aggregate real output and investment growth in six Europe and Central Asia (ECA) economies, with Group of Seven real GDP growth, U.S. 10-year bond yields, and Morgan Stanley Capital International World Index as exogenous regressors and estimated with two lags.

C. Trade-weighted average tariffs computed from product-level tariff and trade data, weighted by U.S. exports to the world and China's exports to the world in 2017.

D. Figure shows three-month moving averages. New export orders measured by Purchasing Managers' Index (PMI). PMI readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction. Last observation is June 2019 for goods trade, July 2019 for container shipping, and August 2019 for new export orders.

cyclical headwinds, have weighed on global trade. In addition, the uncertainty created and the likely disruptions to global value chains will discourage firms from investing.

So far, the cost of trade tensions between the United States and China have been modest compared to the size of the economies involved. If trade tensions were to spread and worsen, however, the consequences for global growth could be sizable. If tariff rates on all bilateral U.S.-China trade flows were increased by 25 percentage points, the impact on world growth could be significant, especially if confidence were also to retreat (Freund et al. 2018). Similarly, if all World Trade Organization (WTO) members were to increase tariffs to legally allowed upper bounds, it could translate into a decline in

global trade flows of about 9 percent, similar to the contraction seen during the global financial crisis in 2008-09 (Kutlina-Dimitrova and Lakatos 2017).

Weakening trade sets back global poverty reduction efforts, as the poorest EMDEs rely heavily on trade for economic growth, with advanced economies their main export destinations and capital imports driving investment (World Bank 2017c). Higher trade openness is associated with lower poverty and inequality, and with helping countries transition out of low-income status, provided other policies are implemented that target adjustment costs (Goldberg and Pavcnik 2004; Winters, McCulloch, and McKay 2004). Tariff reductions have also been found to proportionately increase the incomes of the poor (Dollar and Kraay 2002; Sachs and Warner 1995).

Financial market risks. Notwithstanding still-benign global financial conditions, rising indebtedness makes EMDEs vulnerable to disorderly financial market developments. Several events could trigger a materialization of this risk.

First, in advanced economies, deteriorating growth prospects could increase corporate default rates, especially in an environment where the share of low-rated corporate bonds and the use of less transparent leveraged loans and collateralized debt obligations have increased (figure 6.7).⁸ High-yield debt markets, including those for leveraged loans, have grown rapidly since the financial crisis and now exceed precrisis levels (FSB 2019). The overall size of the leveraged loan market is estimated at \$2.2 trillion to \$2.4 trillion, mainly in the United States and the EU. The accumulation of this debt since 2009 has significantly outpaced growth in the earnings of the corporations taking on these loans. Debt is about five times earnings (before interest, tax, depreciation, and amortization) in the United States and EU and six times earnings in the rest of world, significantly above their precrisis levels (FSB 2019).

Second, large currency depreciations in EMDEs—possibly triggered by domestic vulnerabilities, shifts in U.S. monetary policy expectations, sharp commodity price movements, or changes in investor risk appetite—could lead to financial market disruptions, particularly through increases in the domestic currency value of debt denominated in foreign currencies. Some EMDEs have seen a rise in foreign ownership of local currency-denominated bonds, to over 30 percent of total, reducing immediate currency risks.

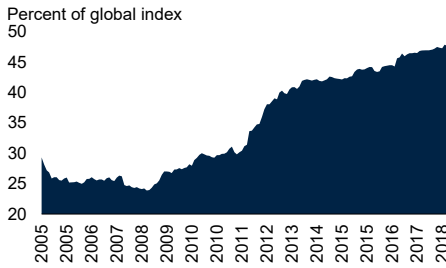
Unlike foreign direct investment, however, foreign participation in local bond markets can quickly reverse if investor sentiment changes. If a currency crisis ensues, EMDEs may experience output contractions, as occurred in half of EMDEs that faced previous crises (figure 6.7). Following a crisis and the accompanying jump in risk premia, debt service costs rise and real incomes fall, eroded by rising inflation and the required tightening of monetary policy. Sharp currency depreciations have been found to be

⁸ Leveraged loans are loans to nonfinancial corporations that have high debt levels, below-investment grade credit ratings, or a spread at issuance higher than a certain threshold (FSB 2019).

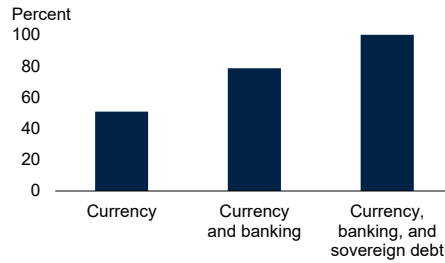
FIGURE 6.7 Risks to EMDE growth prospects: Financial stress

Events that could trigger financial market disruptions include increasing high-yield debt, large currency depreciations in EMDEs, contagion from financial stress in other EMDEs, and shifts in investor risk perceptions.

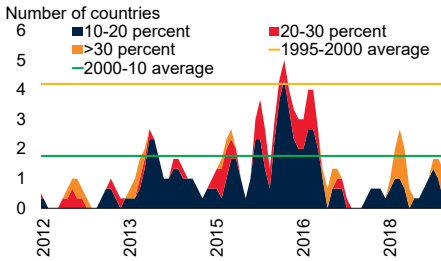
A. Share of global bonds rated BBB or below



B. Share of EMDEs with negative growth around currency crises



C. Number of countries with large currency depreciations



D. U.S. term premium



Sources: Dealogic; Federal Reserve Bank of New York; Laeven and Valencia (2018); World Bank.

Note: EMDEs = emerging market and developing economies.

A. Last observation is July 2018.

B. Share of countries that experienced negative growth in the current or next year following a currency crisis, a currency and banking crisis, or a currency, banking, and sovereign debt crisis between 1975 and 2017.

C. Figure shows three-month moving averages. Depreciations are defined as negative quarterly changes in the effective exchange rate. The sample comprises 138 EMDEs. Last observation is December 2018.

D. Based on Adrian, Crump, and Meonch (2013) model of the term premia at a 10-year maturity. Last observation is August 2019.

associated with significantly larger contractions in output when accompanied by banking sector and sovereign distress (Laeven and Valencia 2018).

Third, concerns about the possibility of contagion have resurfaced amid recent episodes of financial stress in some EMDEs. Financial stress in these economies has been accompanied by only mild exchange rate and equity market spillovers. Financial stress in the largest EMDEs might generate more sizable regional spillovers through trade and financial links (World Bank 2016a). Shifts in portfolio allocations across asset classes, in response to deteriorating investor sentiment, could also lead to contagion.

Fourth, U.S. term premia are negative and at record lows. Concerns about procyclical fiscal policy, intensifying wage pressures, or slowing foreign demand for U.S.

government debt could trigger a sudden upward adjustment in term premia and U.S. borrowing costs, as occurred during the taper tantrum of 2013.⁹

Spillovers from major economies. Weaker-than-expected growth in major economies could dampen activity in EMDEs through trade and financial links, as well as through confidence effects and commodity market movements (box 6.2). More than 80 percent of advanced economies are currently experiencing growth slowdowns (figure 6.8). Among them, the United States and the euro area are the most important sources of growth spillovers to EMDEs. A 1.0-percentage-point decline in U.S. annual growth is estimated to be associated with 0.6 percentage point lower EMDE growth after one year (Huidrom et al. 2019; Kose, Lakatos et al. 2017; World Bank 2016a). A 1-percentage-point decline in annual euro area growth is associated with a somewhat larger impact on EMDE growth (1 percentage point, broadly in line with the impact of China) in part because it has greater global trade integration than the United States and its close supply chain and financial links with EMDEs in ECA and EAP.

Among EMDEs, China is by far the most important source of growth spillovers to other EMDEs (Huidrom et al. 2019; figure 6.8).¹⁰ A 1.0-percentage-point decline in China's growth is estimated to be associated with 0.5-percentage-point lower EMDE growth after one year (Huidrom et al. 2019). Because China is a major source of commodity demand, the adverse impact on commodity-exporting EMDEs is twice that on commodity importers (Baffes et al. 2018; World Bank 2016a). Growth fluctuations in some of the other seven largest EMDEs could also cause adverse spillovers to EMDEs in their regions. A synchronized growth slowdown in several major economies could severely set back EMDE growth. For example, a combined 1.0-percentage-point slowdown in growth in the United States, euro area, and China would depress global growth by almost 1.7 percentage points after a year and EMDE growth (excluding China) by 1.4 percentage points.

Region-specific risks. Region-specific risks have been rising, including geopolitical risks and risks relating to armed conflicts and climate change. Geopolitical risks remain high in MNA, SSA, and ECA. The number of armed conflicts in 2015-17 was significantly higher than the average of the past two decades (figure 6.8).¹¹ The economic costs of conflict can be substantial, through destruction of physical and human capital, reduced employment and investment, and capital outflows (Collier 2003; Goodhand 2001; World Bank 2005). In some cases, conflict can have global consequences. For example,

⁹ During the 2013 taper tantrum, the estimated 10-year term premium rose by 160 basis points over a nine-month period (Adrian, Crump, and Moench 2013; Andolfatto and Spewak 2018; Crump, Eusepi, and Moench 2018; Kopp and Williams 2018). The U.S. 10-year term premium has been persistently negative since June 2017, compared to 1.6 percent on average from 1961 to June 2017.

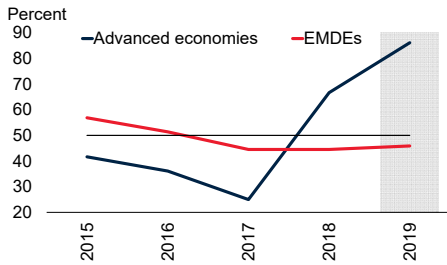
¹⁰ The past decade already featured major growth disappointments in China. For example, in 2012, China's growth was expected to average 7.4-10.1 percent during 2011-19 (World Bank 2012). Actual growth will average closer to 7.2 percent.

¹¹ The number of armed conflicts averaged 51 in 2015-17, compared to 35 in 2000-14 according to the Centre for the Study of Civil War at the Peace Research Institute Oslo. Conflicts are defined as developments that involve the use of armed force between two parties, of which at least one is the government of a state, and that result in at least 25 battle-related deaths in a calendar year.

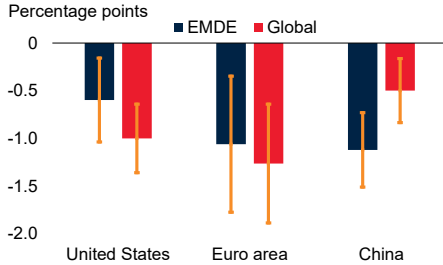
FIGURE 6.8 Risks to EMDE growth prospects: Other adverse shocks

Weaker growth prospects in major economies present significant spillover risks to EMDEs. Region-specific risks include geopolitical developments in the Middle East and North Africa, conflict, and weather-related developments.

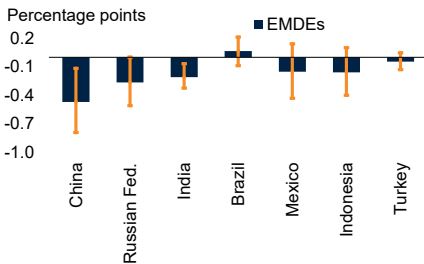
A. Share of countries with growth slowdowns



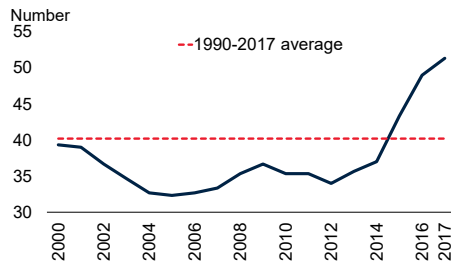
B. Spillovers from the United States, euro area and China



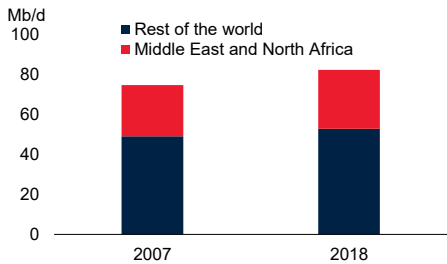
C. Spillovers from the seven largest EMDEs



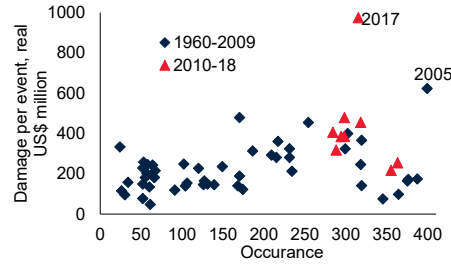
D. Number of armed conflicts



E. Oil production



F. Weather-related events



Sources: Centre for the Study of Civil War at the Peace Research Institute Oslo; Centre for Research on the Epidemiology of Disasters/ Office of U.S. Foreign Disaster Assistance International Disaster Database; Huidrom et al. (2019); International Energy Agency; World Bank.

