

CHAPTER 1

GLOBAL OUTLOOK

Broad-Based Upturn—Will It Last?

A broad-based cyclical global recovery is underway, aided by a rebound in investment and trade, against the backdrop of benign financing conditions, generally accommodative policies, improved confidence, and the dissipating impact of the earlier commodity price collapse. Global growth is expected to be sustained over the next couple of years—and even accelerate somewhat in emerging market and developing economies (EMDEs) thanks to a rebound in commodity exporters. Although near-term growth could surprise on the upside, the global outlook is still subject to substantial downside risks, including the possibility of financial stress, increased protectionism, and rising geopolitical tensions. Particularly worrying are longer-term risks and challenges associated with subdued productivity and potential growth. With output gaps closing or closed in many countries, supporting aggregate demand with the use of cyclical policies is becoming less of a priority. Focus should now turn to the structural policies needed to boost longer-term productivity and living standards. A combination of improvements in education and health systems; high-quality investment; and labor market, governance, and business climate reforms could yield substantial long-run growth dividends and thus contribute to poverty reduction. Among commodity-exporting EMDEs, oil exporters in particular should take advantage of an incipient recovery to pursue policies that support diversification.

Summary

The global economy is experiencing a cyclical recovery, reflecting a rebound in investment, manufacturing activity, and trade. This improvement comes against the backdrop of benign global financing conditions, generally accommodative policies, rising confidence, and firming commodity prices. Global GDP growth is estimated to have picked up from 2.4 percent in 2016 to 3 percent in 2017, above the June forecast of 2.7 percent (Figure 1.1). The upturn is broad-based, with growth increasing in more than half of the world's economies. In particular, the rebound in global investment growth—which accounted for three quarters of the acceleration in global GDP growth from 2016 to 2017—was supported by favorable financing costs, rising profits, and improved business sentiment across both advanced economies and emerging market and developing economies (EMDEs). This synchronous, investment-led recovery is providing a substantial boost to global exports and imports in the near term.

In advanced economies, growth in 2017 is estimated to have rebounded to 2.3 percent, driven by a pickup in capital spending, a turnaround in inventories, and strengthening external demand. While growth accelerated in all major economies, the improvement was markedly stronger than expected in the Euro Area.

Growth among EMDEs is estimated to have accelerated to 4.3 percent in 2017, reflecting firming activity in commodity exporters and continued solid growth in commodity importers. Most EMDE regions benefited from a recovery in exports. The improvement in economic activity among commodity exporters took place as key economies—such as Brazil and the Russian Federation—emerged from recession, prices of most commodities rose, confidence improved, the drag from earlier policy tightening diminished, and investment growth bottomed out after a prolonged period of weakness. Nonetheless, the estimated pace of growth in commodity exporters in 2017, at 1.8 percent, was still subdued and not enough to improve average per capita incomes, which continued to stagnate after two consecutive years of contraction.

Global growth is projected to edge up to 3.1 percent in 2018, as the cyclical momentum continues, and then slightly moderate to an average of 3 percent in 2019-20. This broadly

Note: Prepared by Carlos Arteta and Marc Stocker, with contributions from Ekaterine Vashakmadze and Collette M. Wheeler. Additional inputs were provided by John Baffes, Sinem Kilic Celik, Delfin Go, Gerard Kambou, Eung Ju Kim, Csilla Lakatos, Hideaki Matsuoka, Yirbehogre Modeste Some, and Dana Vorisek. Research assistance was provided by Anh Mai Bui, Ishita Dugar, Xinghao Gong, and Jinxin Wu.

TABLE 1.1 Real GDP¹

(Percent change from previous year)

Percentage point differences
from June 2017 projections

	2015	2016	2017e	2018f	2019f	2020f	2017e	2018f	2019f
World	2.8	2.4	3.0	3.1	3.0	2.9	0.3	0.2	0.1
Advanced economies	2.2	1.6	2.3	2.2	1.9	1.7	0.4	0.4	0.2
United States	2.9	1.5	2.3	2.5	2.2	2.0	0.2	0.3	0.3
Euro Area	2.1	1.8	2.4	2.1	1.7	1.5	0.7	0.6	0.2
Japan	1.4	0.9	1.7	1.3	0.8	0.5	0.2	0.3	0.2
Emerging market and developing economies (EMDEs)	3.6	3.7	4.3	4.5	4.7	4.7	0.2	0.0	0.0
Commodity-exporting EMDEs	0.4	0.8	1.8	2.7	3.1	3.1	0.0	0.0	0.2
Other EMDEs	6.1	5.9	6.0	5.7	5.7	5.7	0.3	0.0	-0.1
Other EMDEs excluding China	5.2	4.9	5.1	4.8	5.1	5.1	0.5	-0.1	0.0
East Asia and Pacific	6.5	6.3	6.4	6.2	6.1	6.0	0.2	0.1	0.0
China	6.9	6.7	6.8	6.4	6.3	6.2	0.3	0.1	0.0
Indonesia	4.9	5.0	5.1	5.3	5.3	5.3	-0.1	0.0	-0.1
Thailand	2.9	3.2	3.5	3.6	3.5	3.4	0.3	0.3	0.1
Europe and Central Asia	1.0	1.7	3.8	2.9	3.0	3.0	1.3	0.2	0.2
Russia	-2.8	-0.2	1.7	1.7	1.8	1.8	0.4	0.3	0.4
Turkey	6.1	3.2	6.7	3.5	4.0	4.0	3.2	-0.4	-0.1
Poland	3.8	2.9	4.5	4.0	3.5	3.1	1.2	0.8	0.3
Latin America and the Caribbean	-0.6	-1.5	0.9	2.0	2.6	2.7	0.1	-0.1	0.1
Brazil	-3.5	-3.5	1.0	2.0	2.3	2.5	0.7	0.2	0.2
Mexico	3.3	2.9	1.9	2.1	2.6	2.6	0.1	-0.1	0.1
Argentina	2.6	-2.2	2.7	3.0	3.0	3.2	0.0	-0.2	-0.2
Middle East and North Africa	2.8	5.0	1.8	3.0	3.2	3.2	-0.3	0.1	0.1
Saudi Arabia	4.1	1.7	0.3	1.2	2.1	2.2	-0.3	-0.8	0.0
Iran, Islamic Rep.	-1.3	13.4	3.6	4.0	4.3	4.3	-0.4	-0.1	0.1
Egypt, Arab Rep. ²	4.4	4.3	4.2	4.5	5.3	5.8	0.3	-0.1	0.0
South Asia	7.1	7.5	6.5	6.9	7.2	7.2	-0.3	-0.2	-0.1
India ³	8.0	7.1	6.7	7.3	7.5	7.5	-0.5	-0.2	-0.2
Pakistan ²	4.1	4.5	5.3	5.5	5.8	6.0	0.1	0.0	0.0
Bangladesh ²	6.6	7.1	7.2	6.4	6.7	6.7	0.4	0.0	0.0
Sub-Saharan Africa	3.1	1.3	2.4	3.2	3.5	3.6	-0.2	0.0	0.0
South Africa	1.3	0.3	0.8	1.1	1.7	1.7	0.2	0.0	-0.3
Nigeria	2.7	-1.6	1.0	2.5	2.8	2.8	-0.2	0.1	0.3
Angola	3.0	0.0	1.2	1.6	1.5	1.5	0.0	0.7	0.0
Memorandum items:									
Real GDP¹									
High-income countries	2.3	1.7	2.2	2.2	1.9	1.8	0.3	0.3	0.2
Developing countries	3.6	3.8	4.5	4.7	4.8	4.9	0.2	0.0	-0.1
Low-income countries	4.7	4.5	5.1	5.4	5.5	5.7	-0.3	-0.4	-0.3
BRICS	4.0	4.4	5.2	5.3	5.4	5.4	0.2	0.1	0.0
World (2010 PPP weights)	3.3	3.2	3.7	3.7	3.7	3.7	0.3	0.1	0.0
World trade volume⁴	2.7	2.3	4.3	4.0	3.9	3.8	0.3	0.2	0.1
Commodity prices									
Oil price ⁵	-47.3	-15.6	23.8	9.4	1.7	1.7	0.0	3.7	-3.7
Non-energy commodity price index	-15.0	-2.6	4.9	0.6	0.8	1.2	0.9	-0.1	-0.2

Source: World Bank.

Notes: PPP = purchasing power parity; e = estimate; f = forecast. World Bank forecasts are frequently updated based on new information and changing (global) circumstances.

Consequently, projections presented here may differ from those contained in other Bank documents, even if basic assessments of countries' prospects do not differ at any given moment in time. Country classifications and lists of emerging market and developing economies (EMDEs) are presented in Table 1.2. BRICS include: Brazil, Russia, India, China, and South Africa.

1. Aggregate growth rates calculated using constant 2010 U.S. dollar GDP weights.

2. GDP growth values are on a fiscal year basis. Aggregates that include these countries are calculated using data compiled on a calendar year basis. Pakistan's growth rates are based on GDP at factor cost. The column labeled 2017 refers to FY2016/17.

3. The column labeled 2016 refers to FY2016/17.

4. World trade volume of goods and non-factor services.

5. Simple average of Dubai, Brent, and West Texas Intermediate.

For additional information, please see www.worldbank.org/gep.

steady forecast masks marked differences between the outlook for advanced economies and EMDEs. Growth in advanced economies is projected to slow, as labor market slack diminishes and monetary policy accommodation is gradually unwound, moving closer to subdued potential growth rates, which remain constrained by aging populations and weak productivity trends.

Conversely, growth in EMDEs is expected to accelerate, reaching 4.5 percent in 2018 and an average of 4.7 percent in 2019-20. This mainly reflects a further pickup of growth in commodity exporters, which is forecast to rise to 2.7 percent in 2018 and to an average of 3.1 percent in 2019-20, as oil and other commodity prices firm and the effects of the earlier commodity price collapse dissipate. Growth in commodity importers is projected to remain stable, averaging 5.7 percent in 2018-20, as a gradual slowdown in China is offset by a pickup in some other large economies. Within the broader group of EMDEs, growth in low-income countries is projected to rise to 5.4 percent in 2018 and to 5.6 percent on average in 2019-20, as conditions gradually improve in oil- and metals-exporting economies.

Despite the projected firming of activity among EMDEs over the forecast horizon, their underlying potential growth—which has fallen considerably over the past decade—appears likely to further decline over the next 10 years, reflecting a more subdued pace of capital accumulation, slowing productivity growth, and less favorable demographic trends.

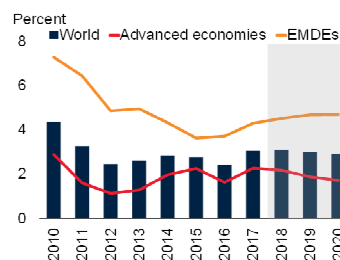
Although risks to the global outlook continue to be tilted to the downside, they are more balanced than in previous forecast exercises (Figure 1.2). This is mainly due to the possibility of stronger-than-expected growth in the largest advanced economies and EMDEs—reflecting, for instance, a more pronounced investment-led recovery in the United States and the Euro Area, or a faster rebound in large commodity exporters. If these positive surprises were to materialize, they could have beneficial international spillovers.

Nonetheless, there remain important downside risks. Disorderly financial market movements, such as an abrupt tightening of global financing

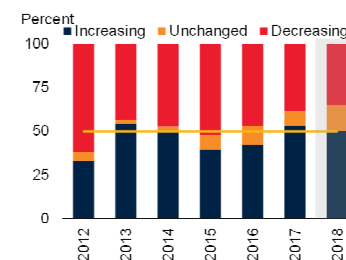
FIGURE 1.1 Summary - Global prospects

Global growth picked up in 2017, supported by a broad-based recovery encompassing more than half of the world's economies. A substantial acceleration in global trade translated into strengthening export growth in most EMDE regions. As headwinds eased in commodity exporters, investment and activity bottomed out in 2017, but income per capita was stagnant. Despite the cyclical recovery, potential growth is likely to decline further, reflecting subdued capital deepening, slowing productivity growth, and less favorable demographics.

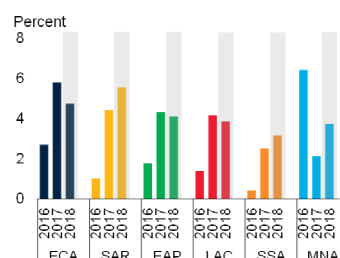
A. Growth



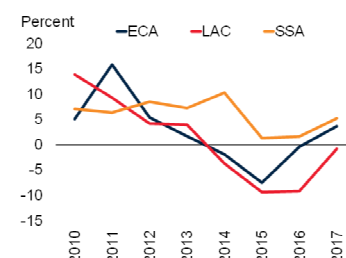
B. Share of countries with increasing/decreasing growth



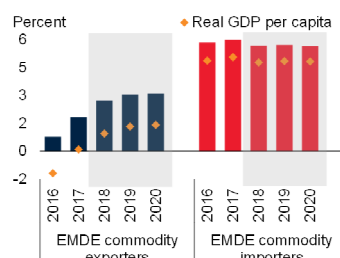
C. Export growth, by EMDE region



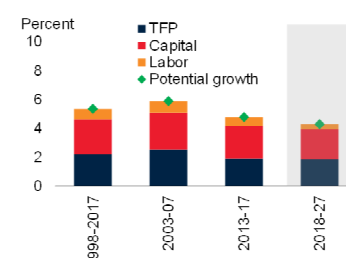
D. Investment growth in commodity-exporting EMDEs, by region



E. EMDE growth



F. Contribution to EMDE potential growth



Source: World Bank.

Notes: EMDEs = emerging market and developing economies. Data for 2017 are estimates.

A. -C. E. F. Shaded areas indicate forecasts.

A. B. E. Aggregate growth rates calculated using constant 2010 U.S. dollar GDP weights.

C. D. 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, and SSA = Sub-Saharan Africa.

B. Increasing/decreasing growth are changes of at least 0.1 percentage point from the previous year. Countries with a slower pace of contraction from one year to the next are included in the increasing growth category. Sample includes 36 advanced economies and 146 EMDEs.

C. Exports measured as the volume of goods and services.

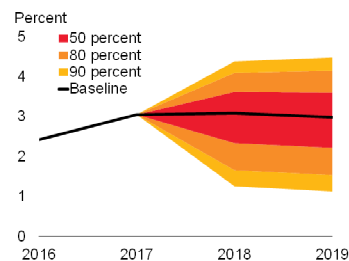
F. GDP-weighted averages of production function-based potential growth as described in Chapter 3. TFP is total factor productivity growth. Sample includes 49 EMDEs.

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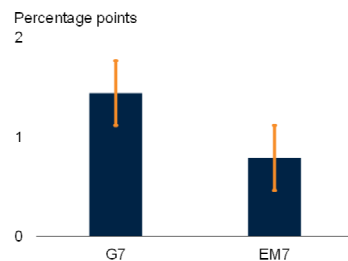
FIGURE 1.2 Global risks and policy challenges

Risks to the outlook remain tilted to the downside, despite the possibility of stronger-than-expected growth in large economies and associated positive international spillovers. Financial market volatility has been unusually low and asset prices have become highly valued, suggesting the risk of sudden market adjustments. Large negative output gaps in commodity exporters would suggest the need for accommodative policies, but fiscal space is limited. Structural reforms are essential to stem a further decline in potential growth in EMDEs.

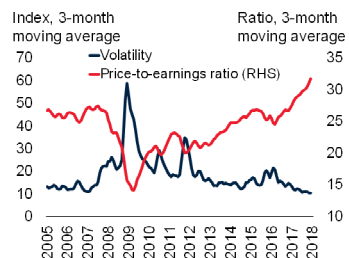
A. Probability distribution around global growth forecasts



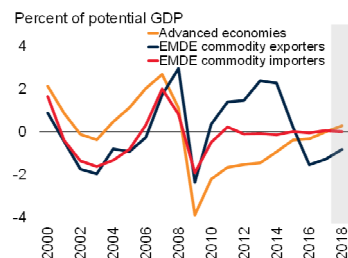
B. Impact of 1-percentage-point increase in G7 and EM7 growth on growth in other EMDEs after one year



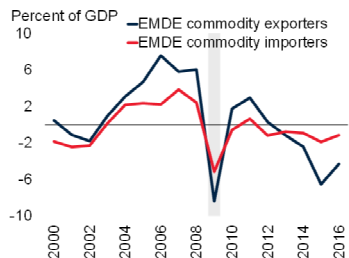
C. U.S. equity prices and volatility



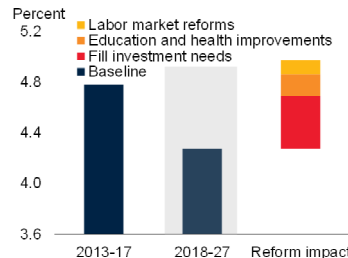
D. Output gaps



E. Fiscal sustainability gaps in EMDEs



F. EMDE potential growth under reform scenarios



Sources: Federal Reserve Bank of St. Louis, Shiller (2015), World Bank.

A. The fan chart shows the forecast distribution of global growth using time-varying estimates of the standard deviation and skewness extracted from the forecast distribution of three underlying risk factors (oil price futures, the S&P 500 equity price futures, and term spread forecasts). Each of the risk factor's weight is derived from the model described in Ohnsorge, Stocker, and Some (2016). Values for 2018 are computed from the forecast distribution of 12-month ahead oil price futures, S&P 500 equity price futures, and term spread forecasts. Values for 2019 are based on 24-month-ahead forecast distributions. Last observation is December 2017.

B. Cumulative impulse responses of a 1-percentage-point increase in EM7 and G7 growth on growth in other EMDEs. Solid bars represent medians, and orange bars represent 16-84 percent confidence intervals.

C. Volatility is measured by the VIX implied volatility index of option prices on the U.S. S&P 500. Price-to-earnings ratio is the cyclically-adjusted ratio as described in Shiller (2015). Last observation is December 2017. Data for December 2017 are estimates.

D. GDP-weighted average of 15 advanced economies and 23 EMDEs. Shaded area indicates forecasts.

E. Simple averages. Sustainability gaps are measured under current conditions. The year of global recession (2009) is shaded in gray.

F. GDP-weighted averages of production function-based potential growth under different policy scenarios as described in Chapter 3. Shaded area indicates forecast.

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conditions or a sudden rise in financial market volatility, could trigger financial turbulence and potentially derail the expansion. The adverse effects of rising borrowing costs could be particularly acute for those EMDEs with large external financing needs, fragile corporate balance sheets, and significant fiscal sustainability gaps. In addition, escalating trade protectionism or rising geopolitical risk could also negatively affect confidence, trade, and overall economic activity. Over the longer term, a more pronounced slowdown in potential output growth in both advanced economies and EMDEs would make the global economy more vulnerable to shocks and worsen prospects for improved living standards.