A. Slowdowns of at least 0.1 percentage point in annual GDP growth. Data for 36 advanced economies and 146 emerging market and developing economies (EMDEs).

B. Median cumulative impulse response of EMDE and global GDP growth after one year to a 1-percentage-point decline in U.S. and euro area GDP growth. Based on vector autoregression of world GDP, output growth in the source country of the shock, the U.S. 10-year sovereign bond yield plus J.P. Morgan’s Emerging Market Bond Index, output in EMDEs excluding China, and oil price as an exogenous variable. The “global” sample includes 22 advanced economies and 19 EMDEs for 1998Q1-2016Q2.

C. See Huidrom et al. (2019) for details. Cumulative impulse responses of EMDE growth after one year in response to a 1-percentage-point decline in growth in origin of shock. Russian Fed. = Russian Federation.

D. A state-based armed conflict is a contested incompatibility that concerns a government or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar year. Three-year rolling average.

E. Mb/d stands for millions of barrels per day.

F. Observations each year. Weather events include drought, extreme temperature, floods, landslides, storms, and wildfires. Real cost deflated using U.S. GDP deflator in 2015 U.S. dollars. Last observation is 2018.

BOX 6.2 The global role of the United States and China

Economic developments in the United States and China, the world's two largest economies, can have effects far beyond their shores. A slowdown in these economies would result in considerably lower global growth transmitted through trade, financial, and commodity market channels. Easing U.S. financial conditions could reverberate across global financial markets, with pronounced effects on emerging market and developing economies that rely heavily on external financing. China's continued deceleration and rebalancing toward domestic consumption and services will likely put downward pressure on commodity prices worldwide and are expected to adversely affect commodity exporters. In addition, lingering uncertainty about the course of U.S. trade policy and an escalation of trade tensions between the United States and China could significantly dampen global growth prospects.

Introduction

The United States and China, the world's two largest economies, together account for close to 40 percent of global gross domestic product (GDP) and more than one-fifth of global trade and world population. Because of their size and international links in these two economies, developments in them are bound to have significant implications for the rest of the world. The United States, the world's largest economy (at market exchange rates), accounts for almost one-quarter of global output, about one-tenth of trade flows, close to one-fifth of remittances, and over a third of stock market capitalization. The United States plays a prominent role in virtually every global market, in international trade, financial and labor flows, and commodities (figure B6.2.1). China, the world's second-largest economy, accounts for about 16 percent of global output, one-tenth of global trade, and close to one-fifth of world population. China plays an important role in global commodity markets, accounting for virtually all of the increase in global consumption of metals and half of primary energy since 2000. China currently accounts for more than 50 percent of global consumption of coal and metals.

This box examines the role of the United States and China in the global economy by addressing the following questions:

- What are the main economic links between the United States and the world?
- What are the main economic links between China and the world?
- How large are global spillovers from shocks originating in the United States and China?

Links between the United States and the world economy

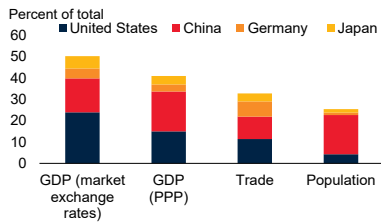
With an estimated nominal GDP of about \$20.5 trillion in 2018, the United States is the world's largest economy and has the world's third-largest population.

BOX 6.2 The global role of the United States and China (continued)

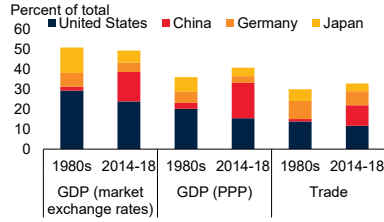
FIGURE B6.2.1 United States and China in the global economy

The United States and China, the world's two largest economies, together account for close to 40 percent of global GDP, and one-fifth of global trade and population.

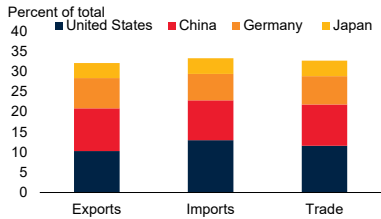
A. Size of major economies



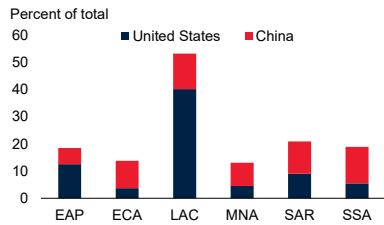
B. GDP and trade shares over time



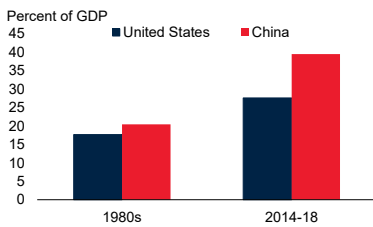
C. Share of global trade



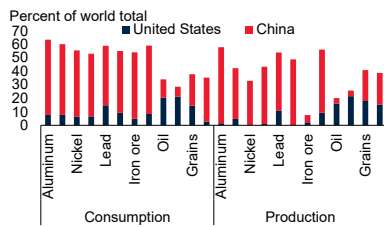
D. Share of regional trade



E. Trade openness over time



F. Share of commodity markets



Source: World Bank.

Note: Trade represents the sum of exports and imports. EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MNA = Middle East and North Africa; PPP = purchasing power parity; SAR = South Asia; SSA = Sub-Saharan Africa.

A.F. Data for 2018.

C.D. Averages for 2014-2018.

D. Goods trade only.

BOX 6.2 The global role of the United States and China (continued)

The United States accounts for more than 24 percent of global GDP, 11 percent of global trade, 13 percent of bank foreign claims, and 44 percent of global stock market capitalization (figures B6.2.1 and B6.2.2).^a The U.S. share of global output and trade has remained broadly stable since the 1980s, whereas the share of other major advanced economies has declined gradually. The United States is also the largest international creditor and debtor: it holds both the world's largest amount of foreign assets and liabilities and the largest net foreign asset position by a wide margin.

U.S. trade and financial integration with other advanced economies and emerging market and developing economies (EMDEs)—especially in Latin America and the Caribbean—runs deep. The countries most affected by developments in the U.S. economy are, directly, countries whose trade and financial ties are predominantly with the United States and, indirectly, those that are in general highly open to global trade and finance.

Trade linkages. Trade accounted for 28 percent of U.S. GDP in 2018, considerably less than the average for other advanced economies but 10 percentage points more than in the 1980s (18 percent). The United States is the world's largest importer of goods and services, and the largest exporter and importer of business services (figure B6.2.3). It accounts for 10 percent of global goods imports and 11 percent of global services imports.

Most U.S. imports are manufactured goods, accounting for more than three-quarters of goods imports. Oil imports make up most of the remainder despite a steady decline in oil imports since 2000. The most prominent imported product categories are motor vehicles, crude petroleum oil, data processing machines, and drugs. Until 2018, close to one-quarter of U.S. imports of goods came from China (22 percent) but this share is likely to have declined as a result of the increase in U.S.-China bilateral tariffs implemented during 2018-19. By the end of 2019, close to all U.S.-China bilateral trade flows were subject to additional tariffs, with average tariffs rising to nearly 25 percent. Other main sources of imports are the European Union (19 percent) and Mexico and Canada (together 26 percent).

The United States is the largest export destination for a quarter of the world's countries and is the primary export destination for countries in Latin America and the Caribbean, as well as a number of countries in other EMDE regions, especially those in East Asia and Pacific and South Asia. Mexico, Vietnam, Colombia, and many smaller Central American EMDEs rely particularly heavily on exports to the United States.

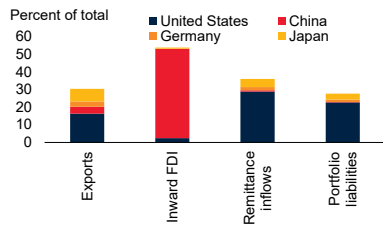
a. At purchasing power exchange rates, the United States is the world's second-largest economy (preceded by China as the world's largest), accounting for 15 percent of global GDP in 2018.

BOX 6.2 The global role of the United States and China (continued)

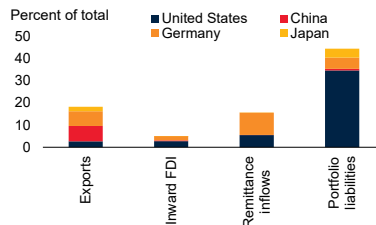
FIGURE B6.2.2 Links between the United States, China, and EMDE regions

The United States is a particularly important trading partner and source of finance for Latin America and the Caribbean. China's economic links are particularly prominent with East Asia and Pacific and Sub-Saharan Africa.

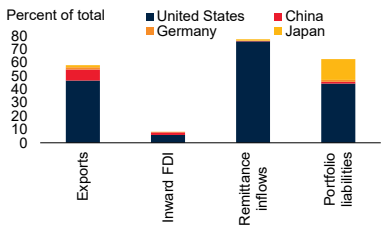
A. East Asia and Pacific



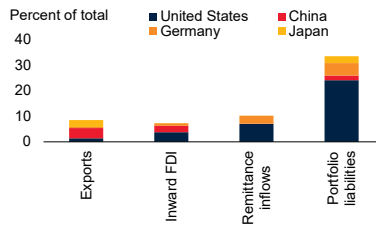
B. Europe and Central Asia



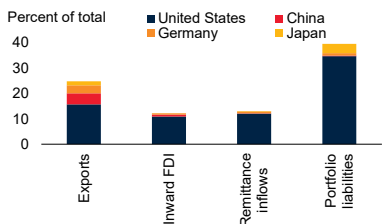
C. Latin America and the Caribbean



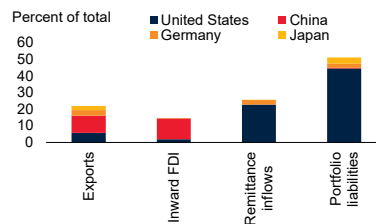
D. Middle East and North Africa



E. South Asia



F. Sub-Saharan Africa



Sources: Bank for International Settlements; International Monetary Fund; World Bank.

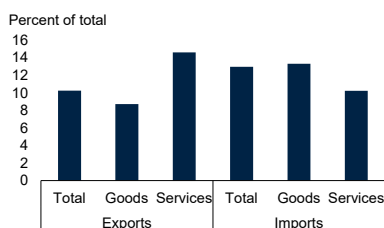
Note: Trade data is based on 2014-18 averages. FDI and remittances data reflect inward FDI stocks and remittances in 2017 (latest available at the bilateral level). Portfolio liabilities reflect June 2019 data. In percent of total exports of each EMDE region, total inward FDI stocks in each EMDE region, total portfolio liabilities (derived from creditor data) in each EMDE region, total foreign claims of BIS-reporting banks on each EMDE region, and total remittance flows to each region. BIS = Bank for International Settlements; EMDEs = emerging market and developing economies; FDI = foreign direct investment.