This outlook underscores the need for policymakers in both advanced economies and EMDEs to shift their focus toward boosting potential growth in the longer term. With unemployment rates returning to pre-crisis levels and recoveries firming in advanced economies, monetary and fiscal policy accommodation become less of a priority, and productivity-enhancing reforms have become increasingly urgent as the pressures on underlying growth from population aging intensify. Among EMDEs, output gaps are near zero in commodity importers but still negative in commodity exporters, suggesting a continued need to nurture the cyclical recovery in the latter, even though fiscal space remains constrained.

Beyond cyclical considerations, EMDEs face the challenge of an expected further decline in potential growth. This argues strongly for the urgency of implementing structural policies, such as improvements in education and health systems; high-quality investment; and labor market, governance, and business climate reforms. All of these efforts will be critical to boost long-term growth prospects, alleviate poverty, and, if accompanied by a rising number of skilled workers in EMDEs thanks to better education outcomes, to help reduce global inequality. In addition to these challenges, oil-exporting EMDEs—which suffered large losses in actual and potential output due to the 2014-16 oil price collapse—need to pursue policies that bolster diversification and resilience to oil price fluctuations.

Major economies: Recent developments and outlook

Growth in advanced economies gained significant momentum in 2017. The recovery was markedly stronger than expected in the Euro Area and, to a lesser degree, in the United States and Japan. As economic slack diminishes and monetary policy becomes less accommodative, growth is expected to gradually moderate toward low potential growth rates in 2018-20. Growth in China continues to be resilient, with drivers of activity shifting away from state-led investment.

Growth in advanced economies strengthened in 2017, reaching an estimated 2.3 percent—0.4 percentage point above previous forecasts—helped by a recovery in capital spending and exports (Figure 1.3). The pickup in investment reflected increased capacity utilization, favorable financing conditions, and rising profits and business sentiment. Confidence was supported by the fact that policy uncertainty, albeit still elevated, diminished during the year.

Consumption growth was stable, as continued labor market improvements offset the dampening impact of a rebound in energy prices. The recovery was substantially stronger than expected in the Euro Area and, to a lesser degree, in the United States and Japan. Despite the strengthening of activity, inflation in advanced economies remained subdued in 2017.

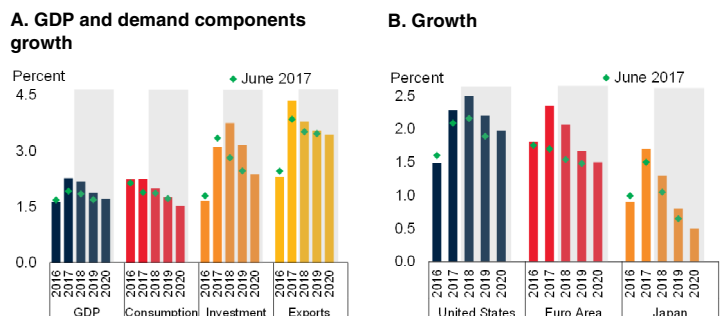
Over the forecast horizon, advanced-economy growth is expected to moderate slightly in 2018, to 2.2 percent, and to average 1.8 percent in 2019-20—close to the upper bound of potential growth estimates. This path reflects the unwinding of a cyclical upturn in investment and further normalization of monetary policy, as advanced-economy output gaps close (Box 1.1).

United States

Growth picked up in 2017 to an estimated 2.3 percent, supported by strengthening private investment. The recovery reflected a diminished drag from capacity adjustments in the energy sector, rising profits, a weakening dollar, and

FIGURE 1.3 Advanced economies

Growth in advanced economies strengthened in 2017, helped by a recovery in capital spending and exports. The recovery was markedly stronger than expected in the Euro Area and, to a lesser degree, in the United States and Japan. Advanced-economy growth will gradually slow toward potential over the forecast horizon, as the cyclical upturn moderates.



Source: World Bank.

A. B. Green diamonds correspond with the June 2017 edition of the *Global Economic Prospects* report. Shaded areas indicate forecasts.

A. Aggregate growth rates and contributions calculated using constant 2010 U.S. dollar GDP weights.

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robust external demand (Figure 1.4). Economic activity was little disrupted by major hurricane landfalls in September, and reconstruction efforts are likely to offset any negative effects over time (Deryugina, Kawano, and Levitt 2014). Private consumption continued to grow at a robust pace despite modest real income gains and moderate wage growth, as the personal savings rate fell further. Households' income expectations continued to recover following a prolonged period of weakness.

Labor market slack diminished further and employment growth slowed. With the economy moving closer to full employment, and despite inflation running below target, the U.S. Federal Reserve continued to normalize monetary policy in 2017, raising interest rates and starting to gradually reduce the size of its balance sheet (FOMC 2017). Recently legislated corporate and personal income tax cuts are expected to provide a lift to activity over the forecast horizon—particularly to investment, by lowering the statutory corporate tax rate and by allowing full expensing of new equipment. The benefits of fiscal stimulus will likely be constrained because the economy is already operating at near full capacity and the pace of monetary policy normalization might slightly accelerate (Gale and Samwick 2016; Gemmell, Kneller, and Sanz 2011; Kose et al.

BOX 1.1 Is the global economy turning the corner?

The year 2018 will likely mark a turning point for the global economy because, for the first time since 2008, the negative global output gap is expected to be closed. Among EMDEs, helped by the recent recovery in commodity markets, and advanced economies, output gaps should approach zero. The closing gaps in major advanced economies would allow a normalization of monetary policy after a decade of exceptional easing. With the anticipated further withdrawal of stimulus by advanced economies, EMDE policymakers need to remain alert to the potential for adverse spillovers even while pursuing policies to support strong, sustained growth.

The global financial crisis tipped the global economy into a deep recession that affected first the advanced economies but spread—especially with the subsequent collapse of commodity prices—to emerging market and developing economies (EMDEs). Recoveries have been slow, but by 2018 the global economy is expected to return to its potential for the first time in a decade as the global output gap is expected to be closed. This in turn could mean a continued withdrawal by advanced economies of the extraordinary policy accommodation that was provided during the crisis, with important spillovers to EMDEs through trade and financial linkages.¹

Against this backdrop, this box addresses three questions.

- Why do we care about the global output gap?
- What are the main challenges associated with the measurement of output gaps?
- How have output gaps evolved since 2000?

Why do we care about the global output gap?

The global output gap captures the difference between the level of actual global output and its “potential,” scaled by potential output. A positive global output gap indicates global excess demand, where economies are operating above the level that is sustainable at full employment. Conversely, a negative global output gap indicates weak demand and the presence of global spare capacity. Negative global output gaps can weigh on global inflation and depress global commodity and financial markets, especially in a world where trade and financial flows are highly integrated (Carney 2017b).

Note: This box was prepared by M. Ayhan Kose, Franziska Ohnsorge, and Modeste Yirbehogre Some.

¹ Some major central banks have already undertaken or signaled measures to shift their monetary policy stance. For potential implications of changes in advanced-economy monetary policies for emerging market economies, see Arteta et al. (2015, 2016). For a discussion of cross-border spillovers from major advanced and emerging market economies, see Huidrom, Kose, and Ohnsorge (2017).

The global output gap is relevant for policies at the individual country level, especially so for smaller and more open economies. A negative global output gap could be a sign of weak external demand that may depress import prices and inflation.² The existence of a large negative global output gap may amplify the potential benefits from international policy coordination. For example, the G20 commitments to fiscal stimulus in 2009 were founded on a consensus that the global economy had sizable slack in the wake of the financial crisis and that unemployment and deflationary pressures would continue to rise absent coordinated policy action (G20 2009). In contrast, when output gaps are diverging, lack of policy coordination becomes more likely.

Measuring the global output gap: Navigating through the haze

Measuring output gaps at the national level is complex since the output gap is an unobserved variable. This is compounded when doing so at the global level.³ National output gaps can be estimated using a range of methods.⁴

- *Production function methods* involve the estimation of the aggregate production capacity from factors of production (labor and capital) and measures of total factor productivity.
- *Long-term growth expectations*, such as five-year-ahead growth forecasts from *Consensus Economics*, incorporate expert judgment about long-term growth potential.

² The evidence is still mixed on the link between the global output gap and domestic inflation. Several studies find that the global output gap is an important determinant of domestic inflation (Borio and Filardo 2007; Eickmeier and Pijnenburg 2013; Auer, Borio, and Filardo 2017; Bianchi and Civelli 2015). Others find little support for the role of the global output gap in driving domestic inflation (Calza 2009; Mishkin 2009; Ihrig et al. 2010; Irena and David 2016).

³ Only two studies focus on the empirical properties of the global output gap (Tanaka and Young 2008; Gerlach 2011). These studies document the major conceptual issues and measurement challenges, and examine the evolutions of a few measures of the global output gap.

⁴ These methodologies are discussed and compared in greater detail in Box 3.1.

BOX 1.1 Is the global economy turning the corner? (continued)

- *Statistical filters* include univariate or multivariate filters. Univariate filters decompose quarterly output series into a trend and a cycle. Multivariate filters expand on the univariate filters by ensuring that the resulting output gap estimates are consistent with multiple indicators of domestic demand pressures, such as inflation and unemployment.

The use of any of these methods presents tradeoffs and the appropriate choice usually depends on the purpose at hand. The *production function* approach, in principle, captures the supply-side drivers of long-term growth, but in practice relies on estimates and projections of these underlying factors that are themselves subject to considerable measurement error. The resulting output gaps are not necessarily consistent with other indicators of domestic demand pressures. *Long-term growth expectations* may reflect additional information to complement models but may also rest on biased judgments on the part of the forecasters. *Univariate filters* for GDP growth essentially involve a moving average of actual past growth. While their calculation is possible even in data-poor environments, they tend to correlate closely with actual growth. As a result, the filter will likely underestimate both the true extent of output losses stemming from unemployment and the associated disinflationary pressure.⁵

Multivariate filters are sensitive to model specification, and in practice can be heavily influenced by financial and commodity market cycles. They do, however, have the advantage of being consistent with multiple indicators of demand pressures. Since they incorporate additional information, they tend to be less susceptible to the end-point problem. Given their ability to capture multiple dimensions of cycles, the analysis in the rest of this box relies on the results from the multivariate filter.

Database and methodology. The sample includes 15 advanced economies (AEs) and 23 emerging market and developing economies (EMDEs) with quarterly data over the period 2000-16. The countries in the sample together accounted for about 85 percent of global GDP, on average, since 2000. National output gaps of each country are estimated using nine different methods.⁶ National

output gaps are then aggregated into a global output gap using GDP weights.⁷ Group- and region-specific output gaps are similarly aggregated.

Results from different methods. While different methods produce broadly consistent trends in national output gaps in the majority of countries and periods, they also show sizable variation across these measures in some periods (Figure 1.1.1). Output gap estimates during 2008-09 illustrate this variation. All estimates pointed to negative output gaps but with a wide range. In EMDEs, the estimated gaps for these years from different methodologies vary from -0.1 to -0.9 percent.

How have global output gaps evolved?

Following the global slowdown in 2001-02, the recovery in advanced economies in the first half of the 2000s was accompanied by narrowing negative global output gaps (Figure 1.1.2). Although growth slowed in EMDEs in the early years of the decade with recessions in Mexico and Turkey and the legacies of the late 1990s Asian financial crisis, by mid-decade the estimates for EMDEs as well as for advanced economies indicated positive gaps. At their 2007 peak, estimated output gaps for both groups were at a positive 2-3 percent.

The global financial crisis of 2008-09 led to significant economic slack in the majority of countries and a wide global output gap (captured unanimously by all methodologies). During 2010-2014, the global output gap remained large and only narrowed during 2015-17 to be statistically indistinguishable from zero. There were substantial differences in the output gaps of different country groups and regions.

Advanced economies. Even well after the global financial crisis, output gaps in most advanced economies remained negative, averaging about -1 percent of potential GDP during 2011-16. By 2015, the gap had narrowed, and was statistically indistinguishable from zero. In 2018, the output gap for advanced economies is expected to turn slightly positive.

⁵ Statistical filters also suffer from end-point problems and large revisions after data updates which tend to be most pronounced at cyclical turning points (Coibion, Gorodnichenko, and Ulate 2017).

⁶ These include five univariate filters (Hodrick-Prescott, Baxter-King, Christiano-Fitzgerald, Butterworth filters, and the unobserved components model), the multivariate filter, the production function approach and two expectations-based measures (five-year-ahead *World*

Economic Outlook and *Consensus* forecasts). Details of the methodologies are provided in Annexes 1 and 2.

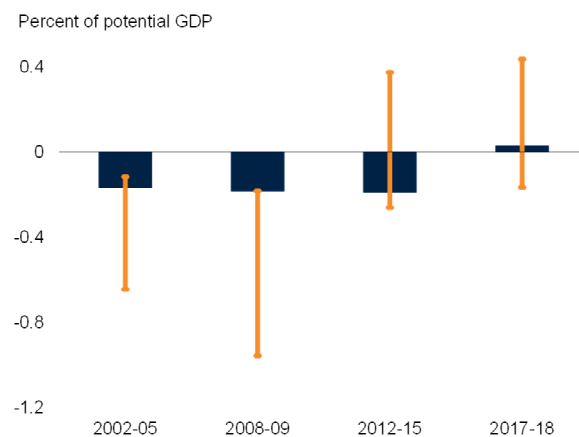
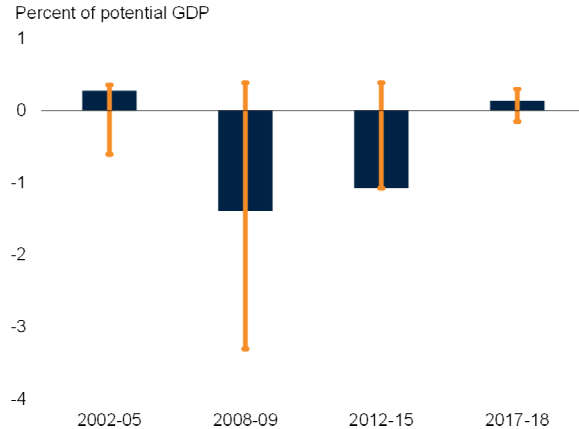
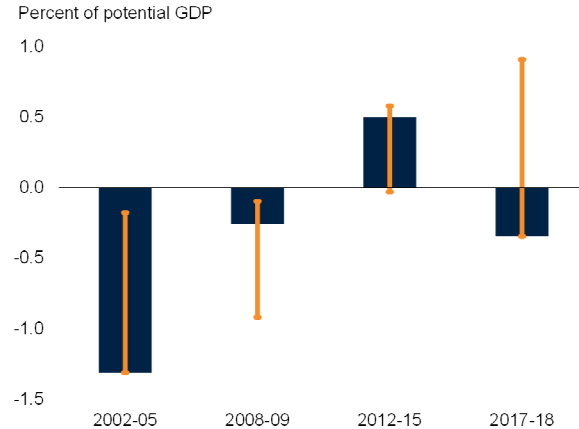
⁷ The estimated weighted average global output gap is broadly consistent with a global output gap estimated directly using global variables, such as GDP-weighted average global GDP, median global inflation, labor force-weighted average employment and oil prices.

BOX 1.1 Is the global economy turning the corner? (continued)**FIGURE 1.1.1 Output gap estimates**

The trends in the estimates of the output gap from different methodologies are broadly similar. For example, they signal the same timing of peaks and troughs. However, at times the point estimates show considerable differences, even in sign.

A. Coincidence of signs of output gaps

Percent of country-year pairs	PFA (Fundamentals)	MVF	HP	BK	CF	BW	Exp. (WEO)	Exp. (CF)
PFA (Fundamentals)								
MVF	73							
HP	65	76						
BK	70	79	92					
CF	58	63	74	76				
BW	61	73	91	88	82			
Exp. (WEO)	65	64	59	64	55	56		
Exp. (CF)	76	69	63	67	58	61	84	
Alt. (WEO)	70	76	74	76	64	72	69	72

B. Global output gap estimates (range across methodologies)**C. Advanced economies output gap estimates (range across methodologies)****D. EMDE output gap estimates (range across methodologies)**

Source: World Bank staff estimates.

Notes: Global, regional, and group output gaps are calculated using constant 2010 U.S. dollar GDP as weights. The sample includes 15 advanced economies (Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, and United States) and 23 EMDEs (Argentina, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Hungary, India, Indonesia, Kazakhstan, Malaysia, Mexico, Peru, Poland, Romania, Russia, Serbia, South Africa, Thailand, Turkey, and Vietnam). 2018 data is forecast.

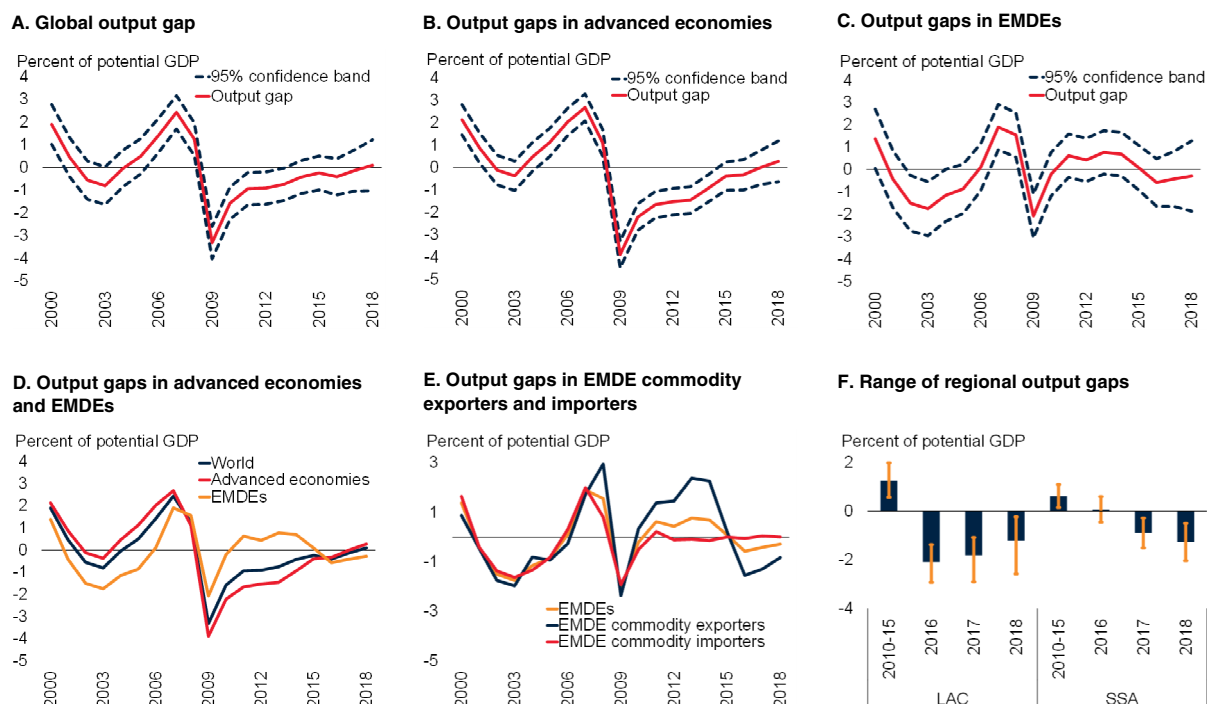
A. Table shows the share of country-year pairs during 2000-16 in which two different measures of output gap have the same signs. Red represents greater than 80 percent, orange represents 60-80 percent, and yellow represents 50-60 percent. "Exp. (WEO)" stands for five-year-ahead WEO expectations, "Exp. (CF)" stands for five-year-ahead Consensus forecast, "Alt. (WEO)" stands for output gap from WEO.