BOX 6.2 The global role of the United States and China (continued)

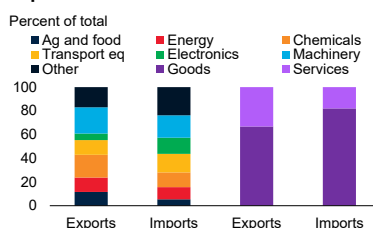
FIGURE B6.2.3 U.S. trade flows: Composition and partners

The United States is the largest country destination of global exports of goods and services. Electronic and transport equipment account for the bulk of U.S. goods imports and are mostly imported from other North American Free Trade Agreement members, European Union countries, and China. The United States is a key export destination for economies in the LAC region and for some EMDEs in EAP.

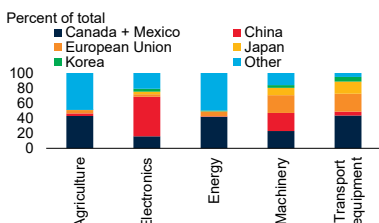
A. U.S. share of global goods and services trade



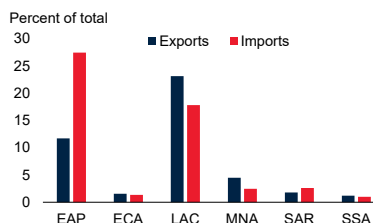
B. Composition of U.S. exports and imports



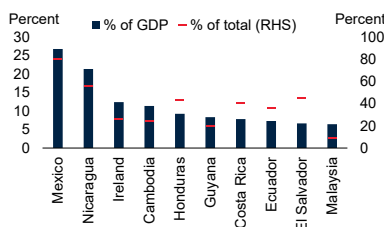
C. Main sources of U.S. imports



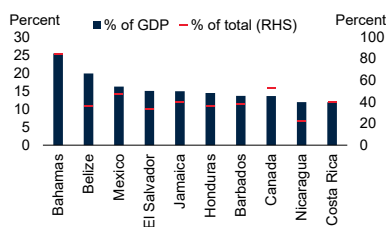
D. United States trade with EMDE regions



E. Selected EMDEs: Exports to the United States



F. Selected EMDEs: Imports from the United States



Sources: World Integrated Trade Statistics; World Bank.

Note: Averages for 2014-18 unless otherwise specified. 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.

B. U.S. exports/imports of goods and services in percent of total U.S. exports/imports of goods and services (purple bars); U.S. exports/imports in each sector in percent of total U.S. goods exports/imports (other bars).

C. Sectoral exports from Canada, China, the European Union, Japan, the Republic of Korea, Mexico, and other economies to the United States in percent of total U.S. imports in each sector.

E. Exports to the United States in percent of total exports or in percent of GDP.

F. Imports from the United States in percent of total imports or in percent of GDP.

BOX 6.2 The global role of the United States and China (continued)

The growth of trade links between the United States and other countries has been largely driven by its membership in the General Agreement on Trade and Tariffs (GATT) since 1948 and the World Trade Organization (WTO) since 1995, as well as 14 bilateral or regional trade agreements with 20 partner countries, which cover 18 percent of its imports.^b The largest of these regional agreements is the North American Free Trade Agreement (NAFTA), in force since 1994. In 2018, NAFTA was renegotiated to be replaced by the United States-Mexico-Canada Agreement (USMCA), yet to be ratified by the United States and Canada. Imports from Sub-Saharan Africa have also grown rapidly following the preferential tariff scheme granted by the United States in 2000 to 34 African economies (“Africa Growth and Opportunities Act”; Frazer and Van Biesebroeck 2008; Mattoo, Roy, and Subramanian 2003).

Financial links. U.S. financial markets are highly integrated with global markets. U.S. international assets and liabilities were on average more than three times larger than GDP over 2010-18 period (figure B6.2.4). The United States remains the world’s largest source and recipient of foreign direct investment (FDI) flows, accounting for about one-fifth of world FDI inflows and outflows in 2015. The European Union, Japan, Canada, and Switzerland together hold about 90 percent of their FDI assets in the United States, whereas the European Union and Canada are the largest recipients of U.S. FDI. EMDEs in Latin America and the Caribbean, in particular, Brazil, Chile and Mexico, are the most exposed to FDI inflows originating in the United States (figure B6.2.5). Reflecting the size and depth of its financial markets, the United States accounts for the largest share of portfolio assets in one-third of EMDEs.

The U.S. dollar is the most widely used currency in international trade and financial markets and is the world’s preeminent reserve currency. More than 50 percent of cross-border bank flows to EMDEs are denominated in U.S. dollars. Europe and Central Asia is the only EMDE region where the U.S. dollar is surpassed by the euro as a currency of denomination for cross-border bank flows. A number of EMDEs use the U.S. dollar as their official currency (Ecuador, El Salvador, Panama), and 31 other EMDEs maintain exchange rate pegs against the U.S. dollar. A large share of foreign exchange reserves (61 percent of allocated reserves), deposits, and bonds held by central banks are dollar-denominated. The

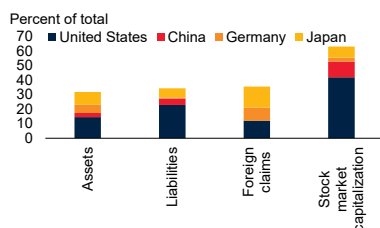
b. For discussions of the implications of the North American Free Trade Agreement (NAFTA) and the Dominican Republic-Central America Free Trade Agreement (CAFTA-DR), see Kose, Meredith, and Towe (2005); Kose, Rebucci, and Schipke (2005); and Romalis (2007). Most U.S. trade is conducted under the most-favored nation (MFN) regime, with average tariffs at 3.5 percent, higher for agricultural products at 5.2 percent. The United States also grants unilateral preferences to a number of EMDEs through its Generalized System of Preferences (GSP) and African Growth Opportunity Act (AGOA), which cover about 3.3 percent of U.S. imports.

BOX 6.2 The global role of the United States and China (continued)

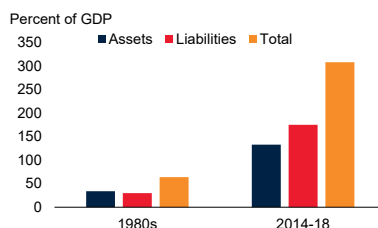
FIGURE B6.2.4 Role of the United States in global financial markets

The United States is the largest international creditor and debtor, and U.S. financial markets are highly integrated in global markets. The U.S. dollar is the most widely used currency in global trade and financial transactions.

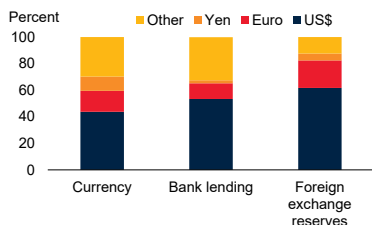
A. Size in financial markets



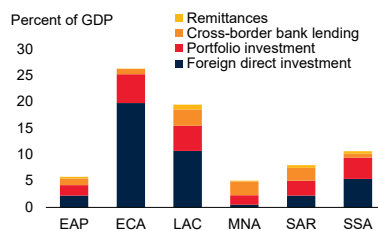
B. U.S. financial openness



C. U.S. dollar-denominated transactions in financial markets, 2018



D. Capital inflows from the United States in financial markets



Sources: Bank for International Settlements; International Monetary Fund; Lane and Milesi-Ferretti (2007); World Bank; World Federation of Exchanges.

Note: BIS = Bank for International Settlements; EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MNA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa.

A. Average share for 2014-18. Foreign claims are consolidated foreign claims of BIS-reporting banks headquartered in respective countries or locations. China is not a country where BIS-reporting banks are located (on a consolidated basis). Assets and liabilities are international positions.

B. Average shares in GDP over the periods of 1980-89 and 2014-18. Total is the sum of assets and liabilities.

C. Currency totals sum to 100 percent because each foreign exchange transaction involves two different currencies. "Euro" includes all legacy currencies of the euro as well as the European Currency Unit. Data for the center and right bars are for June 2016.

D. Capital flows refer to stocks of foreign direct investment (FDI), portfolio investment, and cross-border bank lending from the United States to emerging market and developing economy regions. Country coverage varies by capital flow component.

U.S. dollar is widely used in international trade transactions for invoicing of import and export transactions, accounting for about one-third of invoicing in Europe and two-thirds of invoicing in Asia (Goldberg and Tille 2008).

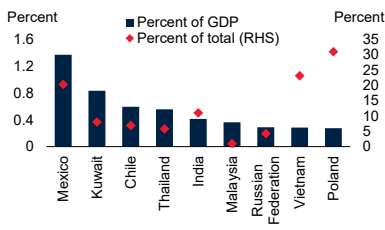
Commodity market links. The United States plays a significant role in global commodity markets as both a producer and consumer of commodities (figure

BOX 6.2 The global role of the United States and China (continued)

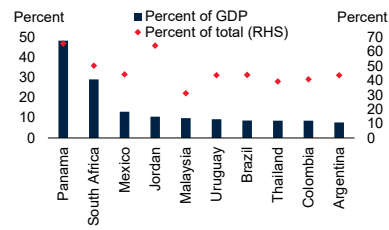
FIGURE B6.2.5 U.S. financial flows: Composition and partners

Because of its large financial system and economy, the United States is an important source of FDI, portfolio flows, remittances, and bank lending to EMDEs across the world.

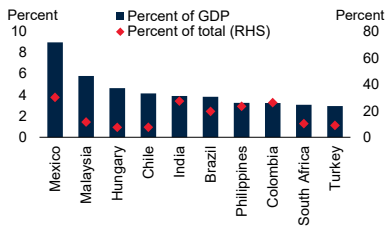
A. FDI inflows from the United States



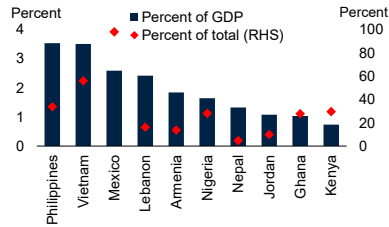
B. Portfolio inflows from the United States



C. Cross-border bank claims of U.S. banks on selected EMDEs



D. Remittance inflows from the United States



Sources: Bank for International Settlements; International Monetary Fund; World Bank.
 Note: BIS = Bank for International Settlements; EMDEs = emerging market and developing economies; FDI = foreign direct investment.
 A. Share of FDI inward stocks from United States in total FDI inward stocks into and as share of GDP of each country, average of 2013 to 2017.
 B. Share of portfolio investment from United States in total portfolio inflows into and as share GDP of each EMDE in 2018.
 C. Share of consolidated U.S.-headquartered BIS-reporting banks' claims on each EMDE region in total consolidated BIS-reporting banks' claims on and as share of GDP of each EMDE region, average of 2010 to 2015.
 D. Share of remittances inflows from United States in total remittances inflows into and as share of GDP of each country in 2017.

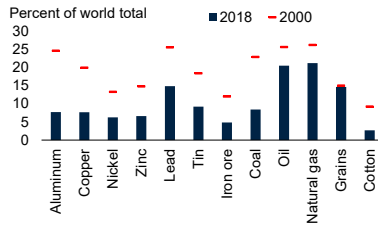
B6.2.6). For example, in global energy markets, the United States has become the largest producer of oil since 2017 and natural gas since 2014. The United States now accounts for 16 percent of global oil production, exceeding the share in the early 1990s. Its oil and gas production is almost evenly split between natural gas and petroleum, in contrast to the predominantly petroleum-based production of other major hydrocarbon producers such as the Russian Federation and Saudi Arabia (EIA 2016). Because U.S. shale oil production, which tripled during 2009-

BOX 6.2 The global role of the United States and China (continued)

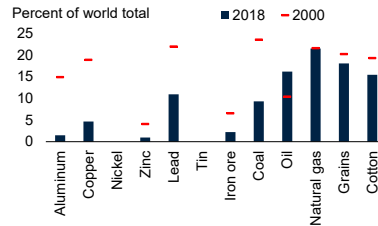
FIGURE B6.2.6 Role of the United States in commodity markets

The United States accounts for more than one-fifth of global consumption of oil and natural gas. In international crude oil and natural gas markets, the United States has recently become the largest producer.