B.-D. Blue bars denote multivariate filter-based estimates. Vertical orange lines indicate range of all six filter-based estimates. The five univariate filters (HP, BK, CF, BW, UCM), the multivariate filter (MVF), and the production function approach (PFA). "HP" stands for Hodrick-Prescott filter, "BK" stands for Baxter-King filter, "CF" stands for Christiano-Fitzgerald filter, "BW" stands for Butterworth filter, "UCM" stands for unobserved components model.

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BOX 1.1 Is the global economy turning the corner? (continued)**FIGURE 1.1.2 Global and group-specific output gaps**

The global financial crisis of 2008-09 opened up a considerable degree of slack in the majority of countries. Post-crisis, a wide divergence in output gaps emerged between advanced economies, which were at the center of the crisis, and EMDEs as well as between commodity-exporting and importing EMDEs.



Source: World Bank staff estimates.

Notes: Output gaps calculated using multivariate filter. Global, regional, and group output gaps are calculated using constant 2010 U.S. dollar GDP as weights. The sample includes 15 advanced economies (Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, and United States) and 23 EMDEs (Argentina, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Hungary, India, Indonesia, Kazakhstan, Malaysia, Mexico, Peru, Poland, Romania, Russia, Serbia, South Africa, Thailand, Turkey, and Vietnam). 2018 GDP is forecast.

A.-C. Dashed lines are 95 percent confidence interval bounds computed from the Kalman smoother state variances. Global lower and upper bounds are obtained as GDP-weighted averages of individual country lower and upper bounds.

E. "EMDE commodity exporters" include Argentina, Bolivia, Brazil, Chile, Colombia, Indonesia, Kazakhstan, Malaysia, Peru, Russia, and South Africa. "EMDE commodity importers" include China, Hungary, India, Mexico, Poland, Romania, Serbia, Thailand, Turkey, and Vietnam.

F. Blue bars denote multivariate filter-based estimates. Vertical orange lines indicate one standard deviation error bands. LAC = Latin America and the Caribbean, SSA = Sub-Saharan Africa.

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EMDEs. Output gaps in EMDEs varied widely between commodity-exporting and importing EMDEs (Figures 1.1.2 and 1.1.3).

- For commodity exporters (accounting for two-thirds of EMDEs), the slide in commodity prices since the first quarter of 2011 and, especially, the sharp drop in oil prices in mid-2014, as well as weaknesses among their major trading partners, led to an unwinding of their large positive output gaps. By 2016, their gaps had turned negative (below -1 percent), on average, and are expected to remain marginally negative (-0.8 percent) in 2018.

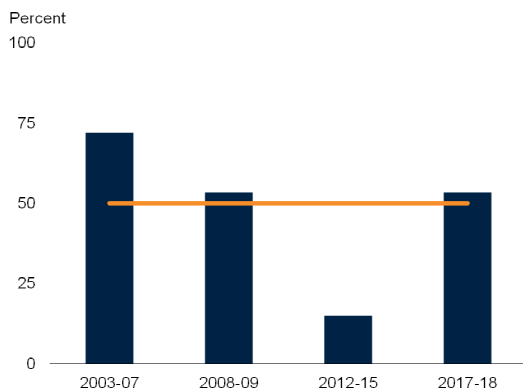
- By contrast, wide negative output gaps emerged among the commodity-importing EMDEs during the global financial crisis and narrowed quickly in the post-crisis rebound. With EMDEs growth remaining steady during 2011-17 at around potential growth, their gaps remained near zero during this period.
- Output gaps in EMDE regions broadly reflected the prevalence of commodity exporters in each region. Notwithstanding a gradual narrowing, LAC and SSA (represented in the sample by South Africa)—two regions with large commodity-exporting economies—are expected to have sizable (and statistically

BOX 1.1 Is the global economy turning the corner? (concluded)

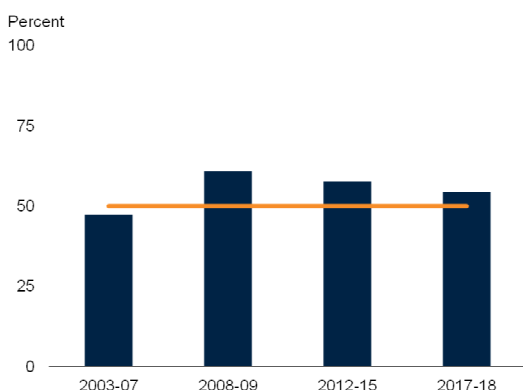
FIGURE 1.1.3 Output gap synchronization

The majority of advanced economies had positive output gaps pre-crisis and negative output gaps post-crisis. In EMDEs, there was greater heterogeneity.

A. Share of economies with positive output gaps: Advanced economies



B. Share of economies with positive output gaps: EMDEs



Source: World Bank staff estimates.

Notes: Output gaps calculated using multivariate filter approach. The sample includes 15 advanced economies (Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, and United States) and 23 EMDEs (Argentina, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Hungary, India, Indonesia, Kazakhstan, Malaysia, Mexico, Peru, Poland, Romania, Russia, Serbia, South Africa, Thailand, Turkey, and Vietnam). 2018 GDP is forecast.

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significant) negative output gaps in 2017 and 2018. Elsewhere, output gaps have been near zero.

Heterogeneity in output gaps. Common shocks and cyclical spillovers through cross-country linkages can generate homogeneity and comovement in output gaps. Since 2000, output gaps in the advanced economies have been less diverse than in EMDEs. Excepting the years of the 2001-02 U.S. recession and the 2011 Euro Area crisis, at least two thirds of advanced economies had output gaps of the same sign. In contrast, in the large majority of years since 2000, around half of EMDEs had positive output gaps (Figure 1.1.3). This heterogeneity among EMDEs has largely reflected the divergences between commodity-exporting and -importing economies.

Implications for EMDEs

Output gap measures are subject to uncertainty as reflected in large variations across methods and wide confidence bands. Policymakers need to account for this uncertainty when assessing and implementing cyclical policies.

That said, for the first time in a decade, the global output gap is expected to approximately close in 2018, with important implications for EMDEs. On the one hand, the expected closing of the global output gap signals a return to health of the world economy after a prolonged period of weak growth, which holds the promise of favorable spillovers to EMDEs, including through trade channels. However, it also means that the coming years may witness an unprecedented shift in the stance of cyclical policies among the advanced economies, with an attendant risk of missteps or disorderly financial market adjustments. This underscores the importance for EMDEs to continue to focus on measures to enhance prospects for strong, sustained growth, but also the need for measures to ensure the resilience of their domestic financial markets and broader macroeconomic policy frameworks in the face of external shocks.

2017a). Other policy initiatives of the U.S. administration, including in the areas of health care and infrastructure, have made limited headways, while the outcome of renegotiations of the North American Free Trade Agreement (NAFTA) remains uncertain.

Barring major additional policy changes, U.S. growth is expected to reach 2.5 percent in 2018, above previous expectations, and then to moderate to an average of 2.1 percent in 2019-20—toward the upper range of potential output growth estimates (Congressional Budget Office 2017; OECD 2017a; Federal Reserve Board 2017). Low labor participation and weak productivity trends remain the most significant drag on U.S. growth over the longer term (Fernald et al. 2017).

Euro Area

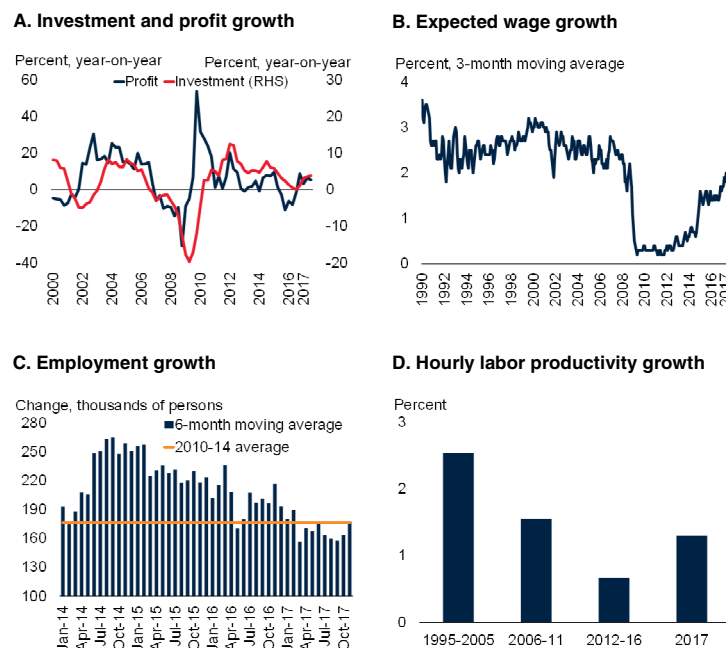
Growth gained substantial momentum in 2017, reaching an estimated 2.4 percent—0.7 percentage point higher than previously expected—with broad-based improvements across member countries spurred by policy stimulus and strengthening global demand. In particular, private sector credit continued to respond to the stimulative stance of the European Central Bank (ECB; Figure 1.5), and both domestic demand and import growth were robust.

The unemployment rate reached its lowest level since 2009, and labor shortages became increasingly prevalent in some countries. However, wage growth remained subdued, and the appreciation of the euro during 2017 is likely to further delay a pickup in inflation in 2018, as it puts downward pressure on import prices (ECB 2016). With inflation remaining below target, the ECB is expected to keep interest rates unchanged during 2018, but to gradually scale back asset purchases. The aggregate fiscal stance of the Euro Area was somewhat expansionary in 2017 (European Commission 2017).

The cyclical upturn is expected to continue in 2018, albeit at a more restrained pace, as domestic demand loses some momentum following strong gains in 2017, and policy stimulus is gradually unwound. GDP growth is expected to be 2.1 percent in 2018, down from the previous year but

FIGURE 1.4 United States

Investment growth picked up in 2017, households' wage growth expectations improved, and labor market slack continued to diminish, even as employment growth slowed. Although productivity has improved recently, it is still weak and remains a major constraint to growth.



Sources: Federal Reserve Bank of St. Louis, Haver Analytics, Survey of Consumers University of Michigan, U.S. Bureau of Economic Analysis, World Bank.

A. Real private fixed capital formation and nominal before-tax profit growth. Last observation is 2017Q3.

B. Expected wage growth is the median increase in expected household income during the next year. Last observation is October 2017.

C. Employment is private nonfarm payroll. Last observation is November 2017.

D. Hourly labor productivity measured as output per hour worked in the nonfarm private sector. Data for 2017 estimated by averaging 2017Q1 to 2017Q3. Last observation is 2017Q3.

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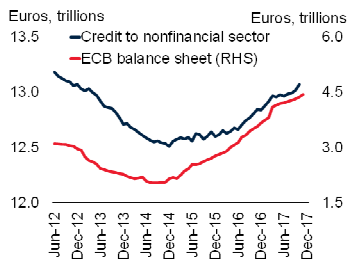
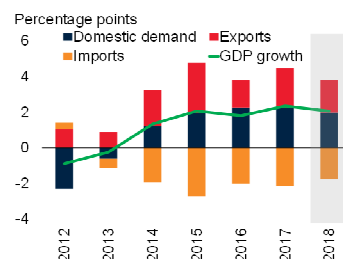
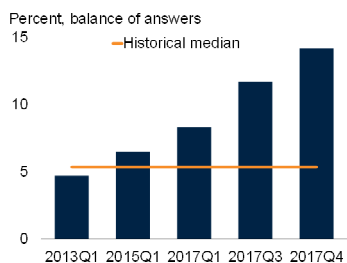
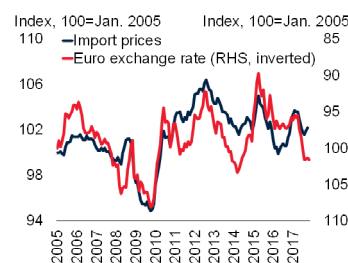
notably stronger than previously projected. It is then foreseen to average 1.6 percent in 2019-20—around the upper end of estimates of potential output growth—as labor market slack dissipates. Over the longer term, growth prospects remain constrained by the shrinking of the working-age population in the majority of Euro Area economies and persistent productivity and competitiveness gaps among the peripheral members (Díaz del Hoyo et al. 2017).

Japan

Growth picked up in 2017 to an estimated 1.7 percent. Domestic demand firmed, supported by a gradual recovery in consumer spending and investment, as well as the implementation of a fiscal stimulus package (Figure 1.6.). Exports accelerated in response to strengthening global

FIGURE 1.5 Euro Area

Credit recovered further in 2017, as the balance sheet of the European Central Bank continued to expand, albeit at a slightly slower pace. Domestic demand, exports, and imports strengthened. Labor shortages have become increasingly prevalent, although wage growth remains subdued. The appreciation of the euro is likely to put downward pressure on import prices and inflation.

A. Private credit and ECB balance sheet**B. Contribution to growth****C. Labor shortages****D. Import prices and euro exchange rate**

Sources: European Central Bank, European Commission, Federal Reserve Bank of St. Louis, Haver Analytics, World Bank.

A. Last observation is November 2017 for ECB balance sheet and October 2017 for credit to nonfinancial sector.

B. Shaded area indicates forecast.

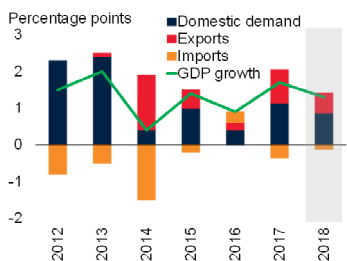
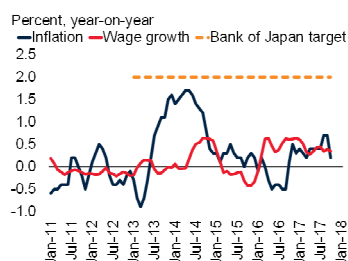
C. Factors limiting output growth based on the European Commission business sentiment surveys. Median value is computed over the period from 2000Q1 to 2017Q4.

D. Last observation is November 2017 for the euro exchange rate and October 2017 for import prices.

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FIGURE 1.6 Japan

Domestic demand strengthened in 2017, but wage growth remained moderate and inflation low despite some increase.

A. Contribution to growth**B. Wage growth and CPI inflation**

Sources: Haver Analytics; Japan Ministry of Health, Labor, and Welfare; Japan Ministry of International Affairs and Communications; World Bank.

A. Shaded area indicates forecast.

B. The Bank of Japan's (BoJ) inflation target is 2 percent. CPI inflation is the headline rate adjusted for changes in the consumption tax rate. Last observation is October 2017.

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demand, but the net trade contribution to growth remained unchanged as imports picked up as well.

Labor market conditions continued to tighten, with the unemployment rate at a 22-year low amid growing labor shortages. However, wage growth remained moderate and inflation below 1 percent. In this context, the Bank of Japan left policy rates unchanged in 2017 and continued to calibrate its bond purchases to stabilize long-term bond yields around zero.

Growth is expected to slow to 1.3 percent in 2018, as fiscal stimulus is withdrawn and export growth moderates. In 2019, growth is forecast at 0.8 percent, in line with average potential growth estimates. The planned consumption tax hike in October 2019 is expected to have a negative effect on growth in 2020, which is projected to slow temporarily to 0.5 percent. Population aging and a shrinking labor force continue to weigh on long-term growth prospects (Japan Cabinet Office 2017; Kawamoto et al. 2017).

China

Growth in China is estimated to have reached 6.8 percent in 2017—an upward revision from June forecasts, reflecting continued fiscal support and the effects of reforms, as well as a stronger-than-expected recovery of exports and a slight positive contribution from net trade (World Bank 2017a; Figure 1.7). Domestic rebalancing continued, with drivers of activity shifting away from state-led investment. China's trade flows recovered markedly in 2017, partly reflecting rising commodity imports amid tightly enforced production cuts as well as strengthening foreign demand.

Consumer price inflation increased steadily throughout the year but remained below target, while producer price inflation was stable, supporting a recovery of industrial profits. House price growth continued to slow, reflecting tighter regulations in larger cities. Despite further monetary and regulatory tightening in 2017, the total stock of non-financial sector debt, at about 260 percent of GDP, continued to expand on a year-on-year basis (BIS 2017; World Bank 2017a).

On the external side, the current account surplus continued to narrow but, with a moderation of net capital outflows, foreign exchange reserves recovered in 2017. In the second half of the year, the renminbi reversed some of its previous nominal appreciation following the removal of reserve requirements for foreign currency trading.

Chinese growth is projected to edge down in 2018 to 6.4 percent as policies tighten, and average 6.3 percent in 2019-20. Key downside risks to the outlook stem from financial sector vulnerabilities, the possibility of increased protectionist policies in advanced economies, and rising geopolitical tensions. Long-term fundamental drivers of potential growth point to a further slowdown in China's growth over the next decade, as population aging is expected to depress labor supply.

Global trends

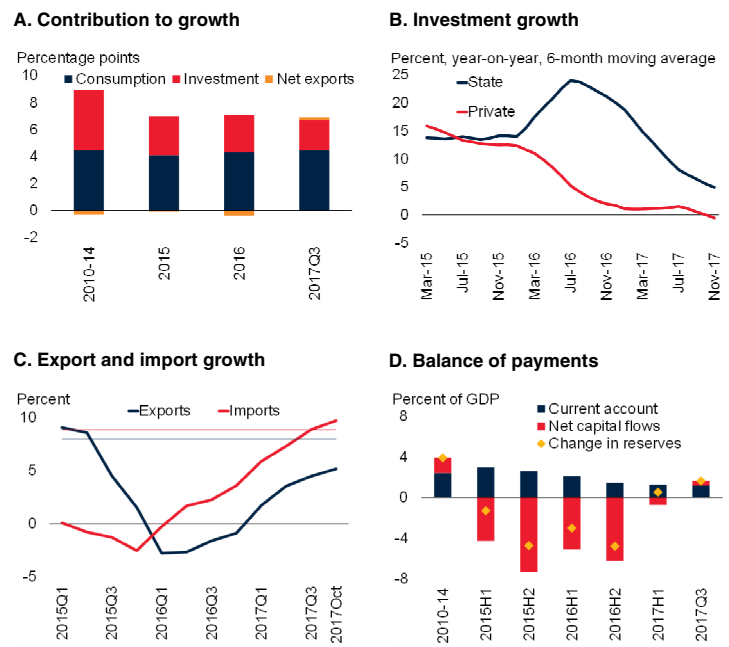
Global trade strengthened significantly in 2017, benefiting from a cyclical recovery in global manufacturing and investment growth. This momentum is expected to diminish in 2018-20, as the upturn in advanced economies moderates and growth in China continues to decelerate. Global financing conditions remain benign, despite prospects of further normalization of monetary policy in major advanced economies, but are likely to tighten going forward. Energy and metals prices recovered in 2017, while agricultural prices remained stable.

Global trade

Global goods trade volumes have gathered significant momentum since mid-2016, following two years of pronounced weakness. A cyclical rebound in investment contributed to strong growth of trade in machinery, electronics and, semiconductors (Figure 1.8). Momentum was sustained throughout 2017, and global trade growth is estimated to have reached a stronger-than-expected 4.3 percent, thanks to synchronous recovery in import demand from both advanced economies and EMDEs. Export growth accelerated in most EMDE regions. However, it decelerated in the Middle East and North Africa,

FIGURE 1.7 China

Growth in China remains solid, with drivers of activity shifting away from state-led investment. China's trade flows recovered markedly in 2017. Tighter enforcement of capital flow management measures helped ease capital outflows and exchange rate pressures and reverse a reduction in foreign reserves.



Sources: China National Bureau of Statistics, Haver Analytics, World Bank.

A. Investment refers to gross capital formation, which includes change in inventories. Last observation is 2017Q3.

B. Last observation is November 2017. October 2017 and November 2017 deflators are estimated.

C. Data include only goods and reflect contributions to year-on-year 12-month moving average growth. Horizontal lines indicate 2010-14 averages. Last observation is October 2017.

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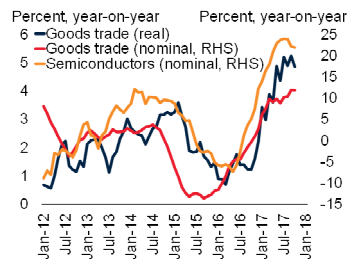
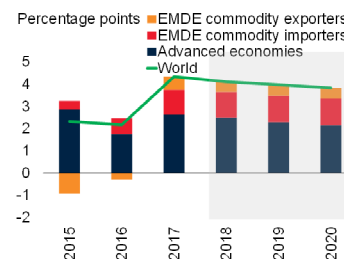
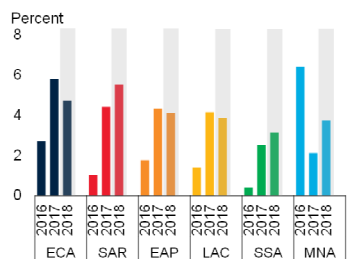
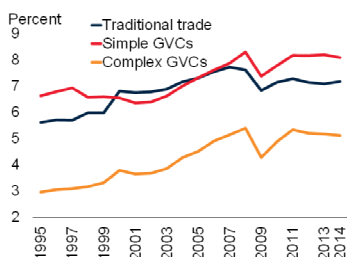
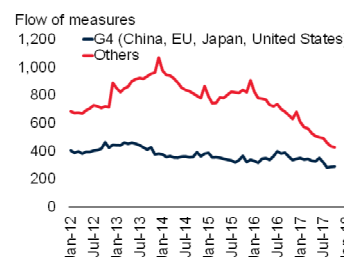
partly reflecting cuts in oil production agreed by OPEC members.

The recovery in global trade has been tightly connected to a cyclical upturn in global manufacturing, which in turn was encouraged by stronger capital spending. Services trade also recovered in 2017, albeit at a slower pace than goods trade, as the former is generally less affected by short-term inventory and production cycles (OECD 2017b). Global trade growth is set to moderate somewhat in 2018-19, at an average of 4 percent, in line with the projected deceleration of capital spending in advanced economies and China.

Besides the effects of maturing recoveries, global trade is expected to remain constrained by structural forces, including the slower pace of global value chain integration and trade liberali-

FIGURE 1.8 Global trade

Global trade has gathered momentum, supported by firming capital goods trade. Robust import demand from major advanced economies was a driving force, while export growth accelerated in most EMDE regions. However, structural factors continue to dampen trade, including stalling global value chain integration. The number of newly introduced protectionist measures in the largest economies stabilized in 2017.

A. Global goods trade growth**B. Contribution to global import growth****C. Export growth, by EMDE region****D. Ratio between global goods trade and global industrial production****E. Evolution of global value chains (GVC)****F. New trade restrictions**

Sources: CPB Netherlands Bureau for Economic Policy Analysis, Global Trade Alert, Semiconductor Industry Association, Wang et al. (2017), World Bank, World Trade Organization.

A. Goods trade data are 3-month moving averages. Last observation is October 2017.

B. C. Shaded areas indicate forecasts.

C. Exports measured as the volume of goods and services. 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, and SSA = Sub-Saharan Africa.

D. Last observation is October 2017.

E. Share of total value added. In simple GVCs, value added crosses national borders only once during the production process. In complex GVCs, value added crosses national borders at least twice. F. Data are 12-month sums. Last observation is October 2017.

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value chains (GVCs) has stabilized—and even dropped slightly for more complex production processes where value added crosses borders multiple times, which is typical for high-value sectors such as motor vehicles, computers, and machinery. Although simple GVCs (where value added crosses borders only once) are about two times larger than complex GVCs in terms of total value added, the latter contribute disproportionately to trade flows and are particularly sensitive to changes in trade costs and trade policy uncertainty (World Bank et al. 2017).

The number of newly introduced protectionist measures in 2017 stabilized in the largest economies and declined in the rest of the world. However, the stock of these measures continues to grow. It is estimated that close to three-quarters of G20 exports face some type of trade distortion in destination markets (Evenett and Fritz 2017). Anti-dumping duties and other tariffs accounted for close to half of recently introduced protectionist measures, followed by financial grants and public procurement localization measures. Exporters of iron and steel, electrical energy and metal products remain disproportionately affected by trade restrictions (Evenett and Fritz 2017).

Financial markets

Global financing conditions remain benign, benefiting from an improved global growth outlook and historically low interest rates, despite prospects of further monetary policy normalization in major advanced economies. The U.S. Federal Reserve hiked policy interest rates three times in 2017, and by a cumulative 125 basis points since the start of its tightening cycle in December 2015. It also began to gradually reduce the size of its balance sheet in October 2017, although the target level over the medium-term has not been specified yet. In addition, the ECB announced a further reduction of its asset purchase program starting in January 2018. Despite prospects of tighter monetary policy, U.S. and Euro Area bond yields remained at historically low levels throughout 2017 (Figure 1.9), reflecting subdued inflation trends and expectations of structurally low real interest rates (Rachel and Smith 2017). Amid low nominal and real interest

zation. Even during a period of marked acceleration since mid-2016, global goods trade only kept pace with global industrial production levels, prolonging a plateau observed since the mid-2000s. Since 2011, participation in global

rates, financial market volatility remained subdued despite policy and geopolitical uncertainties. Stronger-than-expected growth in the Euro Area combined with a relatively stable outlook for the U.S. economy has contributed to some weakening of the U.S. dollar, following three years of significant appreciation.

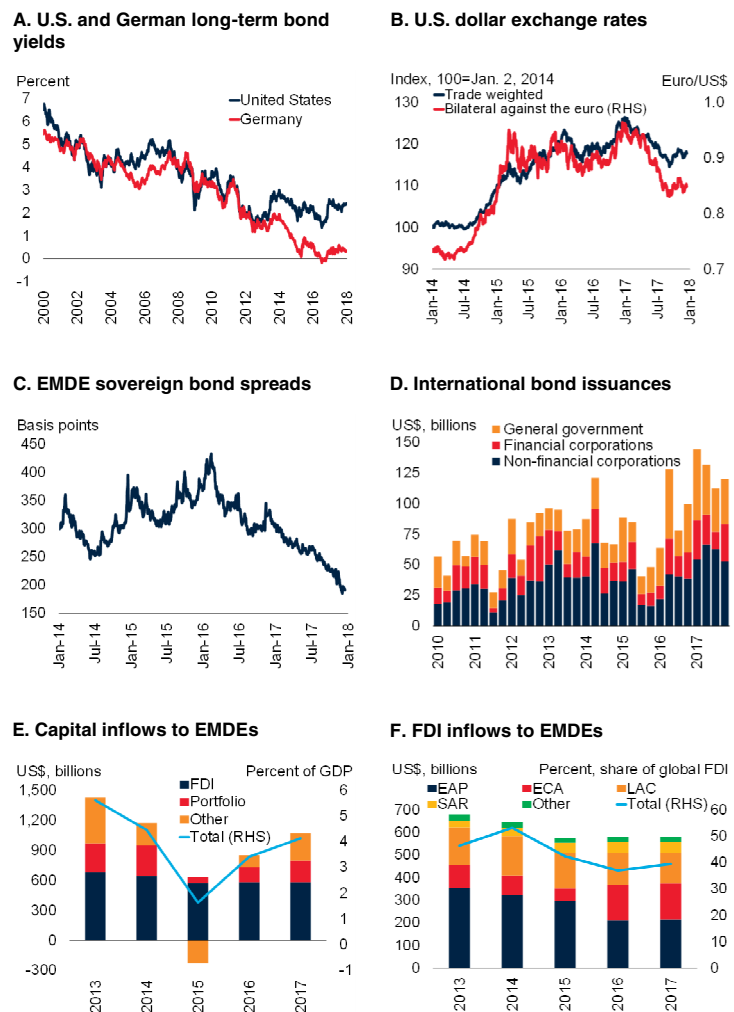
Highly accommodative financing conditions in major advanced economies supported a search for yield and strong demand for EMDE assets in 2017. This was reflected in declining bond spreads, particularly for EMDE investment grade borrowers, and an increase in capital flows, including portfolio and international bond issuances. Among commodity-exporting EMDEs, the waning effect of the terms-of-trade shock, combined with moderating inflation and external imbalances, helped support market sentiment.

Overall, capital inflows rose as a share of EMDE GDP in 2017, recovering further from their post-crisis low in 2015. The increase was particularly notable in Asia and Eastern Europe and Central Asia, while flows into Latin America remained weak. A rise in portfolio and bank lending flows were the main drivers of the overall improvement. Although foreign direct investment (FDI) flows were broadly stable in aggregate, the experience varied across regions. FDI flows to Asia remained strong, supported by a robust growth outlook and policy efforts to attract foreign investment (e.g., India, Indonesia, Vietnam). FDI flows to Sub-Saharan Africa rose only slightly in the wake of a moderate rise in commodity prices and an increase in non-commodity investments, and FDI inflows to Middle East and North Africa also posted modest growth, supported by privatization plans and improvements in business regulations (e.g., Algeria, the Arab Republic of Egypt, Tunisia).

Although cross-border bank lending to EMDEs recovered, it remained subdued, partly reflecting past de-risking from banks in the Euro Area, United Kingdom, and United States (IFC 2017). Capital inflows to EMDEs are expected to continue to be sustained in 2018, supported by improved growth prospects, but are likely to moderate thereafter as global financing conditions tighten.

FIGURE 1.9 Global finance

Despite prospects of tighter monetary policy, U.S. and Euro Area bond yields remained low in 2017, while the U.S. dollar generally depreciated. A continued search for yield helped lower bond spreads for EMDEs and spur robust capital inflows.



Sources: Bank for International Settlements, Bloomberg, Dealogic, Federal Reserve Bank of St. Louis, Haver Analytics, International Monetary Fund, J.P. Morgan, World Bank.

A. 10-year government bond yields. Last observation is December 19, 2017.

B. An increase indicates an appreciation of the U.S. dollar. Last observation is December 15, 2017.

C. Data exclude Venezuela. Last observation is December 18, 2017.

D. Last observation is 2017Q4.

E. F. Based on top 28 recipients of capital flows. "Other" investment category includes all financial transactions not covered in direct investment, portfolio investments, or reserve assets. Data for 2017 are estimates.

F. EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, and SAR = South Asia.

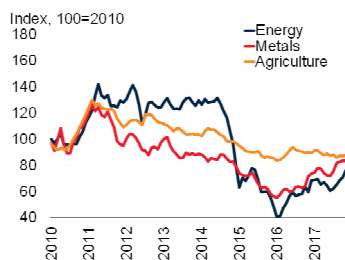
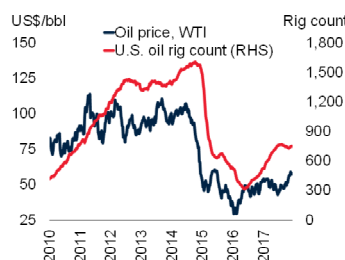
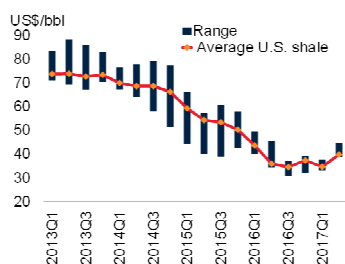
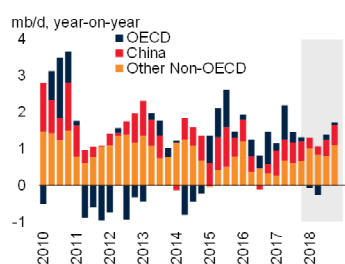
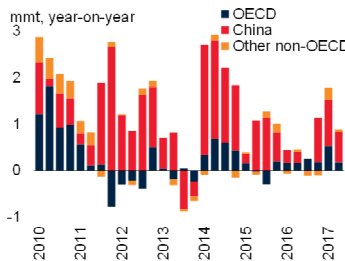
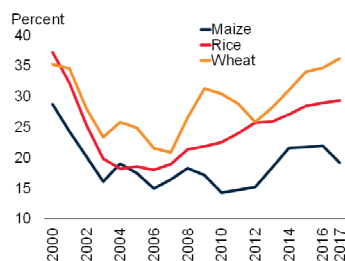
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Commodities

Energy and metals prices recovered in 2017 while agricultural prices remained broadly stable, in line with June expectations (Figure 1.10). Oil prices averaged \$53 per barrel (bbl) in 2017, up 24 percent from 2016, but were volatile throughout

FIGURE 1.10 Commodity markets

Crude oil prices increased in 2017, despite a further rebound in U.S. rig counts and growing efficiency gains in shale oil production. Metals prices rose sharply, on the back of China's strong demand and supply restrictions. Agricultural commodity prices, which stabilized in 2017, are anticipated to make only marginal gains in 2018 as global stocks remain at multi-year highs.

A. Commodity price indexes**B. U.S. oil rig count and oil prices****C. U.S. shale break-even oil prices****D. Global oil consumption growth****E. Global metals consumption growth****F. Stocks-to-use ratios of main grains**

Sources: Baker Hughes, Bloomberg, International Energy Agency, Rystad Energy NASWellCube Premium, U.S. Department of Agriculture, World Bank, World Bureau of Metal Statistics.

A. Index based on nominal U.S. dollars. Last observation is November 2017.

B. Weekly data. Last observation is December 15, 2017.

C. Does not include test activity, where well was shut-down after completion. The average and range are calculated over Bakken, Eagle Ford, Permian Delaware, and Permian Midland basins. Last observation is 2017Q2.

D. Shaded area (2017Q4-2018Q4) represents IEA projections.

E. Last observation is 2017Q2.

F. USDA December 2017 update.

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Nigeria, which were exempted from production targets. The price dip temporarily halted the upturn in U.S. shale drilling. Prices then increased to around \$60/bbl toward the end of 2017, amid strengthening demand, falling stocks, and an agreement in late November to extend production cuts until the end of 2018.

Oil prices are projected to average \$58/bbl in 2018—a slight upward revision from June forecasts—and edge up to \$59/bbl in 2019. These projections reflect expectations of an increase in U.S. production due to continued efficiency gains in the shale oil industry, moderate non-OECD demand growth, and very limited OECD demand growth. Downside risks for oil prices arise mainly from the resilience of the U.S. shale industry and from weak compliance to the agreed production cuts. Conversely, upside risks to prices include the possibility of supply disruptions among politically stressed oil producers (e.g., Iraq, Libya, Nigeria), as well as stronger demand growth.

Metals prices gained 22 percent in 2017 partly due to robust demand from China. Low stocks for some metals, notably aluminum and zinc, and China's efforts to reduce surplus production capacity and limit industrial pollution, also helped lift prices in the second half of 2017. In response to tightening conditions, the base metals price index is expected to edge up in 2018 and 2019. Downside risks to the price forecast include the possibility of slowing demand and less-than-expected production cuts in China. Upside risks include stronger global demand, falling stocks, and a further reduction in Chinese capacity.

Agricultural prices weakened marginally in 2017 and are projected to remain stable in 2018 and 2019. Weighing on prices is the fact that improved growing conditions have pushed stocks-to-use ratios of key grains to multi-year highs. Moreover, fears of supply disruptions (notably, wheat in North America), which temporarily boosted some grain prices, have diminished. Low energy prices have helped reduce grain and oilseeds costs, given that their production is relatively energy-intensive, and have also reduced incentives to divert land to the production of biofuels. Indeed, biofuel production, which grew at 15 percent per annum during the past 10 years,

the year. Despite an agreement by some Organization of Petroleum Exporting Countries (OPEC) and non-OPEC producers to cut production, oil prices dropped to \$46 in mid-2017, reflecting a rebound in U.S. crude oil output and rising production from Libya and

is expected to grow at 3 percent only in the next 3 years, and stabilize thereafter.

Emerging market and developing economies: Recent developments and outlook

EMDE growth accelerated in 2017 to 4.3 percent, reflecting a recovery in commodity exporters amid continued robust activity in commodity importers. EMDE growth is projected to further strengthen to 4.5 percent in 2018 and to an average of 4.7 percent in 2019-20—close to potential—as headwinds to commodity exporters dissipate. However, potential growth over the next decade is likely to decline, reflecting the lagged effect of recent investment weakness, slowing productivity growth, and unfavorable demographic trends.