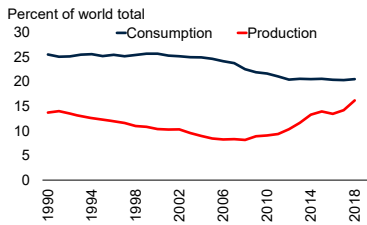
A. U.S. share of global consumption



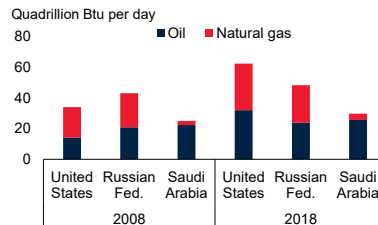
B. U.S. share of global production



C. U.S. share of global crude oil consumption and production



D. Oil and gas production



Sources: BP Statistical Review of World Energy Efficiency; Haver Analytics; U.S. Energy Information Administration; World Bank.

Note: Data for metals all represent refined consumption and production. Iron ore consumption is estimated with crude steel production. Grains include wheat, maize, and rice; edible oils include coconut oil, cottonseed oil, palm oil, palm kernel oil, peanut oil, rapeseed oil, and soybean oil. Oil includes inland demand plus international aviation and marine bunkers and refinery fuel and loss. Coal includes commercial solid fuels only, that is, bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Natural gas excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in Gas-to-Liquids transformation.

D. Oil and natural gas production in British thermal units (Btu), assuming that 1 barrel of crude oil is equivalent to 5,729,000 Btu and 1 cubic foot of natural gas is equivalent to 1,032 Btu. Russian Fed. = Russian Federation.

14, requires little capital investment and can be brought onstream rapidly, it has become one of the most flexible sources of additional global oil supply that responds quickly to price changes (Baffes et al. 2015).

The United States is also the world’s largest biofuel producer. U.S. biofuels account for four-tenths of global biofuel production and one-third of maize production. Rapid growth in maize-based U.S. biofuel production was encouraged

BOX 6.2 The global role of the United States and China (continued)

by the Renewable Fuel Standard (RFS), mandated by the Energy Policy Act of 2005 and Energy Independence and Security Act of 2007, which requires transportation fuel sold in the United States to contain a minimum volume of renewable fuels.

Historically, the United States has been a major consumer of agricultural, energy, and metals commodities. With the rise of large EMDEs, such as China and India, this role has diminished (World Bank 2015a); however, the United States is still the largest consumer of natural gas and oil, accounting for more than one-fifth of global oil and natural gas consumption and the second-largest consumer of a wide range of commodities, including aluminum, copper, lead, and coffee.

Links between China and the world economy

China's share in global GDP and in world trade has increased about 10-fold over the past four decades, to about 16 percent and 10 percent in 2018, respectively (figure B6.2.1). China is now the world's second-largest economy with GDP of \$13.6 trillion in 2018, accounting for about one-third of global economic growth over the last seven years.

Trade links. Trade accounted for 40 percent of China's GDP in 2018, nearly twice as much as in the 1980s and considerably more than in the United States (27 percent). China's rising importance in international trade significantly benefitted from its accession to the WTO in 2001. In addition, China currently has 15 free trade agreements (FTAs) in force with a wide range of countries, including with members of the Association of Southeast Asian Nations and with Australia, the Republic of Korea, New Zealand, and Peru. Partly as a result of intraregional trade liberalization, China is especially highly integrated into production processes in countries in East Asia and Pacific (EAP; figure B6.2.7).

China is the destination of more than one-tenth of total exports of EMDEs in EAP and Sub-Saharan Africa (SSA). It accounts for more than half of exports of more than 17 EMDEs. Most of China's imports are manufactured goods accounting for more than three-quarters of goods imports, with oil and agricultural imports making up the remainder. Services account for one-fifth of total imports. The most prominent imported product categories are machinery and equipment, electronic equipment, and chemicals. Until 2018, close to one-tenth of China's imports came from the United States, but this share is likely to have declined as a result of the increase in U.S.-China bilateral tariffs in 2018-19. Other main sources of imports are Korea (11 percent), Japan (10 percent), and Germany, Australia, and Malaysia (together 15 percent).

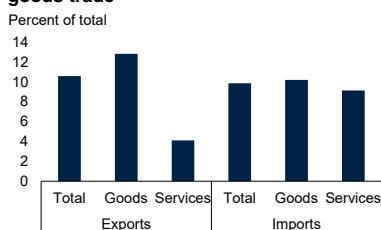
Commodity market links. The rapid industrialization of China and its investment- and manufacturing-driven growth model resulted in a surge in

BOX 6.2 The global role of the United States and China (continued)

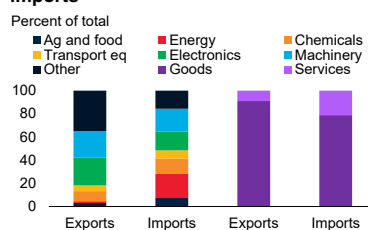
FIGURE B6.2.7 China's trade flows: Composition and partners

China accounts for one-tenth of global trade. Most of China's imports are manufactured goods, accounting for more than three-quarters of goods imports, with oil and agricultural imports making up the remainder. Services account for one-fifth of total imports and only 5 percent of exports. The most prominent imported product categories are machinery and equipment, electronic equipment, and chemicals.

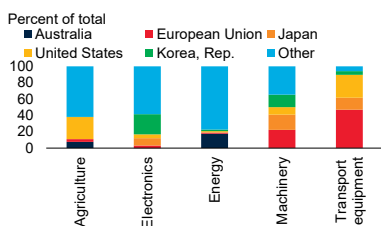
A. China's share of global services and goods trade



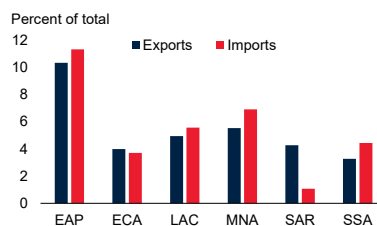
B. Composition of Chinese exports and imports



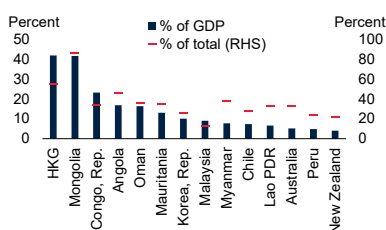
C. Main sources of China's imports



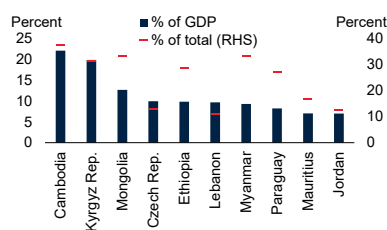
D. China's trade with EMDE regions



E. Selected EMDEs: Exports to China



F. Selected EMDEs: Imports from China



Source: World Bank.

Note: Averages for 2014-18 unless otherwise specified. 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.

B. China's exports/imports of goods or services in percent of total exports/imports of goods and services (purple bars); China's exports/imports in each sector in percent of total goods exports/imports (other bars).

C. Sectoral imports from Australia, the European Union, Japan, the Republic of Korea, the United States, and other economies as share of total imports in each sector.

E. Exports to China in percent of total exports or in percent of GDP of each EMDE. HKG = Hong Kong SAR, China.

F. Imports from China in percent of total imports or in percent of GDP of each EMDE. Czech Rep. = Czech Republic; Kyrgyz Rep. = Kyrgyz Republic.

BOX 6.2 The global role of the United States and China (continued)

demand for commodities from 2000. The expansion in demand contributed to a rapid increase in real energy and metals prices that marked a commodity “super cycle.” China accounted for virtually all of the increase in global consumption of metals and half of primary energy over 2000-08, and again during 2010-18. It now accounts for about half of global consumption of coal and metals (figure B6.2.8). China’s production of commodities has also risen sharply, with production of metals increasing 11-fold over the past two decades. China now accounts for about half of global coal and metals production, and is particularly dominant in aluminum. Commodity markets are highly sensitive to changes in China’s growth. A 1 percent change in China’s industrial production has been associated with a 5-7 percent change in metal and energy prices over the following year (Kolerus, N’Diaye, and Saborowski 2016).

Financial links. Although its financial ties are still limited, China is increasingly investing in other countries. China’s combined cross-border assets and liabilities almost doubled to reach about 3 percent of world total between 2007 and 2016. Since 2014, China has been the world’s largest destination for FDI inflows into the nonfinancial sector, surpassing 10.7 percent of total global inflows in 2018. China’s FDI outflows increased more than fivefold between 2007 and 2018 to 12.8 percent of total global outflows. For example, China’s direct investment in SSA has grown more than sixfold, and China’s official development assistance to SSA expanded from \$0.5 billion in 2000 to \$3.2 billion in 2013.

Spillovers from the United States and China to the world economy

Economic developments in the United States and China can have significant impacts on the global economy, because shocks from these economies can be transmitted to the rest of the world through the wide range of channels documented. An acceleration in growth in each economy can lift growth in its trading partners directly, through an increase in import demand, and indirectly, by strengthening productivity spillovers embedded in trade (Eckmeier 2007; Jansen and Stockman 2004; Kose, Prasad, and Terrones 2004).^c Given the sizable role of these economies in global commodity markets, an acceleration in growth could lift global commodity demand and raise prices, support activity, and ease balance of payments pressures in commodity exporters. Financial market developments in the United States can also have global implications. In addition, monetary and fiscal stimulus in the United States could boost domestic activity and generate cross-border spillovers through real and financial channels.

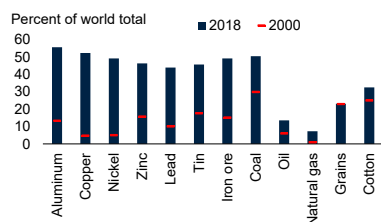
c. For a discussion of these channels, see Eckmeier (2007); Hirata, Kose, and Otrok (2013); and Jansen and Stockman (2004).

BOX 6.2 The global role of the United States and China (continued)

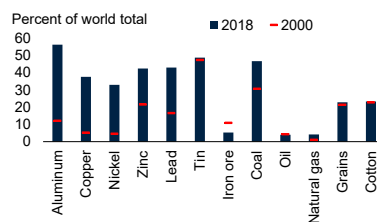
FIGURE B6.2.8 Role of China in commodity markets

China plays an important role in global commodity markets. China's production of commodities has risen sharply, with production of metals increasing 11-fold over the past 20 years. China now accounts for about half of global coal and metals production, and is particularly dominant in aluminum.

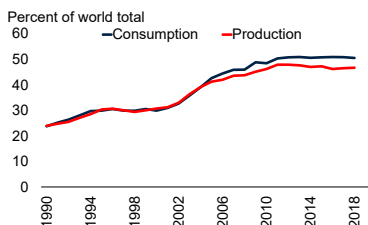
A. China's share of global consumption



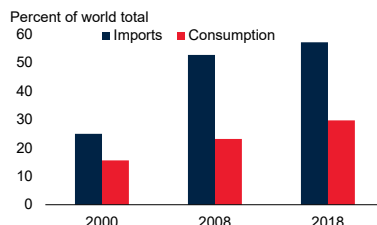
B. China's share of global production



C. China's share of global coal consumption and production



D. China's soybean imports and consumption



Sources: BP Statistical Review of World Energy Efficiency; Haver Analytics; U.S. Energy Information Administration; World Bank.

Note: Data for metals all represent refined consumption and production. Iron ore consumption is estimated with crude steel production. Grains include wheat, maize, and rice; edible oils include coconut oil, cottonseed oil, palm oil, palm kernel oil, peanut oil, rapeseed oil, and soybean oil. Oil includes inland demand plus international aviation and marine bunkers and refinery fuel and loss. Coal includes commercial solid fuels only, that is, bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Natural gas excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in Gas-to-Liquids transformation.

In addition to growth shocks or policy or financial market developments, shocks to confidence in the United States and China can reverberate across borders and cause business cycle fluctuations elsewhere (Levchenko and Pandalai-Nayar 2018). Elevated uncertainty about changes in U.S. and Chinese policies can reduce incentives to commit to capital investment at home and abroad, which in turn could adversely affect long-term global growth prospects (Kose and Terrones 2015).

BOX 6.2 The global role of the United States and China (continued)

Spillovers from the U.S. economy

Growth spillovers. U.S. growth shocks—including those driven by fiscal stimulus—can have sizable effects on activity in the rest of the world.^d A 1.0-percentage-point increase in U.S. growth could lift growth in both advanced economies and EMDEs by 0.8 and 0.6 percentage points after one year, respectively (figure B6.2.9).^e The impact of such a U.S. growth shock on investment could be approximately twice as large. NAFTA members (Canada and Mexico) would particularly benefit from trade spillovers (Shen and Abeysinghe 2016). Commodity markets could be another transmission channel of a U.S. growth shock to EMDEs because such a shock could raise global oil prices given that the U.S. remains the world's largest consumer of crude oil (World Bank 2016b).

Financial market spillovers. The role of the United States in global financial markets goes well beyond direct capital flows to and from the United States (Berkmen et al. 2012; de Grauwe and Yi 2016; Frankel and Saravelos 2012). U.S. sovereign bond and equity markets are the largest and most liquid in the world (IMF 2007). Swings in U.S. sovereign bond yields—whether because of changing expectations of U.S. monetary policy or because of shifting risk sentiment—are often closely mirrored by sovereign bond yields in other large financial markets, including the euro area. The implications for EMDEs of actual or expected changes in U.S. monetary policy would likely depend on underlying drivers (Arteta et al. 2015; figure B6.2.10).^f Financial stress associated with such a change could combine with domestic fragilities and increase the risks of sudden stops in capital flows among more vulnerable EMDEs (Ammer et al. 2016; Borio and Zhu 2012; Bowman, Londono, and Sapriza 2015; Bruno and Shin 2015b; Glick and Leduc 2013; Neely 2015). Similarly, cross-border spillovers from U.S. equity markets are large, regardless of the size of bilateral portfolio flows, depending instead on openness to the global economy (Ehrmann, Fratzscher and Rigobon

d. If U.S. fiscal stimulus leads to a higher U.S. public debt in the long term, it could also raise global interest rates and be a source of adverse cross-border spillovers by tightening financial conditions (Cardarelli and Kose 2004).

e. This estimate for advanced economies is in line with other estimates for Canada (Bayoumi and Swiston 2009). For Caribbean economies and Mexico with strong economic ties to the United States, considerably larger spillovers in excess of 1 percentage point have been estimated (Sun and Samuel 2009; Swiston and Bayoumi 2008).

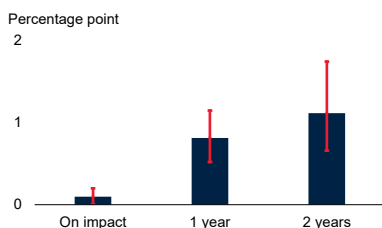
f. If a rise in long-term U.S. yields is supported by prospects of a strengthening U.S. economy (a favorable “real shock”), the net effect for EMDEs could be positive. In particular, it could bolster equity valuations and activity, and lead to less pronounced currency pressures. Alternatively, if financial markets are surprised by prospects of a less accommodative stance of U.S. monetary policy that is not supported by strengthening growth, it could have adverse consequences for EMDEs through asset price and capital flow channels (an adverse “monetary shock”).

BOX 6.2 The global role of the United States and China (continued)

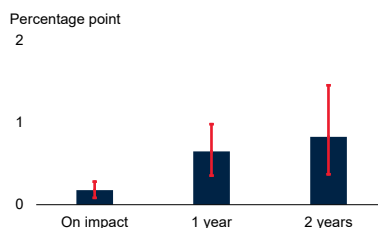
FIGURE B6.2.9 Spillovers from U.S. growth shocks

A 1.0-percentage-point increase in U.S. growth could lift global growth by about 0.7 percentage point over the following year.

A. Output growth in other advanced economies



B. Output growth in EMDEs



Sources: Haver Analytics; Organisation for Economic Co-operation and Development; World Bank.

Note: Cumulative impulse response of weighted average advanced economy (AE) and emerging market and developing economy (EMDE) output growth to a 1 percentage point decline in growth in real GDP in the United States. Growth spillovers to AE and EMDE based on a Bayesian vector autoregression of global GDP growth excluding the United States and AE or EMDE, U.S. GDP growth, the U.S. 10-year sovereign bond yield plus J.P. Morgan's Emerging Market Bond Index and AE or EMDE GDP growth or investment growth. The oil price is exogenous. Bars represent medians, and error bars 16-84 percent confidence bands. Sample for AE includes euro area (19 countries), Canada, Japan, and the United Kingdom, and 20 EMDEs for 1998Q1-2016Q2.

2011; Rose and Spiegel 2011). This makes U.S. monetary policy and investor confidence important drivers of global financial conditions (Arteta et al. 2015; Ehrmann and Fratzscher 2009; Rey 2015).

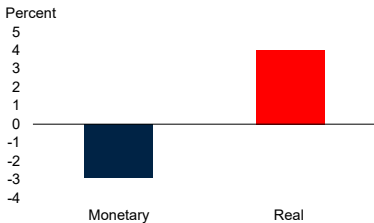
Because of the predominant use of the U.S. dollar in global trade and financial transactions, broadbased U.S. dollar exchange rate movements have global implications. Episodes of U.S. dollar appreciation tend to coincide with bank deleveraging, tighter global financial conditions, greater incidence of financial crises, and subdued EMDE growth (Abbate et al. 2016; Bruno and Shin 2015a, 2015b; Druck, Magud, and Mariscal 2015; IMF 2015a, 2015b). Although the average share of private and public debt denominated in foreign currency has declined since the 1990s, the exposure of some EMDEs to foreign currency movements is still high, especially in commodity exporters, and importers that have received large capital inflows after the global financial crisis (Arteta et al. 2016). As has happened in the past, if the U.S. dollar goes through a period of significant appreciation, EMDEs with substantial short-term dollar-denominated debt could become particularly vulnerable to rollover and interest rate risks and a drying up of foreign exchange liquidity (Chow et al. 2015; Chui, Fender, and Sushko 2014; McCauley, McGuire, and Sushko 2015).

BOX 6.2 The global role of the United States and China (continued)

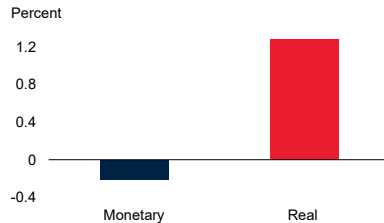
FIGURE B6.2.10 U.S. interest rate shock spillovers to EMDEs

An increase in U.S. long-term yields, supported by a stronger U.S. economy (real shock), could lift EMDE equity prices and industrial production. In contrast, an increase in yields driven by a sudden reassessment of monetary policy expectations (monetary shock) could have a sizable adverse effect on EMDE equity markets, exchange rates, industrial production, and capital flows.

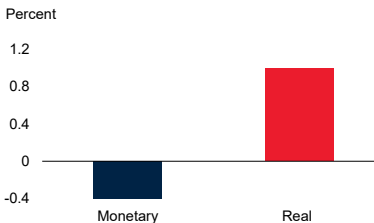
A. Impact of rising U.S. long-term yields on EMDE equity prices



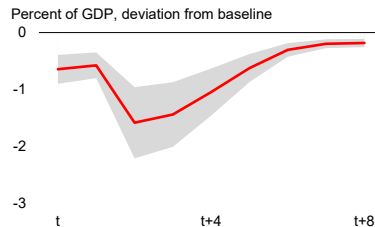
B. Impact of rising U.S. long-term yields on EMDE industrial production



C. Impact of rising U.S. long-term yields on EMDE exchange rate



D. Impact of interest rate shocks in four major economies on EMDE capital flows



Sources: Bloomberg; Haver Analytics; World Bank estimates.

Note: Impulse responses after 12 months from a panel autoregressive model, including EMDE industrial production, long-term bond yields, stock prices, nominal effective exchange rates and bilateral exchange rates against the U.S. dollar, and inflation, with monetary and real shocks as exogenous regressors. Monetary and real shocks are defined as in box 1 of Arteta et al. (2015). All data are monthly or monthly averages of daily data, for January 2013-September 2015 for 23 EMDEs. For comparability, the size of the U.S. real and monetary shocks is normalized such that each shock raises EMDE bond yields by 100 basis points on impact. EMDEs = emerging market and developing economies.

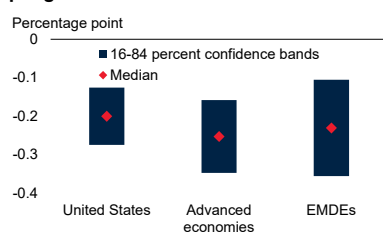
Uncertainty spillovers. Increased uncertainty, driven by financial market volatility or ambiguity about the direction and scope of policies, could discourage investors—in the United States and elsewhere—who base their decisions about long-term investments on stable financing conditions and predictable policies. Sustained increases in financial market uncertainty would set back output and investment growth in the United States, other advanced economies, and EMDEs (Bloom 2009; Carrière-Swallow and Céspedes 2013). A 10 percent increase in the implied volatility of the U.S. stock market (VIX) would reduce average EMDE

BOX 6.2 The global role of the United States and China (continued)

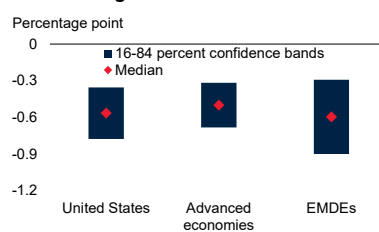
FIGURE B6.2.11 U.S. uncertainty shock spillovers to EMDEs

A sustained increase in policy uncertainty or financial market volatility in the United States would significantly slow U.S. growth as well as output and investment growth in other advanced economies and EMDEs.

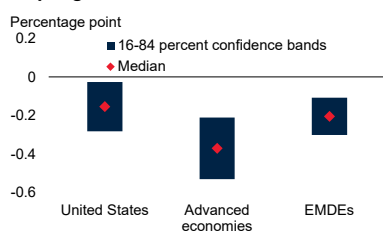
A. Impact of 10 percent rise in VIX on output growth



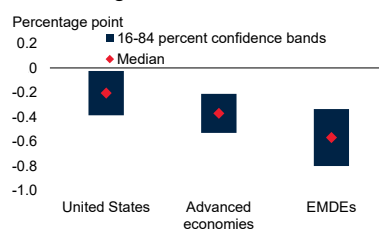
B. Impact of 10 percent rise in VIX on investment growth



C. Impact of 10 percent rise in U.S. EPU on output growth



D. Impact of 10 percent rise in U.S. EPU on investment growth



Sources: Haver Analytics; Organisation of Economic Co-operation and Development; World Bank estimates.

Note: Cumulative impulse responses after one year on output growth (A.C.) or investment growth (B.D.) in the United States, 23 other advanced economies (AEs), and 20 EMDEs to a 10 percent increase in volatility index (VIX, panels A and B) or in the U.S. Economic Policy Uncertainty index (EPU, panels C and D). Vector autoregressions are estimated for 1998Q1-2016Q2 with two lags. The model for the United States includes, in this order, uncertainty index (VIX or U.S. EPU), U.S. stock price index (S&P 500), U.S. 10-year bond yields, U.S. real GDP and investment growth. The model for AEs includes uncertainty index (VIX or U.S. EPU), Morgan Stanley Capital International (MSCI) index for advanced economies (MXGS), U.S. 10-year bond yields, aggregate real output and investment growth in 23 other AEs. The model for EMDEs includes uncertainty indexes (VIX or U.S. EPU), the MSCI emerging market equity price index, J.P. Morgan emerging market bond spreads (EMBIG), aggregate real output, and investment growth in 20 EMDEs. G7 real GDP growth, U.S. 10-year bond yields, and the MSCI world equity price index are added as exogenous regressors.

output growth by about 0.2 percentage point and EMDE investment growth by about 0.6 percentage point after one year (figure B6.2.11). The impact on other advanced economies would be broadly comparable.