Recent developments

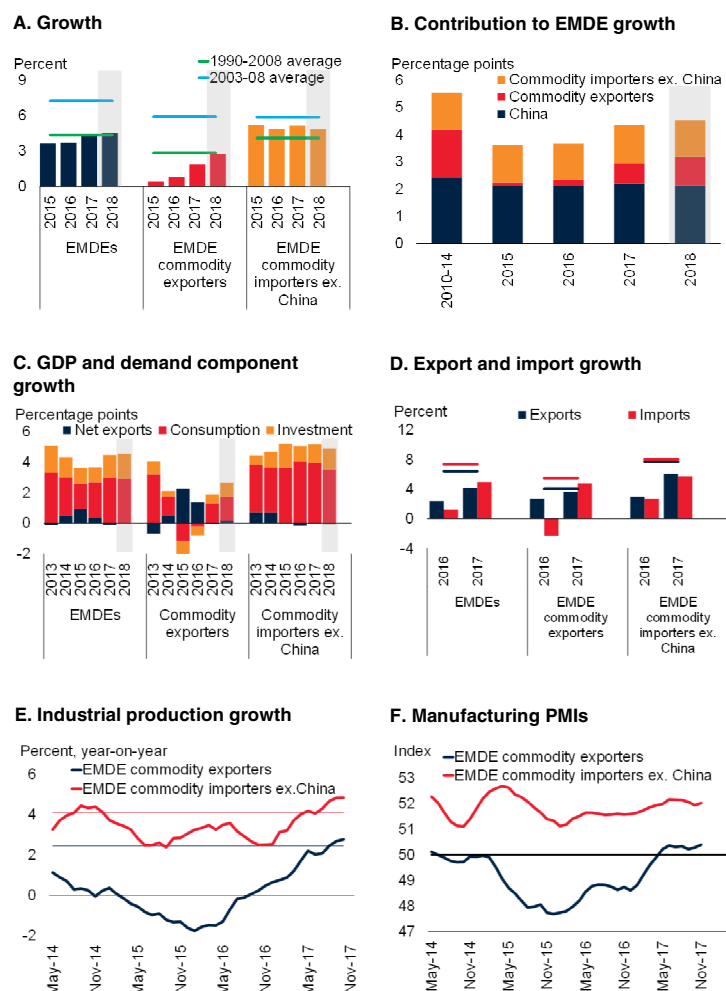
EMDE growth accelerated to an estimated 4.3 percent in 2017, in line with June projections (Figure 1.11). A cyclical upturn continued in commodity exporters, raising their contribution to overall EMDE growth. The recovery in commodity exporters reflected an upturn in private consumption and investment amid improved confidence and diminishing drag from earlier policy tightening. The contribution of net exports declined in commodity exporters, as import growth rebounded substantially. In commodity importers, growth remained robust in 2017, supported by solid domestic demand and strong exports. Recent activity data have been solid, and a number of high-frequency indicators—such as industrial production and purchasing managers' indexes (PMIs)—are at multi-year highs, suggesting continued momentum across EMDEs, particularly among commodity exporters.

Commodity-exporting EMDEs

Growth in commodity exporters is estimated to have accelerated in 2017 to a still subdued rate of 1.8 percent—broadly in line with previous forecasts and up from 0.8 percent in 2016, as various large economies (e.g., Argentina, Brazil, Nigeria, Russia) emerged from recession (Figure

FIGURE 1.11 Activity in EMDEs

EMDE growth strengthened in 2017, as activity recovered in commodity exporters and remained solid in commodity importers. In particular, firming private consumption and investment supported growth in commodity-exporting EMDEs. A number of high-frequency indicators suggest continued momentum across EMDEs.



Sources: Haver Analytics, World Bank.

A. -C. Shaded areas indicate forecasts. Data for 2017 are estimates.

C. Based on sample of 155 EMDEs for which demand components are available and projected. Aggregate GDP growth numbers can differ from those presented in Table 1.1 due to the smaller country sample.

D. Data include goods and services. Blue and red horizontal lines indicate 2006-17 averages. Data for 2017 are estimates.

E. Blue and red horizontal lines indicate January 1995-October 2017 averages. Last observation is October 2017.

F. Values above 50 indicate expansion. Last observation is November 2017, with South Africa data as of May 2017.

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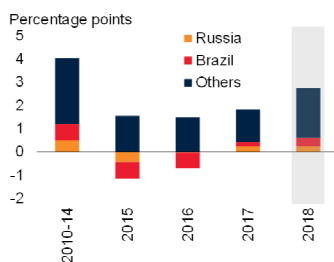
1.12). Although the recovery was led by a rebound in Brazil and Russia (the largest economies in this group), it was broad-based, and seen in more than 50 percent of commodity exporters.

Domestic demand in 2017 continued to benefit from improved confidence and greater macroeco-

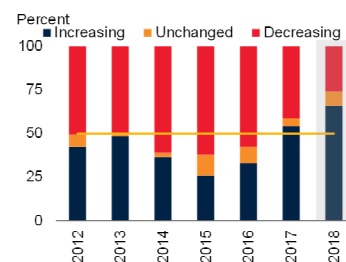
FIGURE 1.12 Activity in EMDE commodity exporters

While the recovery in commodity exporters reflected improvements in Brazil and Russia, it was broad based, with growth increasing in more than 50 percent of countries. Investment in commodity exporters bottomed out, reflecting stabilizing commodity prices, improved confidence, and diminishing drag from past policy tightening. However, energy exporters continued to lag behind.

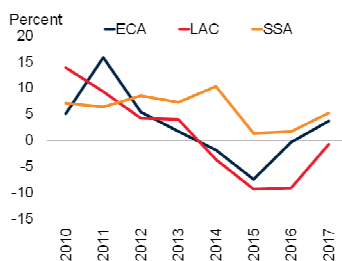
A. Contribution to growth in commodity exporters



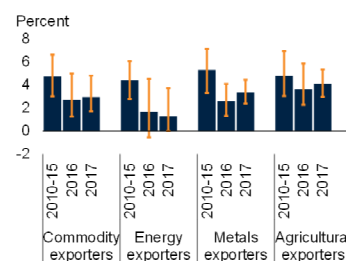
B. Share of commodity exporters with increasing/decreasing growth



C. Investment growth



D. Growth



Source: World Bank.

A. B. Shaded area indicates forecasts. Data for 2017 are estimates.

B. Increasing/decreasing growth are changes of at least 0.1 percentage point from the previous year. Countries with a slower pace of contraction from one year to the next are included in the increasing growth category. Sample includes 85 commodity-exporting EMDEs.

C. ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, and SSA = Sub-Saharan Africa. Data for 2017 are estimates.

D. Simple average of GDP growth. Orange lines indicate interquartile ranges of growth in each group. Data for 2017 are estimates.

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nomic, currency, and price stability. The drag from earlier policy tightening diminished, and declining inflation allowed for more accommodative monetary policy (e.g., Brazil, Chile, Colombia, Kazakhstan, Russia, South Africa, Zambia). Lower inflation and greater monetary policy accommodation supported private consumption growth in large economies (e.g., Brazil, Kazakhstan, Russia, South Africa, Zambia; World Bank 2017b).

Investment recovered in 2017 after a period of contraction (e.g., Argentina, Colombia, the Islamic Republic of Iran, Nigeria, Russia, Zambia). In about 65 percent of commodity exporters investment growth rose. The turnaround

reflected a response to the stabilization of global commodity prices and improved domestic conditions, which contributed to a reduction in financing costs and a recovery in capital inflows.

In resource sectors, corporate profits picked up supported by higher commodity prices, stronger currencies, and increased global demand, which helped improve balance sheets. After a substantial decline in 2014-2016, upstream energy investment rebounded modestly across commodity exporters, with gains in large energy producers in the Europe and Central Asia and Middle East and North Africa regions (e.g., Kazakhstan, Libya, Russia) offsetting continued contraction in large producers in the Latin America and Caribbean and Sub-Saharan Africa regions (International Energy Agency 2017). Positive industry-wide trends in mining and metals markets, including rising demand and prices, encouraged investment in metals producers (e.g., Armenia, Mongolia, Zambia; World Bank 2017c).

Trade volume flows in commodity exporters recovered markedly. A significant rebound in import growth reflected strengthening private consumption and investment. Export growth was supported by firming foreign demand; however, it remained moderate, as production cuts in some oil exporters offset accelerating export flows in other commodity exporters. More generally, export growth was modest in countries with undiversified export bases.

Among the largest commodity exporters, growth in Brazil rebounded to an estimated 1 percent in 2017 following two years of contraction—above previous forecasts, reflecting a recovery of domestic demand supported by easier monetary conditions and improved confidence (World Bank 2017d). In Russia, activity in 2017 was stronger than previously expected, with growth reaching an estimated 1.7 percent, in response to higher oil prices, banking sector support, targeted fiscal stimulus, and reduced external imbalances amid exchange rate flexibility (World Bank 2017e). Growth in Nigeria picked up to an estimated 1 percent—below previous forecasts, mainly due to softer-than-expected recovery of oil production (World Bank 2017f).

Activity in 2017 remained solid in a number of more diversified economies and agriculture exporters (e.g., Benin, Burkina Faso, Côte d'Ivoire, Ethiopia, Indonesia, Malaysia, Morocco, Senegal, Tanzania). Growth generally improved among metals exporters (e.g., Armenia, Mongolia, Zambia), reflecting higher metal prices and improved domestic conditions.

In contrast, adjustment to low commodity prices has proven more protracted than initially expected in some energy exporters (Special Focus 1). Countries with sluggish performance in 2017 include those that implemented oil production cuts (e.g., Iraq, Kuwait, Saudi Arabia). They also include countries that began to undertake belated policy adjustment in Sub-Saharan Africa (e.g., Chad, Republic of Congo), Latin America and the Caribbean (e.g., Trinidad and Tobago), Europe and Central Asia (e.g., Azerbaijan), and East Asia and Pacific (e.g., Timor-Leste). In some cases, these difficulties were compounded by country-specific challenges, such as exchange rate misalignments, social tensions, political challenges, and security issues.

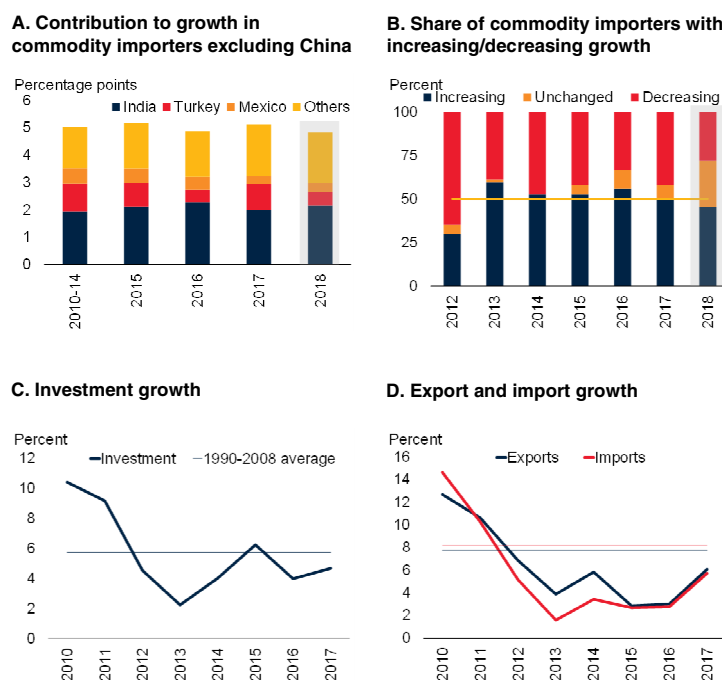
More generally, stronger initial conditions and fundamentals helped some countries recover from the commodity price shock more quickly than others (World Bank 2017g). For example, initial conditions among oil producers accounted for about half of the cross-country variations in the impact of the oil price shock (Grigoli, Herman, and Swiston 2017). More broadly, key determinants of the speed of recovery in commodity exporters included greater macroeconomic policy space and more adequate reserve buffers (e.g., Indonesia, Kazakhstan, Malaysia, Russia); more effective policy frameworks such as flexible exchange rate regimes (e.g., Colombia, Malaysia, Kazakhstan, Russia; Werner, Adler, and Magud 2017), and more diversified export bases (e.g., Albania, Indonesia, Malaysia).

Commodity-importing EMDEs

Growth in commodity importers remained robust at an estimated 6 percent in 2017. Excluding China, estimated growth in 2017 was 5.1 percent, in part reflecting a continued strong contribution

FIGURE 1.13 Activity in EMDE commodity importers excluding China

Growth in commodity importers was solid in 2017, supported by a continued strong contribution from India. About 50 percent of countries experienced increasing output growth. Investment growth in commodity importers generally strengthened, although it varied across regions. Export and import growth accelerated.



Source: World Bank.

A. B. Shaded area indicates forecasts. Data for 2017 are estimates.

B. Increasing/decreasing growth are changes of at least 0.1 percentage point from the previous year. Countries with a slower pace of contraction from one year to the next are included in the increasing growth category. Sample includes 57 commodity-importing EMDEs.

C. Data exclude China and refer to fixed investment. Data for 2017 are estimates.

D. Data exclude China and refer to goods and services. Horizontal lines indicate 1990-2008 averages. Data for 2017 are estimates.

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from India (Figure 1.13.). About 50 percent of countries in this sub-group experienced increasing GDP growth. Accommodative policies, amid benign global financing conditions and low inflation, supported domestic demand, which offset the diminishing windfalls from the earlier decline in commodity prices. In particular, investment growth in commodity importers generally strengthened, although it varied across regions—picking up sharply in Europe and Central Asia, edging down in South Asia due to ongoing softness in India's private investment, and stagnating in Latin America and the Caribbean amid policy uncertainty. Meanwhile, export and import growth accelerated, reflecting firming global and domestic demand, respectively.

Many commodity importers in the Europe and Central Asia and Middle East and North Africa enjoyed positive trade and financial spillovers from strengthening activity in the Euro Area and the recovery in Russia (e.g., Belarus, Georgia, Jordan, Montenegro, Poland, Romania, Tunisia, Turkey). Idiosyncratic factors that had held back growth in several large commodity importers in the ECA region in 2016 diminished in 2017. For instance, absorption of EU structural funds strengthened in some Central European countries (e.g., Hungary, Poland). In addition, fiscal and monetary policy support in Turkey contributed to a much stronger-than-expected rebound in growth. However, geopolitical and domestic challenges in some economies (e.g., FYR Macedonia, Lebanon, Serbia) continued to weigh on activity. In Latin America, growth in Mexico was slightly better than expected, supported by solid services sector activity, despite challenges related to the renegotiation of NAFTA and natural disasters.

Commodity importers across Asia continued to register solid growth, in line with potential rates, supported by robust domestic demand and strengthening exports. Growth in large commodity importers accelerated (e.g., Pakistan, Thailand, Vietnam), or remained strong (e.g., Bangladesh, India, the Philippines), despite some disruptions related to idiosyncratic factors (e.g., adjustment to the new Goods and Services Tax in India, floods in Bangladesh, slower progress in the implementation of public investment projects in the Philippines; World Bank 2017h). Smaller Asian economies continued to benefit from robust growth in China and India, including resurging trade and substantial infrastructure investment (e.g., Afghanistan, Cambodia, Maldives, Sri Lanka). New infrastructure investment supported by China-led Belt and Road projects also benefitted a number of commodity importers in North Africa (e.g., Djibouti).

Low-income countries

Within the broader group of EMDEs, growth in low-income countries (LICs) is estimated to have strengthened to 5.1 percent in 2017, from 4.5 percent in 2016, reflecting an increase in commodity prices and a recovery in agriculture

sectors from earlier droughts (Box 1.2). Mining output and investment rebounded in metals-exporting LICs (e.g., Democratic Republic of Congo) as metals prices recovered. The uptick in oil prices helped oil exporters exit recession (e.g., Chad). Non-resource intensive LICs expanded at a solid pace, supported by infrastructure investment and higher crop production. Favorable monsoon rains, a pickup in reconstruction works, and the normalization of trade with India underpinned a strong recovery in Nepal. However, growth was softer than expected in LICs dealing with heightened political uncertainty (e.g., Democratic Republic of Congo), high government debt (e.g., Chad), large external imbalances (e.g., Rwanda), and weak execution of fiscal plans (e.g., Tanzania). Most LICs reported a modest decrease in the poverty headcount in 2017. For almost a third of LICs, per capita growth was negative (e.g., Burundi, Chad, Democratic Republic of Congo, Haiti) or stagnant (e.g., Afghanistan, Comoros, The Gambia, Liberia).

EMDE outlook

EMDE growth is projected to strengthen to 4.5 percent in 2018 and to an average of 4.7 percent in 2019-20, in line with June forecasts (Figure 1.14). This outlook is predicated on improved global manufacturing activity and robust global trade, broadly favorable financing conditions, and firming commodity prices, amid an investment-led recovery in advanced economies.

The projected acceleration for EMDEs as a whole reflects a continued recovery in commodity exporters, whose growth is expected to pick up from 1.8 percent in 2017 to 2.7 percent in 2018, as the cyclical rebound continues, and to an average of 3.1 percent in 2019-20, as output gaps close and labor market slack gradually diminishes. The rebound in commodity exporters is expected to be broad-based, so long as the prices of oil and other commodities continue to rise. Domestic demand is expected to further strengthen, reflecting the positive effects of currency and price stability on consumer and business confidence. As the cyclical recovery continues, large negative output gaps are expected to narrow.

Consequently, growth in most EMDE regions with large numbers of commodity exporters is projected to accelerate (Box 1.3; Chapter 2).

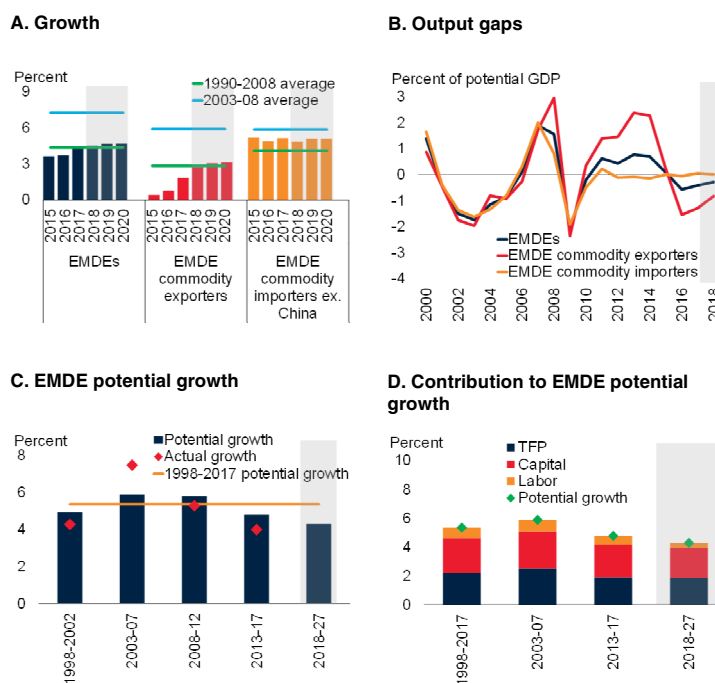
Growth in commodity importers is projected to remain broadly stable in 2018-20, averaging 5.7 percent—in line with its potential rate. Strengthening exports are expected to offset the impact of diminishing policy support in the face of emerging price pressures and waning windfalls from earlier commodity price declines. A gradual slowdown in China is expected to be offset by a modest pickup in the rest of the group during the forecast horizon. Excluding China, growth in commodity importers is foreseen to be 4.8 percent in 2018 and to accelerate to an average of 5.1 percent in 2019-20, reflecting the diminishing role of idiosyncratic factors weighing on activity in some large economies (e.g., India, Mexico).

Forecasts for both groups are, on average, broadly in line with June projections. In commodity exporters, an upward revision to the largest economies (e.g., Brazil, Russia) offsets a downgrade to the near-term growth forecast in several large energy-producing economies related to higher-than-expected production cuts. In commodity importers excluding China, a small downgrade to growth projections in 2018 reflects a slight downward revision to India's still-fast pace of expansion due to a softer-than-envisioned recovery in investment and lingering effects of recent policy changes, as well as moderating growth in Turkey following a sharp rebound in 2017.

Growth in low-income countries is projected to rise to 5.4 percent in 2018 and to an average of 5.6 percent in 2019-20, as commodity prices firm. These forecasts are lower than in June, and reflect a reassessment of the pace of recovery in oil—and metals-exporting LICs that experienced sharp slowdowns or recession in 2016-17. Non-resource-intensive LICs in Sub-Saharan Africa are expected to continue to expand at a solid pace, supported by infrastructure investment and exports. However, growth is projected to moderate in countries adjusting to high public debt (e.g., Ethiopia), large external imbalances (e.g., Mali, Rwanda), and rising fiscal deficits (e.g., Zimbabwe). As for the non-resource-intensive LICs in South Asia, activity is expected to expand

FIGURE 1.14 EMDE growth prospects

In the near term, EMDE growth is projected to pick up, as cyclical headwinds in commodity exporters, where negative output gaps remain large, gradually dissipate. Absent significant policy changes, EMDE potential growth—which has already fallen since the onset of the global financial crisis—is likely to further decline over the next decade, reflecting a more subdued pace of capital accumulation, slowing total factor productivity growth, and population aging.



Source: World Bank.

A.-D. Shaded area indicates forecasts.

B. Output gaps calculated using multivariate filter. Groups output gaps is the GDP-weighted average of individual country output gap estimates using, as weights, real GDP at 2010 prices and market exchange rates. The 23 EMDEs in the sample include Argentina, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Hungary, India, Indonesia, Kazakhstan, Malaysia, Mexico, Peru, Poland, Romania, Russia, Serbia, South Africa, Thailand, Turkey, and Vietnam.

C. D. GDP-weighted averages of production function-based potential growth as described in Chapter 3. Sample includes 49 EMDEs.

D. TFP stands for total factor productivity growth.

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at a modest pace in Afghanistan, as the security situation continues to weigh on investment. In Nepal, growth is expected to moderate owing to infrastructure bottlenecks and regulatory challenges.

EMDE potential growth has declined considerably over the past two decades, notwithstanding an investment-driven boost during the pre-crisis surge in commodity prices. This slowdown reflected softening total factor productivity (TFP) growth and, to a lesser extent, recent investment weakness as well as less favorable demographic trends (Chapter 3). These factors were compounded by the slow post-crisis recovery and, in commodity

BOX 1.2 Low-income countries: Recent developments and outlook

Economic activity in low-income countries (LICs) strengthened, as commodity prices improved and the agricultural sector recovered. Growth in LICs is estimated to have picked up to 5.1 percent in 2017, and is projected to rise to 5.4 percent in 2018 and 5.6 percent in 2019-20, as commodity prices firm. However, these forecasts are lower than in June, due to a slower-than-previously-anticipated pace of recovery in oil and metals exporters. Risks to the outlook remain skewed to the downside, including the possibility of lower commodity prices, weaker-than-expected implementation of needed policy reforms, and a deterioration in political and security situations. On the upside, stronger-than-expected recoveries in large advanced economies and EMDEs could support stronger LIC growth through higher exports, investment, and remittances.

Recent developments

Growth rebounded. Growth in low-income countries (LICs) is estimated to have picked up to 5.1 percent in 2017 from 4.5 percent in 2016, reflecting gains in commodity prices and a recovery in agricultural sectors from droughts (Figure 1.2.1).¹ Mining output and investment rebounded in some metals-exporting LICs (e.g., Democratic Republic of Congo) as metals prices recovered. The uptick in oil prices helped slow the pace of contraction in some oil exporters (e.g., Chad). Non-resource-intensive LICs expanded at a solid pace, supported by infrastructure investment and higher crop production. Favorable monsoon rains, a pickup in reconstruction works, and the normalization of trade with India underpinned a strong recovery in Nepal. However, growth was softer than expected in LICs dealing with heightened political uncertainty (e.g., Democratic Republic of Congo), high government debt (e.g., Mozambique), large external imbalances (e.g., Rwanda), and weak execution of the capital expenditure budget (e.g., Tanzania).

Currencies stabilized, inflation slowed. The uptick in commodity prices, along with foreign aid inflows and central bank interventions, helped mitigate currency pressures. In some LICs (e.g., Mozambique), currencies strengthened as rising export receipts boosted the supply of foreign exchange. Exchange rate stability and an easing of food price inflation, due to improved rainfalls, helped lower headline inflation across LICs. However, in some metals-exporting LICs (e.g., Democratic Republic of Congo, Liberia), a slow recovery of foreign direct investment and the inability to access other sources of external financing resulted in a rapid depreciation of their currencies, which exacerbated inflationary pressures. Other cases of high inflation reflected rising fuel prices and the

effects of natural disasters on domestic food supplies (e.g., Haiti). In LICs where inflation eased, some central banks (e.g., Tanzania) were able to cut interest rates to support domestic demand.

Current account deficits narrowed. The median current account deficit in LICs is estimated to have narrowed by 0.6 percentage points to 8.8 percent of GDP in 2017, reflecting an improvement in their terms of trade. Current account deficits narrowed in oil-exporting LICs (e.g., Chad), as imports decreased amid weak domestic demand, but remained elevated in metals-exporting LICs, as imports of capital equipment for mining projects continued. Deficits widened in non-resource-intensive LICs, due to a rise in capital goods imports for infrastructure development and natural disaster-related reconstruction work (e.g., earthquake in Nepal), and in fuel and food imports (e.g., Haiti). Although some current account deficits could be financed through Eurobond issuance and remittances (e.g., Senegal), capital flows to LICs remained soft and foreign reserves generally declined.

Declining fiscal deficits, still-elevated government debt. The median fiscal deficit in LICs is estimated to have narrowed to 4.3 percent of GDP in 2017 from 4.8 percent in 2016. The fiscal balance in some oil-exporting LICs turned into a surplus, in response to drastic spending cuts, and the fiscal deficits narrowed in non-resource-intensive countries, owing in some cases to delayed public investment spending. However, the fiscal deficits in metals-exporting LICs widened, as they continued to struggle to mobilize domestic revenue, while reconstruction-related spending increased the fiscal deficit in LICs hit by natural disasters (e.g., Nepal, Haiti).

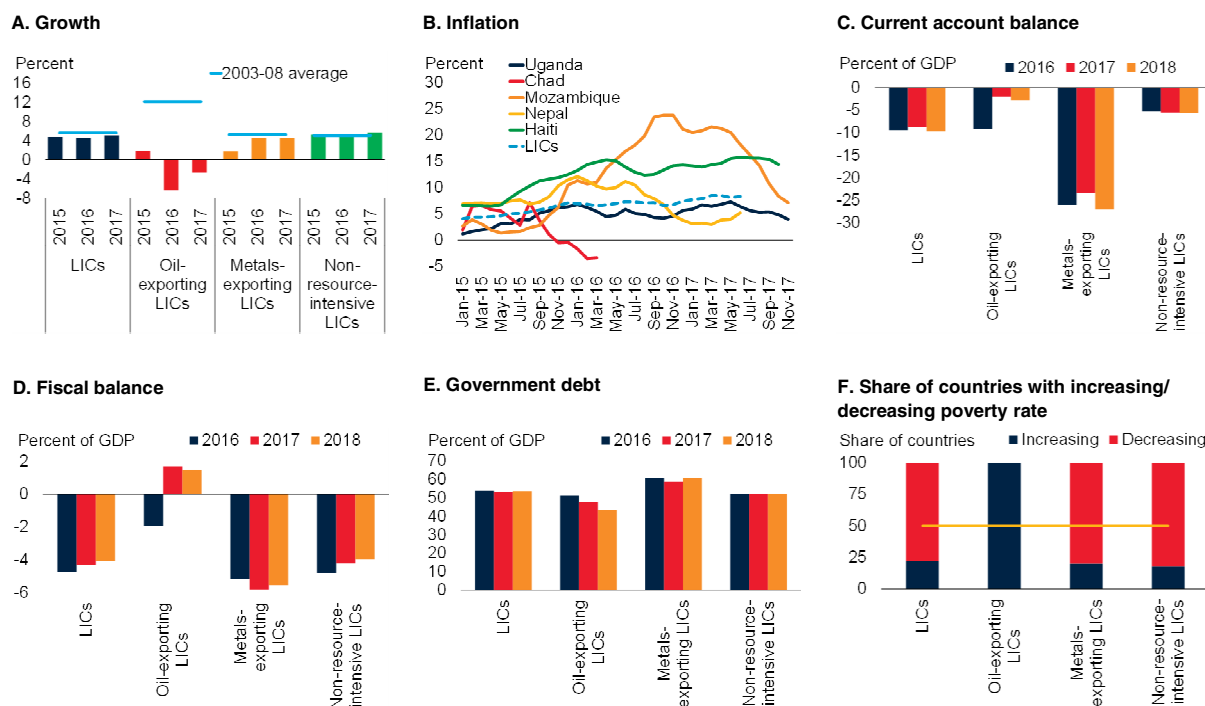
Government debt remained elevated, reflecting the slow progress in reducing fiscal deficits, with the median debt-to-GDP ratio edging down to 53.3 percent from 53.8 percent in 2016. Government debt fell in oil-exporting LICs, but remained high in metals-exporters and the non-resource-intensive countries. Between 2016 and 2017, government debt increased by 5 percentage points to above 50 percent of GDP in some non-resource-intensive

Note: This box was prepared by Gerard Kambou. Research assistance was provided by Xinghao Gong.

¹ For the 2018 fiscal year, low-income economies are defined as those with a gross national income per capita, calculated using the World Bank Atlas method, of \$1,005 or less in 2016.

BOX 1.2 Low-income countries: Recent developments and outlook (continued)**FIGURE 1.2.1 Recent developments in low-income countries**

Growth strengthened in low-income countries in 2017, reflecting a pickup in some metals exporters. Non-resource-intensive LICs continued to expand at a solid pace. Headline inflation slowed across LICs, as food inflation fell. Current account and fiscal deficits narrowed in oil-exporting LICs as they implemented measures to contain spending, but remained elevated in metals exporters and non-resource-intensive countries as investment spending remained high. Government debt remained elevated across LICs, reflecting still-high fiscal deficits. While most LICs reported a decrease in the poverty headcount, it is expected to increase in metals exporters and, particularly, in oil exporters.



Sources: Haver Analytics, International Monetary Fund, World Bank.

Note: Non-resource-intensive countries consist mostly of agricultural exporters.

A. Data for 2017 are estimates.

C, D, E. Data for 2017 are estimates and data for 2018 are forecasts.

F. Based on the international poverty line of \$1.90 a day, at 2011 purchasing power parity (PPP) exchange rates.

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LICs (e.g., Burundi) and metals-exporters (e.g., Niger, Sierra Leone). Although government debt increased less in Benin and Ethiopia, it still rose above the median debt ratio, as they continued to borrow to finance ambitious investment plans. Debt servicing costs remained unsustainable in Chad and Mozambique, highlighting the need for governments in these and other LICs to continue their efforts to mobilize domestic revenue and rationalize public spending.

Slow progress in poverty reduction. Most LICs reported a modest decrease in the poverty headcount in 2017, based on the international poverty line (\$1.90 in 2011 PPP). Per capita growth improved on average from 1.5 percent in 2016 to 2.1 percent in 2017, but was negative or flat for

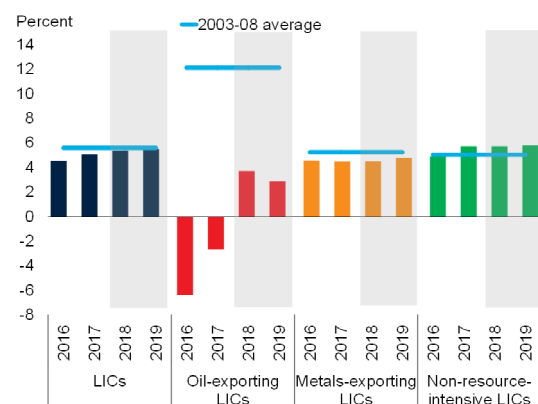
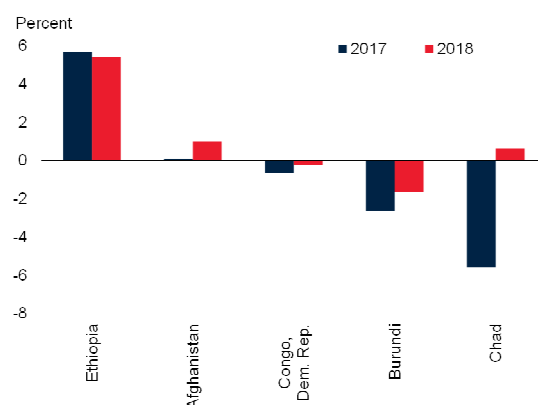
about a third of LICs. The international headcount poverty rate is estimated to have edged up in oil- and metals-exporting LICs (e.g., Chad, Democratic Republic of Congo), as well as in fragile countries (e.g., Afghanistan, Burundi) as they continued to experience low GDP growth rates.

Outlook

Softer-than-expected outlook. Growth in LICs is projected to pick up further, rising to 5.4 percent in 2018 and to 5.6 percent on average in 2019-20, as commodity prices firm (Figure 1.2.2). These forecasts are lower than in June, reflecting a more gradual pace of recovery in a number of oil and metals-exporting LICs that experienced

BOX 1.2 Low-income countries: Recent developments and outlook (continued)**FIGURE 1.2.2 Outlook**

Economic activity in LICs is projected to pick up further, with growth rising to 5.4 percent in 2018 and to 5.6 percent on average in 2019-20 as commodity prices firm. However, these forecasts are lower than in June, reflecting a more gradual pace of recovery among oil and metals exporters. While per capita growth will edge up in LICs as a whole, it will remain negative or low in a number of oil and metals exporters and in fragile countries. Growth, including in per capita terms, is expected to remain robust in non-resource-intensive LICs, although it will ease in some countries.

A. Growth forecasts**B. Per capita GDP growth projections for selected LICs**

Source: World Bank.

A. Data for 2017 are estimates; data for 2018 and 2019 are forecasts. Shaded areas indicate forecasts.

B. Data for 2017 are estimates; data for 2018 are forecasts.

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a significant slowdown or recession in 2016-17. Moreover, while per capita growth is expected to edge up in LICs as a whole, it will still remain negative or low in several oil and metals-exporters and in fragile countries.

Growth in non-resource-intensive LICs is expected to remain robust. Non-resource-intensive LICs in Sub-Saharan Africa are expected to continue to expand at a solid pace, supported by expanding infrastructure investment. However, growth is projected to moderate in countries adjusting to high public debt (e.g., Ethiopia) and large external imbalances (e.g., Mali, Rwanda).

Among non-resource-intensive LICs in South Asia, activity is expected to expand at a modest pace in Afghanistan, as the security situation limits investment. In Nepal, following the strong recovery in 2017, growth is expected to moderate owing to infrastructure bottlenecks, regulatory challenges, and lower agricultural output. Elsewhere, after a slowdown in 2017, growth in Haiti is expected to rebound, as improving political stability helps lift investment.

Risks

Risks still skewed to the downside. A key downside risk to activity in LICs is the possibility of weaker-than-expected commodity prices, due for instance to softer Chinese demand. Renewed slides in commodity prices would strain fiscal and current account balances in commodity exporters. Foreign direct investment in mining and infrastructure, which is essential for long-term growth, would be curtailed. Metals-exporting LICs in Sub-Saharan Africa are particularly vulnerable to negative terms-of-trade shocks. Other downside risks include the possibility of a sharp reduction in foreign aid or of a large decline in remittances due to stricter immigration policies in advanced economies, which would harm investment and consumption in many LICs. On the upside, stronger-than-expected growth in the Euro Area—a major trading partner for many LICs—could lead to a stronger-than-expected pickup in activity in LICs through trade, investment and remittance channels. Faster-than-expected recoveries in EMDEs could have positive spillover effects on neighboring LICs.