Financial market volatility does not necessarily coincide with policy uncertainty, yet both appear to be detrimental to investment. Policy uncertainty is measured by the Economic Policy Uncertainty Index (EPU, a news-based measure of policy uncertainty; Baker, Bloom, and Davis 2016). A sustained 10 percent increase in

BOX 6.2 The global role of the United States and China (continued)

the index of U.S. economic policy uncertainty could reduce U.S. output growth by 0.15 percentage point, EMDE output growth by 0.2 percentage point, and EMDE investment growth by 0.6 percentage point after one year (figure B6.2.11).

Spillovers from China

Global growth spillovers from China are sizable and, in part because of China's larger economic size, much larger than those from other BRICS (Brazil, Russia, India, China, South Africa) economies (Huidrom et al. 2019). China's economy is twice as large as the other BRICS combined and five times as large as the next-largest BRICS economy (India); it has six times the trade of the next most open BRICS economy (Russia); and accounts for two times the commodity imports of the next-largest BRICS commodity importer (India). A 1.0-percentage-point increase in growth in China is estimated to contribute to global growth by 0.2 percentage point after two years, growth in emerging markets (excluding Brazil, Russia, India, and South Africa) by 0.5 percentage point, and in frontier markets by 1.0 percentage point after two years (figure B6.2.12). The impact on commodity-exporting EMDEs would be considerably larger than on commodity-importing ones. Spillovers from economic uncertainty in China could be significant. For example, variation in the macroeconomic uncertainty (MU) index in China constructed following Jurado, Ludvigson, and Ng (2015) explains 1.7 percent, 3.8 percent, 13 percent, and 4.3 percent of the fluctuations in U.S. consumer price index, producer price index, electric energy production, and money supply (M2), respectively (Huang et al. 2018).

As China's economy slows, rebalances, and shifts toward less commodity-intensive activities, its demand for commodities is likely to plateau. For example, China's and other EMDEs' rising per capita incomes and slowing growth are expected to slow global consumption growth for metals, which are among the commodities most sensitive to the business cycle, by one-third over the next decade (Baffes et al. 2018; World Bank 2018d). Based on current levels of consumption of commodities and expected growth rates elsewhere, no country or group of countries is expected to come close to replicating China's growth in metals demand, which in turn will provide less support to commodity prices (World Bank 2015a, 2018d).

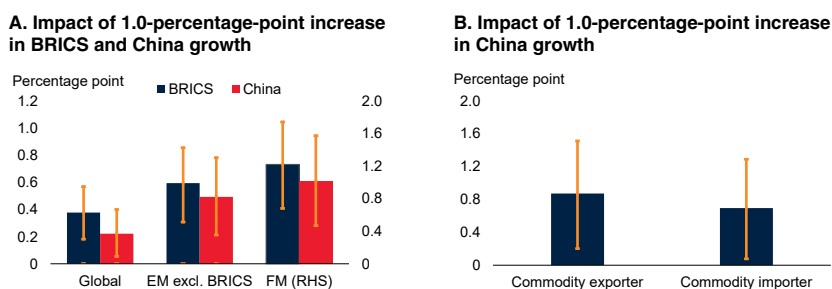
Conclusion

The United States and China, the world's two largest economies, together account for close to four-tenths of global GDP and more than one-fifth of global trade and world population. Because of the size and international links of these two economies, developments in them are bound to have significant implications for the rest of the world.

BOX 6.2 The global role of the United States and China (continued)

FIGURE B6.2.12 Spillovers from China growth shocks

A 1.0-percentage-point increase in China's growth is estimated to boost global growth by 0.2 percentage point after two years.



Sources: Haver Analytics; Organisation of Economic Co-operation and Development; World Bank.

A. Cumulated impulse responses at the end of two years due to a 1.0-percentage-point increase on impact in growth in China and in BRICS (Brazil, the Russian Federation, India, China, and South Africa). The shock size is such that China's growth rises by 1.0 percentage point on impact. The shock size for BRICS is calibrated such that its growth rises by exactly the same amount as that of China at the end of two years. Solid bars denote the median and the error bars denote the 16-84 percent confidence bands. EM = emerging market economies.

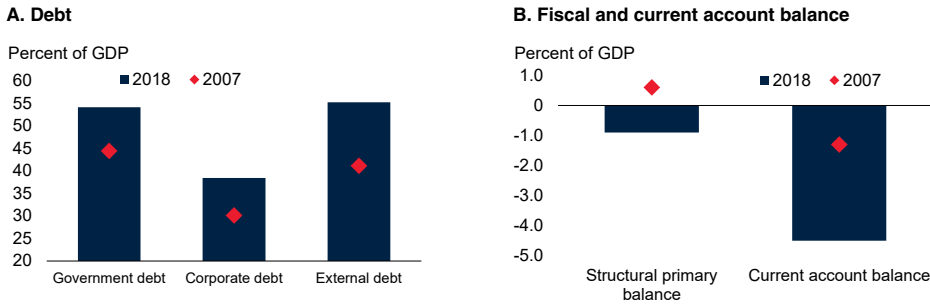
B. Cumulated impulse responses of trade-weighted commodity prices of commodity exporters, for different horizons, due to a 1.0-percentage-point increase in China's growth. Solid bars denote the median and the error bars denote the 16-84 percent confidence bands. The average quarterly growth rate of commodity prices is about 0.9 percent in the sample.

The United States is the world's largest economy, accounting for almost one-quarter of global output and about one-tenth of total trade flows. It is also the largest international creditor and debtor economy. China, the world's second-largest economy accounts for about 16 percent of global output, one-tenth of global trade, and close to one-fifth of world population. China plays an important role in global commodity markets, currently accounting for about half of global consumption of coal and metals.

Shocks to U.S. growth, changes in U.S. fiscal and monetary policies, or uncertainty in U.S. financial markets or policies all could have sizable global spillovers. The impact is likely to be broad-based and most severe for more financially open economies with stronger trade ties to the United States. A shock to growth in China would also reverberate around EMDEs, with particularly strong impacts on commodity-exporting EMDEs. For now, shocks to China's growth may have somewhat more modest global impacts than shocks to U.S. growth, but policy uncertainty, especially adverse developments, about these two countries' future economic relationship would hit many countries doubly.

FIGURE 6.9 Vulnerabilities in EMDEs

Since 2007, external, corporate sector, and sovereign vulnerabilities have risen in the majority of EMDEs.



Sources: International Monetary Fund; World Bank.

A. Unweighted averages of gross government debt for 146 emerging market and developing economies (EMDEs), nonfinancial corporate debt for 48 EMDEs, and total external debt for 61 EMDEs.

B. Unweighted averages of the structural primary balance for 149 EMDEs, and current account balances for 143 EMDEs.

oil supply disruptions in MNA can raise global oil prices, depressing global aggregate demand and worsening trade balances in oil-importing economies.

Extreme weather events have been increasing in frequency, severity, and cost (World Bank 2014). Small island economies of the Caribbean and EAP, and economies with large agricultural sectors, including in SSA and SAR, are most at risk (World Bank 2017b). In the median SSA economy, agricultural value added accounted for 21 percent of GDP in 2017—three times larger than in non-SSA EMDEs and 11 times larger than in advanced economies. As natural disasters become more common, their effects on the level and volatility of output in agriculture-dependent economies are likely to increase.

Rising vulnerabilities

Comparison before the global recession. Since 2007, external, corporate sector, and sovereign vulnerabilities have risen in most EMDEs, leaving them less well prepared for the next financial shock (figure 6.9). Vulnerabilities can be defined as conditions that increase the probability of financial or economic crises (or stress) when adverse shocks occur. If risks materialize, their impact on an economy's growth will depend on its vulnerabilities and the ability of policy makers to respond.¹²

Sovereign vulnerabilities. Since 2007, government debt in EMDEs has increased by about 10 percentage points of GDP, on average, to 54 percent of GDP by end-2018,

¹² See Llaudes, Salman, and Chivakul (2010) on the interaction of vulnerabilities in emerging markets and the global financial crisis.

with the most rapid increases seen in commodity exporters (figure 6.10). Debt has risen in three-quarters of EMDEs and by more than 20 percentage points of GDP in one-third of them. Reflecting this rise in sovereign indebtedness, many EMDEs have a lower average sovereign credit rating now than in 2007. Moreover, the average maturity of EMDE sovereign debt has declined from 11.5 years in 2007 to 10.3 years in 2018, with 23 percent of EMDEs in 2018 having an average debt maturity under 6 years.

The rise in EMDE sovereign debt reflects a deterioration in fiscal balances. On average, the primary surplus of 2.4 percent of GDP in 2007 turned into a deficit of 1.3 percent of GDP by 2018. The cyclically adjusted overall fiscal balance has shifted from a surplus of 2.4 percent of GDP to a deficit of 1.5 percent. Nine-tenths of EMDEs now have a cyclically adjusted fiscal deficit, compared to two-thirds in 2007. EMDEs, on average, continued to run cyclically adjusted primary budget deficits in 2018, and have not yet fully unwound fiscal stimulus implemented during the global recession (chapter 5). Commodity-exporting EMDEs experienced the largest deterioration in fiscal balances, on average, and are currently running the largest deficits.

External vulnerabilities. Although external financing helps fund much-needed investment in EMDEs, it can increase EMDEs' vulnerability to global financial market stress. EMDE total external debt has risen by 14 percentage points of GDP since 2007, to 55 percent of GDP on average in 2018. In half of EMDEs, it has risen by 10 percentage points of GDP or more (figure 6.11). This increase has mainly reflected sizable and persistent current account deficits, which averaged 4.5 percent of GDP in 2018, compared with 1.2 percent of GDP in 2007. In 2018, 60 percent of EMDEs had weaker current account balances than in 2007, 76 percent ran current account deficits (compared with 66 percent in 2007), and 44 percent had current account deficits in excess of 5 percent of GDP.

The share of external debt maturing in 12 months or less has remained stable since 2007 at about 12 percent, whereas the share denominated in foreign currency has remained above 90 percent. This buildup of external vulnerabilities has been mitigated somewhat by foreign exchange reserves in most EMDEs. Although still above their 1980s and 1990s averages, international reserves have fallen since 2007 in two-thirds of EMDEs, and in some they have more than halved. In 44 percent of EMDEs, they also appear not to be sufficient to meet their potential balance of payments needs in 2019, according to the reserves assessment metric of the International Monetary Fund (IMF).

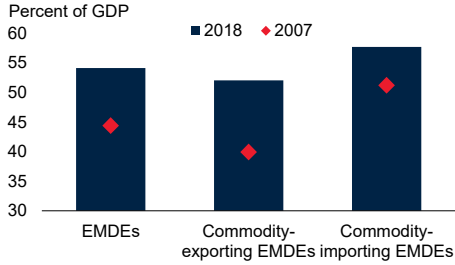
A growing share of external liabilities are channeled through domestic bond markets. In some EMDEs, the share of nonresident-held bonds in local currency bond markets has grown to more than 30 percent. The higher participation of nonresidents reduces immediate currency risks, but exposes these countries to the risk of shifts in global risk sentiment (Agur et al. 2018).

Corporate and household debt vulnerabilities. Since 2007, nonfinancial corporate debt has increased on average by 10.3 percentage points of GDP to 48.0 percent in 2018 among EMDEs other than China, often fueled by low global interest rates and

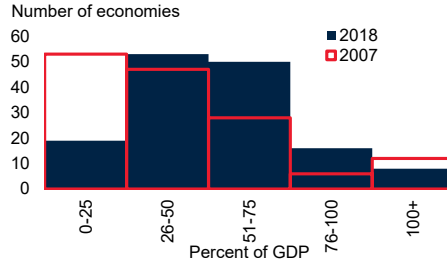
FIGURE 6.10 Sovereign vulnerabilities in EMDEs

Government debt and fiscal deficits had broadbased increases in emerging market and developing economies between 2007 and 2018.