On the domestic front, weak economic and financial policies remain the main risk to the LICs outlook. This risk is especially important among oil- and metals-exporting LICs, where sustained measures are needed to contain fiscal deficits, stabilize government debt, and rebuild buffers. In contrast to oil and metals exporters, the

BOX 1.2 Low-income countries: Recent developments and outlook (concluded)**TABLE 1.2.1 Low-income country forecasts^a**

(Real GDP growth at market prices in percent, unless indicated otherwise)

Percentage point differences from June 2017 projections

	2015	2016	2017e	2018f	2019f	2020f	2017e	2018f	2019f
Low Income Country, GDP^b	4.7	4.5	5.1	5.4	5.5	5.7	-0.3	-0.4	-0.3
Afghanistan	1.1	2.2	2.6	3.4	3.1	3.1	0.0	0.0	0.0
Benin	2.1	4.0	5.4	6.0	6.3	6.7	-0.1	0.0	0.0
Burkina Faso	4.0	5.9	6.4	6.0	6.0	6.0	0.3	-0.3	-0.3
Burundi	-3.9	-0.6	0.5	1.5	2.5	2.5	-1.0	-0.5	-0.1
Chad	1.8	-6.4	-2.7	3.7	2.9	6.8	-2.9	0.5	-0.2
Comoros	1.0	2.2	2.5	2.7	2.9	2.9	-0.8	-1.3	-1.1
Congo, Dem. Rep.	6.9	2.4	2.6	3.0	3.3	3.3	-2.1	-1.9	-1.6
Ethiopia ^c	9.6	7.5	8.5	8.2	7.8	7.8	0.2	0.2	-0.1
Gambia, The	4.1	2.2	3.0	3.5	4.2	4.2	0.5	-0.3	0.2
Guinea	3.5	6.6	6.7	5.8	5.9	5.9	2.3	1.2	1.3
Guinea-Bissau	6.1	5.8	5.5	5.2	5.4	5.4	0.4	0.1	0.3
Haiti ^c	1.2	1.4	1.1	2.2	2.5	2.5	0.6	0.5	0.2
Liberia	0.0	-1.6	2.5	3.9	5.0	6.0	-0.5	-1.4	-0.7
Madagascar	3.1	4.2	4.1	5.1	5.6	5.4	0.6	-1.3	0.9
Malawi	2.8	2.5	4.5	5.0	5.4	5.4	0.1	0.1	0.1
Mali	5.7	5.8	5.3	5.0	4.7	4.7	0.0	-0.2	-0.4
Mozambique	6.6	3.8	3.1	3.2	3.4	3.4	-1.7	-2.9	-3.3
Nepal ^c	2.7	0.4	7.5	4.6	4.5	4.5	0.0	-0.9	0.0
Niger	4.0	5.0	5.2	5.2	5.4	5.6	0.0	-0.3	-0.1
Rwanda	8.9	5.9	5.2	5.9	6.8	6.8	-0.8	-0.9	-0.2
Senegal	6.5	6.7	6.8	6.9	7.0	7.0	0.1	0.0	0.0
Sierra Leone	-20.6	6.3	5.6	6.3	6.7	6.7	0.2	0.7	0.8
Tanzania	7.0	7.0	6.6	6.8	6.9	6.9	-0.6	-0.4	-0.5
Togo	5.3	5.0	5.0	5.3	5.4	5.4	0.4	-0.2	-0.1
Uganda ^c	5.2	4.7	4.0	5.1	5.7	6.0	-0.6	-0.1	0.1
Zimbabwe	1.4	0.7	2.8	0.9	0.2	0.2	0.5	-0.9	-1.5

Source: World Bank.

Notes: e = estimate; f = forecast. World Bank forecasts are frequently updated based on new information and changing (global) circumstances. Consequently, projections presented here may differ from those contained in other Bank documents, even if basic assessments of countries' prospects do not differ at any given moment in time.

a. Central African Republic, Democratic People's Republic of Korea, Somalia, and South Sudan are not forecast due to data limitations.

b. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars.

c. GDP growth based on fiscal year data. For Nepal, the year 2017 refers to FY2016/17.

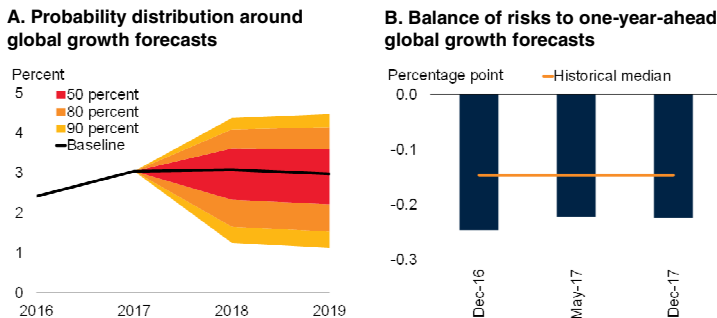
For additional information, please see www.worldbank.org/gep.

non-resource-intensive LICs (e.g., Ethiopia, Senegal)—which are relatively more diversified—have expanded at a robust pace. Their high pace of expansion has, however, been accompanied by a rising debt burden, as they continued to borrow, including on international capital markets, to finance ambitious public infrastructure

programs. Excessive external borrowing, in the absence of sound forward-looking budget management, could worsen debt dynamics and cause economic instability. In addition, droughts, heightened policy uncertainty, conflicts, and worsening security conditions could weigh heavily on economic activity in LICs, especially in fragile countries.

FIGURE 1.15 Global growth forecasts: Uncertainty and the balance of risks

Uncertainty around global growth prospects remains elevated and risks still tilted to the downside, despite the possibility of stronger-than-expected growth in large economies.



Source: World Bank.

A. B. The fan chart shows the forecast distribution of global growth using time-varying estimates of the standard deviation and skewness extracted from the forecast distribution of three underlying risk factors (oil price futures, the S&P 500 equity price futures, and term spread forecasts). Each of the risk factor's weight is derived from the model described in Ohnsorge, Stocker, and Some (2016). Values for 2018 are computed from the forecast distribution of 12-month ahead oil price futures, S&P 500 equity price futures, and term spread forecasts. Values for 2019 are based on 24-month-ahead forecast distributions. Last observation is December 2017.

B. Balance of risks to 12-month global growth forecasts measured as the time-varying skewness of global growth forecasts, computed from the forecast distribution of the three underlying risk factors. Dates in horizontal axis correspond to cutoff dates for the January 2017, June 2017, and January 2018 editions of *Global Economic Prospects*. Median value is computed over the period January 2006 to October 2016.

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exporters, the decline in commodity prices. Absent significant policy changes to boost potential growth, long-term fundamental drivers of EMDE growth are expected to continue to weaken over the next decade, including a subdued pace of capital accumulation, slowing productivity, and population aging. Demographic trends are expected to particularly worsen in East Asia and Pacific (e.g., China, Thailand) and Europe and Central Asia (e.g., Poland, Russia), while they will remain especially supportive to potential growth in South Asia.

Risks to the outlook

Risks to global growth have become more balanced, following a stronger-than-expected cyclical upturn in 2017. A further pickup in investment growth in major economies could strengthen the recovery, with positive spillover effects for trading partners. However, risks remain predominantly on the downside, especially over the medium term. With interest rates and financial market volatility at exceptionally low levels, the outlook is vulnerable to sudden changes in market sentiment or unexpected

policy shifts that could lead to financial instability. Also, increased trade protectionism and rising geopolitical tensions could weigh on sentiment and disrupt the recovery. Over the longer term, a sharper-than-expected slowdown in potential output growth could reduce the resilience of the global economy to adverse shocks and damage prospects for gains in living standards and poverty reduction.

Global growth estimates for 2017 have been revised up to 3 percent, reflecting a broad-based recovery in advanced economies and faster-than-expected growth in some major EMDEs. The pace of global investment and export growth was stronger than previously projected, which benefited in particular more trade-dependent EMDE regions (e.g., Europe and Central Asia, East Asia and Pacific). While global growth is forecast to edge up to 3.1 percent in 2018, it is projected to slightly moderate later in the forecast horizon, given the anticipated normalization of monetary policy in major advanced economies in the face of closing output gaps, an expected slowing of growth in China, and limited medium-term prospects for substantial further acceleration among commodity-exporting EMDEs.

This said, the better-than-expected outcome in 2017 illustrates the possibility of a continued pickup in global investment and GDP growth if financing conditions continue to be benign, policy uncertainty recedes, and confidence improves further. Risks to the outlook have therefore become more balanced in 2018-19, although they remain tilted to the downside (Figure 1.15). Major risks include the possibility of disorderly financial market movements, unexpected policy changes, rising trade protectionism, heightened geopolitical tensions, and, over the longer run, a sharper-than-expected slowdown in potential output growth.

Upside risk: Stronger-than-expected growth in large economies

In the *Euro Area*, the dampening effect on activity of household and firm deleveraging has diminished, and capital spending is recovering (Figure 1.16). With investment rates still well below pre-crisis levels, the recovery could

continue to strengthen in 2018 as monetary policy remains highly accommodative and confidence improves further. The cyclical upturn could be reinforced by targeted structural reforms, which could create additional space for fiscal support measures in the short term (Banerji et al. 2017).

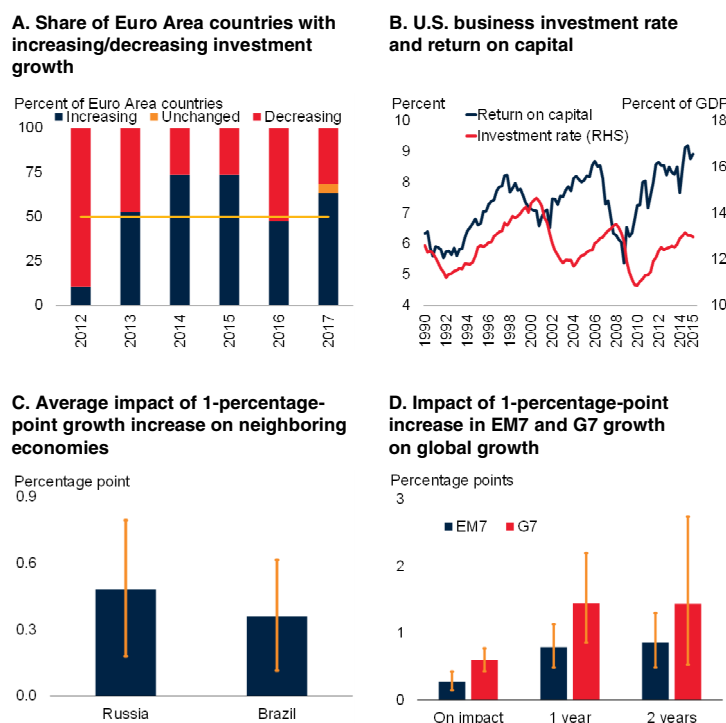
In the *United States*, the real return on business capital recovered from the global financial crisis, reaching historically high levels. Investment rates have rebounded but remain below previous cyclical highs, and they could recover more quickly than expected if rising business confidence or growth-enhancing policies unlock pent-up demand for capital spending. In particular, removing distortions that discourage capital spending could help spur stronger-than-expected activity (Auerbach et al. 2017; Toder 2017; Devereux, Lockwood, and Redoano 2008).

In *commodity-exporting EMDEs*, a stabilization of commodity prices and policy adjustments have generally helped restore confidence. Investment bottomed out in 2017, and diminished currency pressures allowed monetary policy to be eased. A faster pickup in commodity prices amid strengthening global growth could contribute to a more rapid revival in near-term activity and investment than currently expected, particularly in some of the largest commodity exporters (e.g., Brazil, Russia). Faster growth in these economies would have positive spillover effects on neighboring countries (World Bank 2016b).

More generally, a further strengthening of investment in the largest advanced economies and EMDEs could stimulate global trade and manufacturing activity, benefiting in particular more trade-dependent EMDEs (Freund 2016). Developments in major advanced economies continue to generate the largest international spillovers, but systemically important EMDEs are playing an increasing role as well. In addition, a stronger-than-expected cyclical recovery, in these large economies and elsewhere, could generate its own momentum, encouraging greater investment and boosting productivity. Consequently, if this growth spurt were to materialize and be sustained, it could in turn support potential growth (Chapter 3).

FIGURE 1.16 Upside risks of stronger-than-expected growth in large economies

Investment has been recovering across the Euro Area and the return on capital is at historically high levels in the United States. A stronger-than-expected recovery in these and other major economies, including the largest commodity-exporting EMDEs, could provide a boost to trading partners.



Sources: Federal Reserve Bank of St. Louis; Gomme, Ravikumar, and Rupert (2011); World Bank.

A. Increasing/decreasing investment growth are changes of at least 0.1 percentage point from the previous year. Countries with a slower pace of contraction from one year to the next are included in the increasing investment growth category.

B. Business capital data are calculated using constant U.S. dollars, following the methodology from Gomme, Ravikumar, and Rupert (2011). Investment as a share of GDP measured in current U.S. dollars.

C. Based on estimates of a structural VAR. Average cumulative impact response after two years of neighboring country's real GDP growth to a 1-percentage-point decline in Russia's or Brazil's growth. Orange bars reflect the 16th-84th percentile confidence bands. For Russia, the list of affected neighboring countries is Armenia, Kazakhstan, Poland, Romania, Slovak Republic, Turkey, and Ukraine. For Brazil, it is Argentina, Chile, Colombia, Ecuador, Paraguay, and Peru. For each country, the variables included in the model are: G7 growth, EMBI, growth of source country, trade-weighted average commodity prices, growth of the affected countries, the real effective exchange rate of the affected countries. The model includes a dummy that captures the global financial crisis of 2008-09.

D. EM7 includes Brazil, China, India, Indonesia, Mexico, Russia, and Turkey. Cumulative impulse responses of a 1-percentage-point increase in EM7 and G7 growth on global growth. The impact is the GDP-weighted average of the responses of EM7, other EMDEs, and G7 countries. Solid bars represent medians, and error bars represent 16-84 percent confidence intervals.

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Downside risk: Disorderly adjustment of financial market conditions

A disorderly adjustment of financial market conditions could be triggered by several factors, including a sudden correction in asset valuation, a market reassessment of the pace of monetary policy normalization in advanced economies, or financial stress in major EMDEs such as China.

BOX 1.3 Regional perspectives: Recent developments and outlook

Growth in most EMDE regions with large numbers of commodity exporters recovered in 2017, with the notable exception of the Middle East and North Africa mostly due to oil production cuts. These regions are generally expected to see faster growth during the forecast horizon, as commodity prices rise and the impact of the earlier collapse in those prices dissipates. The robust pace of expansion in EMDE regions with a substantial number of commodity importers is expected to continue. Risks to the outlook have become more balanced in some regions, but continue to tilt down in all of them.

East Asia and Pacific. Regional growth in 2017 edged up to an estimated 6.4 percent in 2017, up 0.2 percentage point from previous forecasts, reflecting an improving external environment. Notwithstanding this cyclical upturn, growth is projected to moderate to 6.2 percent in 2018 and to an average of 6.1 percent in 2019-20, as a structural slowdown in China offsets a modest pickup in the rest of the region. Risks to the forecast have become more balanced, as near-term growth in advanced-economy trading partners may be stronger than expected. However, downside risks still predominate, including rising geopolitical pressures, an abrupt tightening of global financing conditions, increased global protectionism, and a steeper-than-envisaged slowdown in China or other major economies.

Europe and Central Asia. Growth in the region is estimated to have accelerated to 3.8 percent in 2017, 1.3 percentage points above June projections, reflecting a stronger-than-envisioned recovery across the region—including in Poland, Russia, and particularly Turkey—mainly due to firming domestic demand. Growth is projected to decelerate to 2.9 percent in 2018, as the recovery in Turkey moderates, and settle at 3 percent in 2019-20. This stable outlook reflects continued recovery in the eastern part of the region, driven by commodity exporters, which is offset by a gradual slowdown in the western part of the region amid moderating activity in the Euro Area toward the end of the forecast horizon. Risks are more balanced than in previous forecasts, with stronger-than-expected growth in advanced economies in the upside and increased policy uncertainty and a renewed slide in oil prices in the downside.

Latin America and the Caribbean. The region emerged from a two-year contraction in 2017, growing by an

estimated 0.9 percent, slightly up from the June forecast. Growth in the Caribbean sub-region was significantly lower than projected in mid-2017, however, reflecting the impact of two major hurricanes in September. The pickup in overall regional activity was supported by private consumption and, to a lesser degree, by net exports. Growth is expected to accelerate during the forecast period, reaching 2.7 percent in 2020, as conditions in commodity exporters improve further. However, the materialization of several downside risks could derail the recovery. They include economic spillovers from domestic policy uncertainty, additional disruptions from natural disasters, negative spillovers from international financial market disruptions or a rise in U.S. trade protectionism, and a further deterioration in fiscal conditions.

Middle East and North Africa. Growth in the region is estimated to have slowed markedly to 1.8 percent in 2017, 0.3 percentage point below previous projections. OPEC oil production cuts and heightened geopolitical tensions led to deterioration in growth of oil exporters, more than offsetting improving growth in oil importers. Regional growth is forecast to pick up over the medium term, as reforms across the region gain momentum and as fiscal adjustments ease amid a projected rise in oil prices. Improved competitiveness and external conditions are expected to further support growth in oil importers. Key risks to the regional outlook are tilted to the downside, including continued geopolitical conflicts and weakness in oil prices.

South Asia. Regional growth decelerated but remained strong in 2017, at an estimated 6.5 percent—below June forecasts, mainly due to temporary disruptions associated with the adjustment in India to the new Goods and Services Tax. Growth is expected to pick up to 6.9 percent in 2018 and stabilize around 7.2 percent, on average, in 2019-20, as consumption remains strong, exports recover, and investment revives with ongoing policy reforms and infrastructure improvements. Main downside risks to the outlook include fiscal slippages (e.g., Bangladesh, Maldives, Pakistan), a setback in

Note: This box was prepared by Carlos Arteta with contributions from Gerard Kambou, Lei Ye, Yoki Okawa, Temel Taskin, Ekaterine Vashakmadze, and Dana Vorisek. Research assistance was provided by Jinxin Wu.

BOX 1.3 Regional perspectives: Recent developments and outlook (concluded)

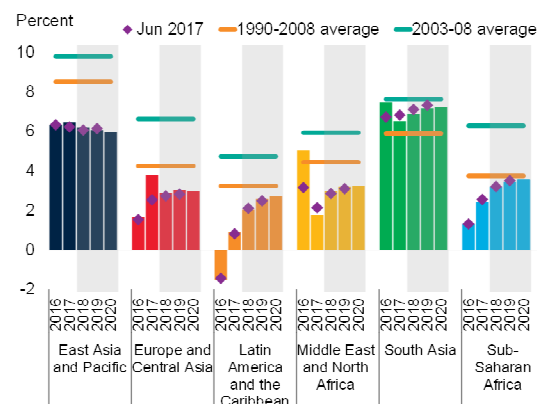
implementation of reforms to improve corporate and financial sector balance sheets (e.g., Bangladesh, India), an abrupt rise in global financial market volatility, and disruptions due to natural disasters. On the other hand, stronger-than-expected global growth in the near term could result in positive spillovers to the more open economies in the region.

Sub-Saharan Africa. Regional growth is estimated to have strengthened to 2.4 percent in 2017, 0.2 percentage point below the June forecast, partly reflecting a softer-than-expected recovery in Nigeria. An uptick in metals prices, along with a recovery in the agricultural sector, supported a modest rebound in metals exporters, while growth was stable in non-resource-intensive countries as infrastructure investment continued. Despite these improvements, regional growth remained negative in per capita terms in 2017. The region is projected to see a moderate pickup in activity, with growth rising to 3.2 percent in 2018 and an average of 3.6 percent in 2019-20, turning slightly positive in per capita terms. These forecasts assume that commodity prices will firm and reforms to address economic imbalances will be implemented. Downside risks include lower commodity prices, inadequate fiscal adjustment, and a faster tightening of global financing conditions.