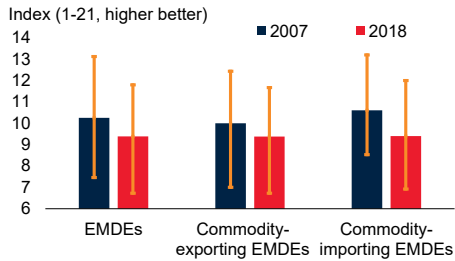
A. Government debt



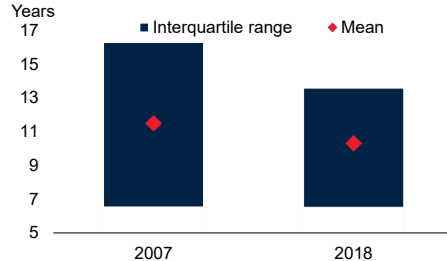
B. Government debt



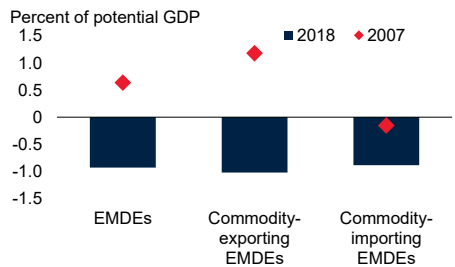
C. Sovereign credit ratings



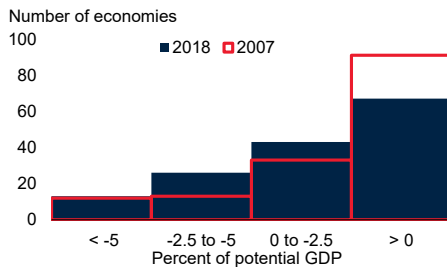
D. Maturity of government debt



E. Cyclically adjusted primary fiscal balance



F. Cyclically adjusted primary fiscal balance

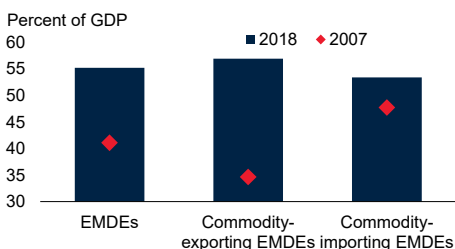


Sources: International Monetary Fund; Kose, Kurlat et al. (2017); World Bank.
 Note: EMDEs = emerging market and developing economies.
 A. Unweighted average of government debt ratios for 85 EMDE commodity exporters and 60 EMDE commodity importers.
 B. Based on data for 146 EMDEs.
 C. Unweighted averages of foreign currency sovereign credit ratings for 54 EMDE commodity exporters and 40 EMDE commodity importers. Whiskers denote interquartile ranges.
 D. Unweighted averages of the average maturity of government debt based on 38 EMDEs.
 E. Unweighted average of cyclically adjusted primary balance-to-potential GDP ratios for 91 EMDE commodity exporters and 64 EMDE commodity importers.
 F. Based on data for 149 EMDEs.

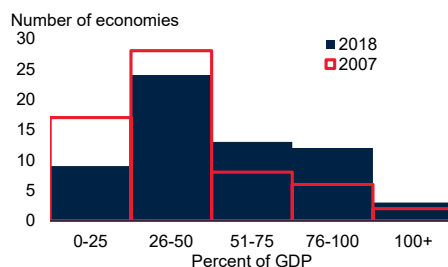
FIGURE 6.11 External vulnerabilities in EMDEs

Since 2007, external debt has risen in most EMDEs relative to GDP and current account balances have weakened in commodity exporters. Most EMDEs appear to have adequate foreign reserve coverage to meet balance of payments needs, but significant heterogeneity exists.

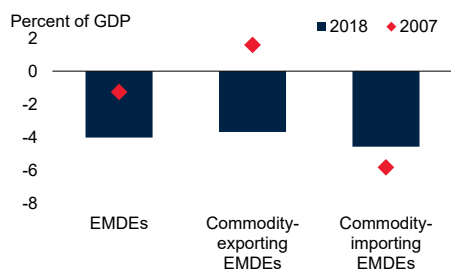
A. External debt



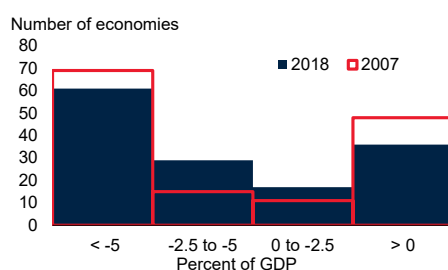
B. External debt



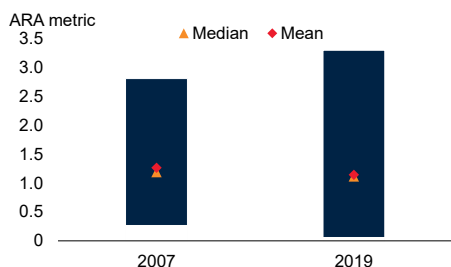
C. Current account balance



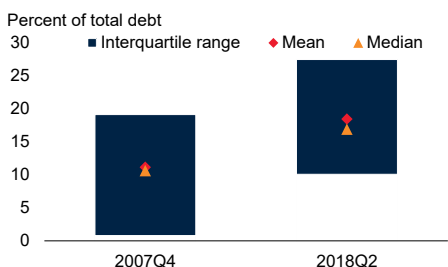
D. Current account balance



E. Foreign reserves adequacy



F. Nonresident holdings of local currency debt



Sources: Ha, Kose, and Ohnsorge (2019); International Monetary Fund; World Bank.

Note: EMDEs = emerging market and developing economies.

A. Unweighted average of total external debt-to-GDP ratios for 31 EMDE commodity exporters and 30 EMDE commodity importers.

B. Based on data for 61 EMDEs.

C. Unweighted average of current account balance-to-GDP ratios for 88 EMDE commodity exporters and 55 EMDE commodity importers.

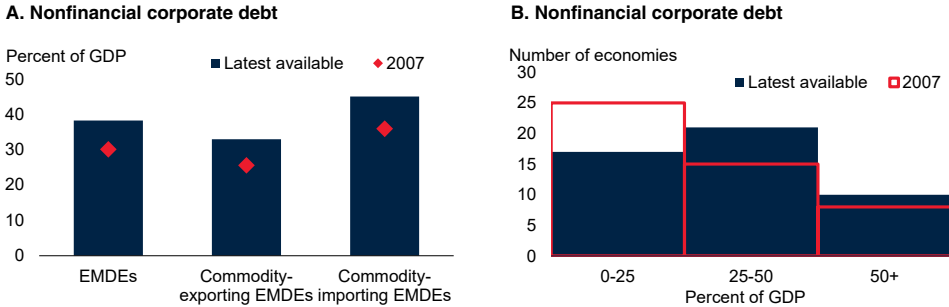
D. Based on data for 143 EMDEs.

E. Based on data for 48 EMDEs. Dark blue bars show minimum and maximum values. Assessing Reserve Adequacy (ARA) metric is based on IMF (2011), which determines the appropriate reserve cover on a risk-weighted basis covering short-term debt, medium and long-term debt, and equity liabilities. Broad model and export earnings. Risk weights are based on observed outflows during periods of exchange rate pressure. Values above 1 suggest that countries are fully able to meet balance of payments needs using reserves.

F. Based on data for 23 EMDEs.

FIGURE 6.12 Corporate vulnerabilities in EMDEs

Corporate debt has risen most rapidly among commodity-importing EMDEs.



Sources: Bank for International Settlements; International Monetary Fund.

Note: Based on data for 48 emerging market and developing economies (EMDEs). Latest available datapoint is 2019Q1 for Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Poland, the Russian Federation, Saudi Arabia, South Africa, Thailand, and Turkey; 2016 for Algeria, Malaysia, Peru, and Sri Lanka; and 2017 for the rest. Data from 2008 are used for South Africa and the United Arab Emirates.

A. Unweighted average of nonfinancial corporate debt in 27 EMDE commodity exporters and 21 EMDE commodity importers.

compressed risk premiums (figure 6.12).¹³ Corporate debt, as a ratio to GDP, has risen above 2007 levels in eight-tenths of EMDEs and, in one-third of them, by more than 10 percentage points of GDP (Borensztein and Ye 2018; Ohnsorge and Yu 2016).¹⁴ The most rapid increases in nonfinancial corporate debt have occurred in some of the largest EMDEs, particularly China. Outside China, about half of the buildup in EMDE corporate debt since 2010 has been in foreign currency (World Bank 2018c).

Household debt in the average EMDE has also increased by 5 percentage points of GDP since 2007, reaching 25 percent of GDP in 2018. In some EMDEs, household debt has risen by more than 10 percentage points of GDP. The largest increases are in China and Thailand, where household debt swelled by 32 and 24 percentage points of GDP, respectively.

Vulnerabilities in LICs. In LICs also, government debt and current account deficits have grown since 2007. Government debt in the median LIC was 47 percent of GDP in 2018, 10 percentage points higher than in 2007, although significantly lower than before the Multilateral Debt Relief Initiative (MDRI) and Heavily Indebted Poor Countries Initiative (HIPC).¹⁵ The government debt-to-GDP ratio reached a low in 2013 and has since increased by 16 percentage points; it has risen in 90 percent of LICs

¹³ Based on data for 16 EMDEs that have 2019Q1 data: Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Poland, the Russian Federation, Saudi Arabia, South Africa, Thailand, and Turkey.

¹⁴ Based on a larger sample of 48 EMDEs with data for 2017 and 2016.

¹⁵ Average LIC debt was 51 percent of GDP in 2018, lower than the 59 percent of GDP in 2007; however, the mean is driven by a minority of LICs that have seen significant declines in debt as part of the Enhanced HIPC initiative of 2009/10.

and, in one-third of them, by more than 20 percentage points. The composition of LIC debt has shifted toward nontraditional sources of funding, including international capital markets and non-Paris Club creditors (World Bank 2019b).¹⁶ Debt has been increasingly financed by nonconcessional and private sources, increasing LICs' vulnerability to financial market disruptions. As a result, interest payments are absorbing an increasing share of government revenues. Separately, the average LIC current account deficit widened to 8.1 percent of GDP in 2018, from 3.1 percent of GDP in 2007.

Vulnerabilities now and during previous crises

EMDEs have periodically witnessed currency, banking, and debt crises (Laeven and Valencia 2018). Reflecting their different triggers and circumstances, these crises were preceded by wide heterogeneity in vulnerabilities. Broadly speaking, however, compared to the average EMDE two years before EMDE crises since the 1980s, today's average EMDE has somewhat higher government and nonfinancial corporate debt and larger fiscal deficits, but smaller current account deficits, lower external debt, and stronger foreign exchange reserve cover (figure 6.13).

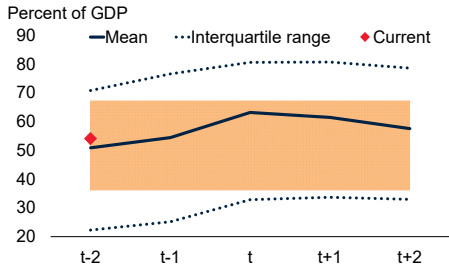
- *Higher government and corporate debt.* In the average EMDE, government debt (as of end-2018) is 3 percentage points of GDP higher, and nonfinancial corporate debt is about 7 percentage points of GDP higher, than in the average EMDE two years before it slid into a crisis in the past. Half of EMDEs have government debt levels above the average two years before past crises. Corporate debt levels in about half of EMDEs are above the average two years before past crises. Relative to only sovereign debt crises, however, average government debt in EMDEs today is 18 percentage points of GDP below the average two years preceding past crises.
- *Larger fiscal deficits.* In today's average EMDE, the cyclically adjusted fiscal deficit is 0.5 percentage point of GDP larger than in the average EMDE two years before it slid into a crisis in the past. Over half of EMDEs had a fiscal deficit in 2018 that was larger, in relation to GDP, than the historical average in countries two years away from a crisis.
- *Lower external balances.* In the average EMDE today, the current account deficit, relative to GDP, is 0.7 percentage point smaller than in the average EMDE two years before it slid into crisis. Almost half of EMDEs, however, have current account deficits larger than the average two years before past crises.
- *Lower external debt.* Total external debt is 7 percentage points lower in the average EMDE today compared to the average two years before the crisis; however, 41 percent of EMDEs have external debt levels higher than the average two years prior to crisis.

¹⁶By August 2019, 12 out of 28 LICs were regarded as being in debt distress, or at high risk thereof, under the IMF-World Bank debt sustainability framework (two more than at end-2018). A country is considered to be in debt distress if it is experiencing difficulties in servicing its debt, as evidenced, for example, by the existence of arrears or ongoing or impending debt restructuring, or if there are indications that a future debt distress event is probable.

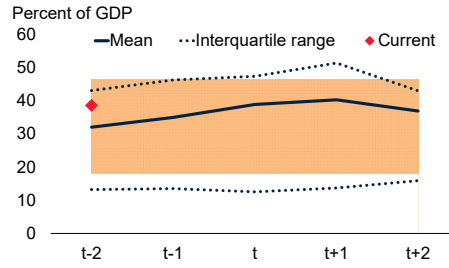
FIGURE 6.13 EMDE vulnerabilities now and during previous crises

Compared to the average EMDE two years ahead of EMDE crises since the 1980s, today's average EMDE has wider fiscal deficits and higher government and corporate debt, but narrower current account balances, lower external debt, and higher foreign exchange reserve cover for short-term external debt.

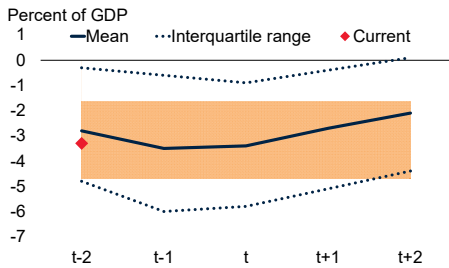
A. Government debt



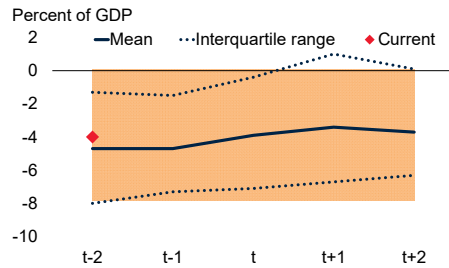
B. Nonfinancial corporate debt



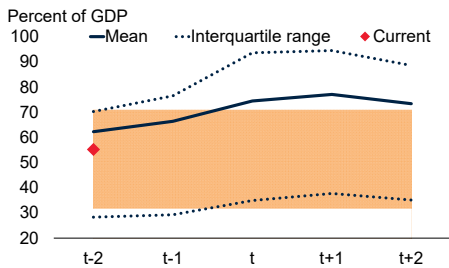
C. Cyclically adjusted fiscal balance



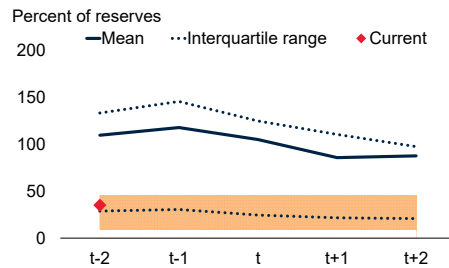
D. Current account balance



E. External debt



F. Short-term external debt



Sources: International Monetary Fund; Laeven and Valencia (2018); World Bank.

Note: Crises are currency, sovereign debt, and banking crises as defined by Laeven and Valencia (2018). Horizontal axis indicates years. "Current" denotes unweighted averages for 2018 for government debt, total external debt, and cyclically adjusted fiscal balance; 2017 for short-term external debt to reserves; 2018Q3 for corporate debt in Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Poland, the Russian Federation, Saudi Arabia, South Africa, Thailand, and Turkey; 2016 for corporate debt in Algeria, Malaysia, Peru, and Sri Lanka; and 2017 for corporate debt in 29 other EMDEs. Orange shaded area indicates the interquartile range of current observations. t = year of crisis. EMDEs = emerging market and developing economies.

A. Mean and interquartile range based on 94 previous EMDE crisis events.

B. Based on 31 previous EMDE crisis events.

C. Based on 158 previous EMDE crisis events.

D. Based on 295 previous EMDE crisis events.

E. Based on 170 previous EMDE crisis events.

F. Based on 136 previous EMDE crisis events.

- *Higher reserve cover.* In the average EMDE, the ratio of short-term external debt to official international reserves is now only a third of its level in the average EMDE two years before its crisis. More than 80 percent of EMDEs have foreign reserve cover, measured this way, that is larger than levels seen two years before previous crises. Although EMDE reserves have risen since the 1990s, these increases were not evenly distributed across countries. According to the IMF's metric of reserve adequacy, 44 percent of EMDEs appear not to have sufficient reserves to meet their balance of payments needs in 2019.

Many EMDEs have learned the basic lessons from the crises of the 1980s and 1990s and adopted policies that have improved their resilience. These policies include greater exchange rate flexibility, more robust monetary and fiscal policy frameworks, and increased central bank transparency (figure 6.14). Financial sector reforms implemented since the global recession have also increased resilience, particularly the expansion of the Global Financial Safety Net.¹⁷ Resources available in country-specific, regional, and multilateral financial safety nets tripled between 2007 and 2016, including through the creation of regional financing arrangements (RFAs), expanded IMF resources, and international reserve holdings (ECB 2018; IMF 2017a, 2017b). There are also now an estimated 160 bilateral swap lines between central banks around the world (Bahaj and Reis 2018).

The World Bank Group responded to the global recession with unprecedented levels of financing, doubling its commitments (in real terms) during FY09 and FY10, compared to FY07 and FY08 (chapter 8). Lending activity was larger than during any previous crisis, made to more than 100 economies, and larger than any other international financial institution. The World Bank Group has built upon its experience during the global recession in its subsequent work. It has expanded its global economic surveillance capabilities to better identify emerging financial and macroeconomic risks, it has rebuilt its capital, and its lending model has become more flexible and adaptable to the needs of its clients.

Conclusion

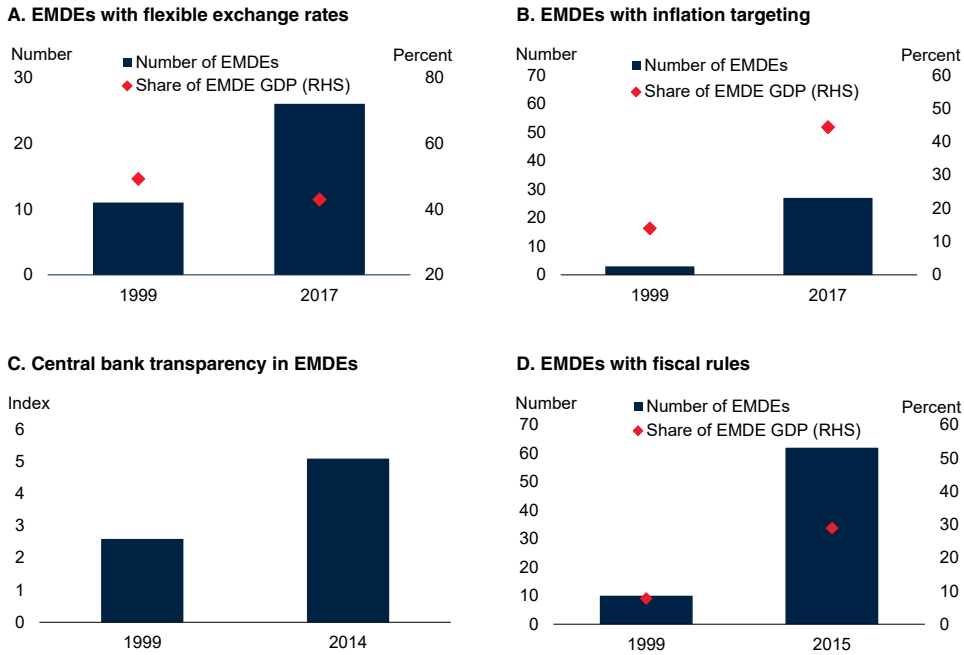
EMDE growth has generally disappointed in the past decade, with significant and frequent forecast downgrades, and 2019 is no different. EMDE growth in 2019 has been revised down by 0.7 percentage point between the January 2018 and June 2019 forecasts. Almost 40 percent of EMDEs are projected to experience a slowdown relative to 2018; growth forecasts have also been downgraded for 40 percent of EMDEs.

Growth in EMDEs is expected to bottom out in 2019, but the weak growth of the past few years has taken its toll. As growth has slowed, so has the rate of income convergence with advanced economies. Income gaps with advanced economies will widen in one-

¹⁷The Global Financial Safety Net consists of four layers: self-insurance against external shocks, on the basis of foreign reserves or fiscal positions at the national level; bilateral currency swap lines among countries; regional financing arrangements; and the global financial backstop provided by the IMF (ECB 2018).

FIGURE 6.14 Policies to improve resilience

Compared to 1999, more EMDEs in recent years have employed flexible exchange rate arrangements, more transparent central banks, and rules-based fiscal and monetary policies.



Sources: Dincer and Eichengreen (2014); International Monetary Fund; World Bank.
 Note: EMDEs = emerging market and developing economies.
 A,B,D. Share of EMDE GDP based on respective year constant 2010 U.S. dollar GDP.
 A. An economy is considered to have a flexible exchange rate if it is classified as “floating” or “free floating.”
 C. Central bank transparency based on the Dincer/Eichengreen Transparency Index. Larger numbers reflect greater transparency. Last observation is 2014.
 D. An economy is considered to implement a fiscal rule if it has one or more fiscal rules on expenditure, revenue, budget balance, or debt. Last observation is 2015.

third of EMDEs in 2019, and more in MNA and SSA. With near-zero per capita income growth in SSA—where most of the world’s poor will live a decade from now—the goal of reducing global poverty to 3 percent appears out of reach. The prospects for progression of today’s LICs, mainly in SSA, to middle-income levels have also dimmed from a decade ago, because of a larger prevalence of countries affected by fragility, conflict, and violence; weaker commodity demand prospects; and higher vulnerability to extreme weather, especially in agriculture-dependent economies (World Bank 2019a).

EMDEs face increased risks from a multitude of sources that could further damage growth. In most cases, these risks relate to a few large economies, where developments could have adverse spillovers to EMDEs. These risks include increased policy uncertainty in advanced economies, as well as rising trade tensions between the United States and some of its major trading partners, most notably China. Where risks originate

outside EMDEs, enhanced monitoring and understanding of their likely impact may help prepare a more effective policy response. Where risks originate within EMDE regions, including geopolitical risks and domestic policy uncertainty, EMDEs can take actions to mitigate them or their impacts. If risks materialize, more vulnerable EMDEs are likely to experience more severe downturns. Since the global recession, external, corporate sector and sovereign vulnerabilities have risen in many EMDEs, leaving them less prepared for future shocks.

Over the next few years, EMDEs are expected to experience a modest cyclical upturn. Even after this projected upturn, however, growth is likely to be well below rates enjoyed in the past. Longer-run prospects are weak because of structural factors limiting potential growth. Indeed, the expected slowdown in potential growth is the continuation of a trend. This slowdown reflects sharp deteriorations in capital accumulation and productivity growth amid pronounced weakness in investment, as well as demographic changes. These constraints are unlikely to wane, but structural reforms can dampen their impacts or even counteract them. The next chapter looks at the macroeconomic, financial, and structural policy actions that EMDEs, including LICs, can take to counter the structural factors slowing potential growth, to mitigate their vulnerabilities, and to prepare for future crises.

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