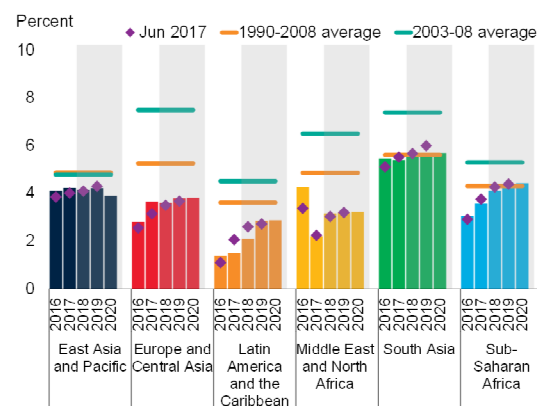
FIGURE 1.3.1 Regional growth

Growth in most EMDE regions with substantial numbers of commodity exporters is expected to accelerate as commodity prices rise and the impact of the earlier collapse in those prices dissipates. The robust pace of expansion in EMDE regions with a large number of commodity importers is expected to continue.

A. Regional growth, weighted average



B. Regional growth, unweighted average



Source: World Bank.

A. B. Bars denote latest estimates and forecasts; diamonds correspond to *Global Economic Prospects* June 2017 forecasts. Average for 1990-2008 is constructed depending on data availability. For Europe and Central Asia, the long-term average uses data for 1995-2008 to exclude the immediate aftermath of the collapse of the Soviet Union. Shaded areas indicate forecasts.

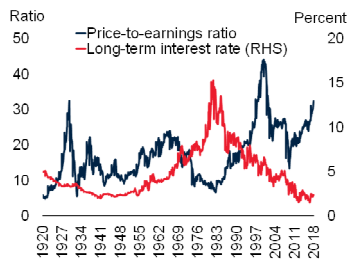
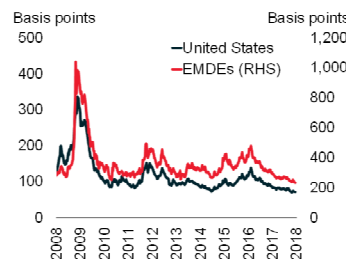
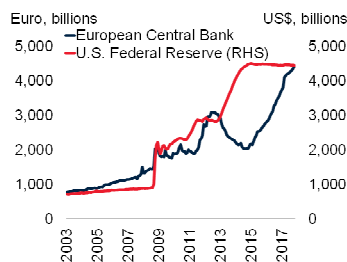
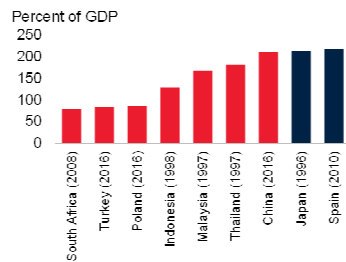
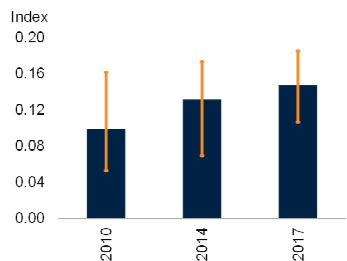
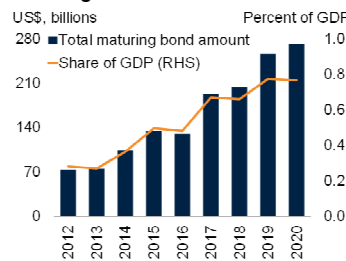
A. Since the largest economies account for almost 50 percent of regional GDP in some regions, the weighted average predominantly reflects the development in the largest economies in each region.

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

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FIGURE 1.17 Financial market risks

Asset valuations are elevated and compensation for credit risks is at low historical levels. A market reassessment of policies by major central banks or financial stress in systemically large EMDEs such as China, could cause a sudden increase in financial market volatility and borrowing costs for EMDEs. The impact of a sharp reversal in capital inflows could be amplified by elevated corporate sector vulnerabilities and growing debt redemptions in coming years.

A. U.S. equity prices and long-term interest rates**B. Risk-adjusted bond spreads****C. Asset holdings by the U.S. Federal Reserve and the European Central Bank****D. Corporate credit-to-GDP ratios during past credit boom episodes****E. EMDE corporate vulnerability****F. Value of international EMDE bonds maturing**

Sources: Bank for International Settlements, Bloomberg, Dealogic, Federal Reserve Bank of St. Louis, Feyen et al. (2017), Shiller (2015), World Bank.

A. Price-to-earnings ratio is the cyclically-adjusted ratio as described in Shiller (2015). Long-term interest rates are the nominal 10-year Treasury constant maturity rates. Last observation is December 2017. Data for December 2017 are estimates.

B. Based on option-adjusted spreads calculated from early redemptions of government and corporate bonds. The option-adjusted spreads are used as a measure of credit risk compensation. Last observation is December 18, 2017.

C. Last observation is November 2017.

D. Ranges shows the highest private non-financial debt to GDP ratios across advanced economies and EMDEs over the period 1996Q1-2016Q4. Red bars denote EMDEs and blue bars are advanced economies.

E. The Corporate Vulnerability Index (CVI) tracks financial conditions of the non-financial corporate sector in 69 EMDEs. The CVI uses firms' balance sheet information covering seven indicators: interest coverage ratio, leverage ratio, net debt-to-EBIT ratio, current-to-long term liabilities ratio, quick ratio, return to assets, and market-to-book ratio. The CVI ranges from 0 (i.e., firms in a particular country are not financially vulnerable in any of the 7 indicators) to 1 (i.e., all firms in a particular country are financially vulnerable in all 7 indicators). The CVI is calculated using data from 14,207 firms. For more details, see Feyen et al. (2017). The 2017 numbers are an average of the first two quarters.

F. Horizontal axis shows maturity date.

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Asset valuations have continued to rise amid persistently low interest rates and improved growth prospects (Lansing 2017). Equity prices are elevated and compensation for credit risks for lower-graded borrowers has reached historical lows in both advanced economies and EMDEs (Figure 1.17). While they could help support the recovery in the short term, stretched asset valuations and compressed risk premiums raise the risk of destabilizing corrections. The combination of deteriorated credit quality, corporate balance sheet leverage, and diminished compensation for credit risks make corporate bond markets susceptible to sudden reversals (IMF 2017a).

Both the U.S. Federal Reserve and the ECB have announced measures to unwind or cap the size of their balance sheets in the short term. During the post crisis period, the expansion of these central banks' balance sheets helped compress global long-term interest rates and volatility (Gagnon 2016; Christensen and Rudebusch 2016; Altavilla, Carboni, and Motto 2015). This spurred demand for riskier assets, supporting capital inflows in EMDEs (Arteta et al. 2015). While a gradual and well-anticipated reversal of balance sheet policies should be manageable, unexpected changes, or market reassessment of these policies and of underlying inflation dynamics, could lead to an abrupt rise in global bond yields and risk premiums. In addition, uncertainty surrounding the outlook for inflation and equilibrium interest rates has contributed to diverging views between market participants and monetary authorities on the path for policy rates, particularly in the United States. A sudden market reassessment of this path could generate financial stress.

China continues to face vulnerabilities associated with high corporate indebtedness, particularly in sectors with overcapacity and deteriorating profitability (IMF 2017b). Credit growth still outpaces nominal GDP growth, despite monetary and regulatory tightening. The total stock of non-financial sector debt is above levels observed at the peak of previous credit booms in other major EMDEs, although still below those of advanced economies. The materialization of financial stress could have significant adverse repercussions on activity, with negative effects on other EMDEs,

particularly commodity exporters (Huidrom, Kose, and Ohnsorge 2017). However, policy buffers remain substantial in China and are likely to provide space to support growth if risks materialize.

EMDEs would be particularly susceptible to the materialization of these and other financial risks, which can result in a sudden increase in external financing conditions, a reversal of capital flows and slowing activity. These reversals could exacerbate default risks, which have so far been mitigated by a long period of exceptionally low global interest rates (Reinhart, Reinhart, and Trebesch 2017). The adverse effects would be most acute for countries with large external financing needs, fragile corporate balance sheets, and significant fiscal sustainability gaps. During the post-crisis period, corporate vulnerability has increased substantially in a number of EMDEs, driven by a rise in leverage ratios and a deterioration in profitability and debt service capacity (Feyen et al. 2017). Credit-to-GDP ratios have continued to increase in recent years in commodity exporters, while they remain elevated, albeit stable or declining, in commodity importers (World Bank 2016b).

Although profitability of banks in EMDEs is generally solid, credit losses could continue to erode capital buffers (e.g., India, Russia, South Africa). A large volume of international debt redemptions scheduled in 2019-20 could also make some EMDEs vulnerable to a sudden increase in borrowing costs around that period. Rising public-sector risks are an important source of concern across EMDEs, affecting in particular a substantial number of low-income countries (World Bank 2017g).

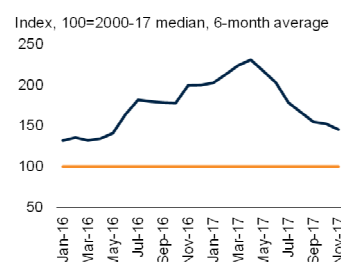
Downside risk: Policy uncertainty and geopolitical risks

Global policy uncertainty moderated in the course of 2017, reflecting diminished risks from key electoral outcomes in Europe and perceptions of a reduced likelihood of major policy shifts in the United States. However, uncertainty remains elevated and could intensify again, potentially weighing on confidence and growth (Figure 1.18). Negotiation around the exit of the United

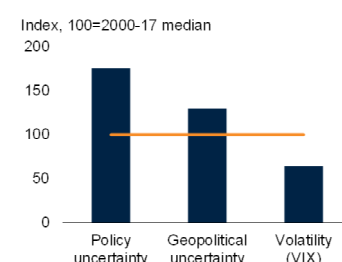
FIGURE 1.18 Policy uncertainty and geopolitical risks

Global policy uncertainty moderated in the course of 2017, but remains elevated. Geopolitical risks spiked during 2017, mainly reflecting tensions on the Korean peninsula, and is also above historical norms. Despite these concerns, financial market volatility reached new lows.

A. Global economic policy uncertainty



B. Global economic policy uncertainty, geopolitical risks, and financial market volatility



Sources: Baker, Bloom, and Davis (2015); Bloomberg; Caldara and Iacoviello (2017); World Bank.

A. B. Policy uncertainty is the Economic Policy Uncertainty index computed by Baker, Bloom, and Davis (2015) and is based on the frequency of articles in domestic newspapers mentioning economic policy uncertainty. The index is normalized to equal 100 at its 2000-17 median. Orange horizontal line denotes 2000-17 median.

A. Last observation is November 2017.

B. Geopolitical uncertainty is the Geopolitical Risk Index computed by Caldara and Iacoviello (2017) and is based on the frequency of words related to geopolitical tensions in international newspapers. Volatility is measured by the VIX. All indexes are normalized to equal 100 at their 2000-17 medians. Blue bars denote 2017 averages. The last observation is December 2017 for geopolitical uncertainty and volatility (VIX), and November 2017 for policy uncertainty.

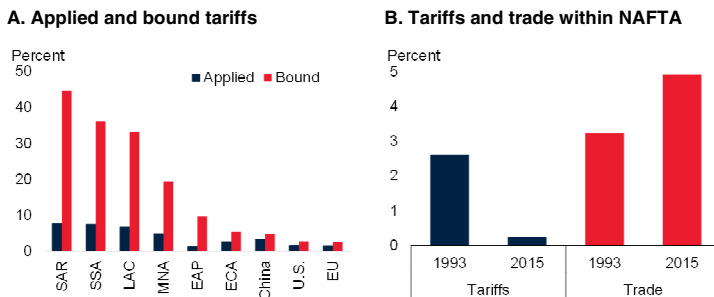
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Kingdom from the European Union, calls for greater regional autonomy, or governance challenges for the Euro Area could impact investment decisions in Europe and beyond. In the United States, there remains substantial uncertainty about possible changes to trade, immigration, and other policies, and there are concerns that fiscal brinkmanship could contribute to market turmoil, as it did in 2011 (U.S. Treasury 2013).

Similarly, geopolitical risks spiked during 2017 and remain above historical averages, mainly reflecting tensions on the Korean peninsula, border disputes and territorial claims in Asia, and strains in the Middle East. A renewed and sustained rise in geopolitical tensions, especially those involving systemically large economies, could dampen confidence and lead to bouts of financial market volatility, both in the affected countries and their major trading partners. If these tensions escalate into high-intensity interstate conflict, the result could be a significant loss of lives, assets, and productive capacity, particularly in more vulnerable countries. In the Middle East, they could also result in rising migrant flows

FIGURE 1.19 Trade protectionism

An increase in tariffs up to WTO bound rates could significantly raise costs and reduce trade volumes, particularly for some EMDE regions. The reduction of tariff and non-tariff barriers between NAFTA countries has been associated with rising trade, which could reverse if the agreement is undone.



Sources: U.S. Bureau of Economic Analysis, World Bank.

A. Bound tariffs are maximum tariffs under WTO rules. Data as of 2015. EAP = East Asia and Pacific excluding China, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, and SSA = Sub-Saharan Africa.

B. Trade between NAFTA countries in percent of their combined GDP.

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across the region (World Bank 2017i). This could be further amplified by regional instability, displacement, and violence (Rodrik 1999, Polachek and Sevastianova 2012, Institute for Economics and Peace 2017).

Downside risk: Increased restrictions to trade

Despite the recent stabilization in the number of newly introduced barriers to trade, the threat of protectionism is still a major concern. This was highlighted by the failure of G20 economies to renew their long-standing commitment to free trade and pledge to resist all forms of protectionism.

Even isolated attempts to resort to beggar-thy-neighbor policy measures by large economies could be met with retaliatory responses and translate into wide-ranging negative effects for participating countries as well as the rest of the world (Bouët and Laborde 2017). While a withdrawal of commitments from unilateral preferential schemes and trade agreements could have a significant negative impact on trade, a trade war that would result in a worldwide increase in tariffs up to legally allowed WTO bound rates would have much larger effects (Figure 1.19). Due to their reliance on trade flows, an increase in barriers to trade would likely impact low-income

countries (LICs) substantially. Measures that negatively affect the economic interest of LICs subsided in recent years, but that trend could reverse, as was observed in the immediate post-crisis period.

Apart from potential upticks in protectionist measures, the renegotiation of several free trade agreements—notably, NAFTA—casts uncertainty over trade and investment flows between major trading partners. NAFTA was accompanied by a significant deepening of trade relationships between the United States, Canada, and Mexico. Given the depth of the agreement, the undoing of NAFTA could result in an appreciable decline in trade among member countries. Due to the interconnectedness of NAFTA countries with the global economy, major changes in their trade policies could affect the rest of world (Bergsten and de Bolle 2017).

Downside risk: Sharper-than-expected slowdown in potential growth

There is considerable uncertainty regarding underlying rates of potential growth. The risk remains for both advanced economies and EMDEs of a more pronounced weakness in productivity growth and investment. This would amplify a broad-based further deterioration of potential growth expected in coming years amid demographic pressures (Figure 1.20). In both advanced economies and EMDEs, demographic trends will become an increasing headwind to potential growth. More than 84 percent of global GDP is currently produced by countries whose working age population shares are expected to shrink by 2030. Population aging is expected to dampen global potential growth by around 0.2 percentage point over 2018-27 on average compared to the average of 2013-17, as it depresses labor supply and total factor productivity growth.

A sharper-than-expected slowdown in potential growth could reduce the resilience of the global economy to adverse shocks and, in the longer term, damage prospects for gains in living standards and poverty reduction. Slowing long-term growth in large economies—particularly in advanced economies, which are the destination for

about 60 percent of EMDE exports, and China, which has substantial trade and commodity linkages with other EMDEs—would have important negative spillovers (World Bank 2016b).

In EMDEs, past investment busts have generally been associated with subsequent slowdowns in potential growth (Chapter 3). The post-crisis slowdown in investment growth has had lingering effects on EMDEs, and renewed weakness in investment would further dampen potential growth. Adjustments in commodity-exporting EMDEs caused by a slump in commodity prices could leave a particularly long legacy for this group of countries. More generally, there is a risk that the anticipation of lower future growth may have a larger-than-expected effect on current investment, leading to a negative feedback loop that further amplifies the slowdown.

Region-specific downside risks

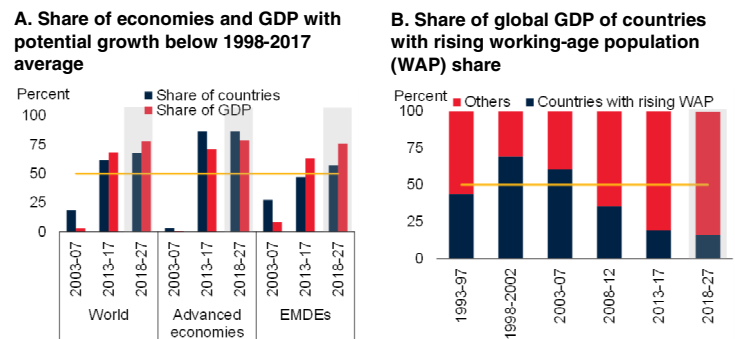
In addition to global risks, there are various region-specific downside risks (Box 1.3; Chapter 2). For instance, heightened domestic policy uncertainty within EMDE regions may compound the effects of uncertainty emanating from major economies, as discussed above, and adversely affect confidence and investment. EMDE regions where policy uncertainty remains elevated in some large economies include Europe and Central Asia, Latin America and the Caribbean, and Sub-Saharan Africa.

A worsening of security conditions and conflict, and the associated displacement of people, could weigh substantially on growth in some economies in Europe and Central Asia, the Middle East and North Africa, South Asia, and Sub-Saharan Africa. A greater incidence of natural disasters and extreme weather events—such as hurricanes, earthquakes, droughts, or floods—could exert further economic disruption in regions such as Latin America and the Caribbean (particularly in the Caribbean sub-region), South Asia, and Sub-Saharan Africa.

Finally, a renewed weakness in the price of oil and other commodities could derail the recovery in

FIGURE 1.20 Slowing potential growth

A large number of advanced economies and EMDEs have experienced a deterioration in potential growth in recent years. More than 84 percent of global GDP is currently produced by countries whose working-age population shares are expected to shrink in the coming decade.



Source: World Bank.

A, B. Shaded areas indicate forecasts.

A. Number of economies and their share of global GDP among 80 advanced economies and EMDEs with potential growth in each period below its long-term average (1998-2017).

B. Period averages are simple averages of the shares. Sample includes 37 advanced economies and 148 EMDEs.

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regions with large numbers of commodity exporters—Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa. In particular, oil exporters in these regions remain vulnerable to a renewed slide in oil prices (Special Focus 1).

Policy challenges

Challenges in major economies

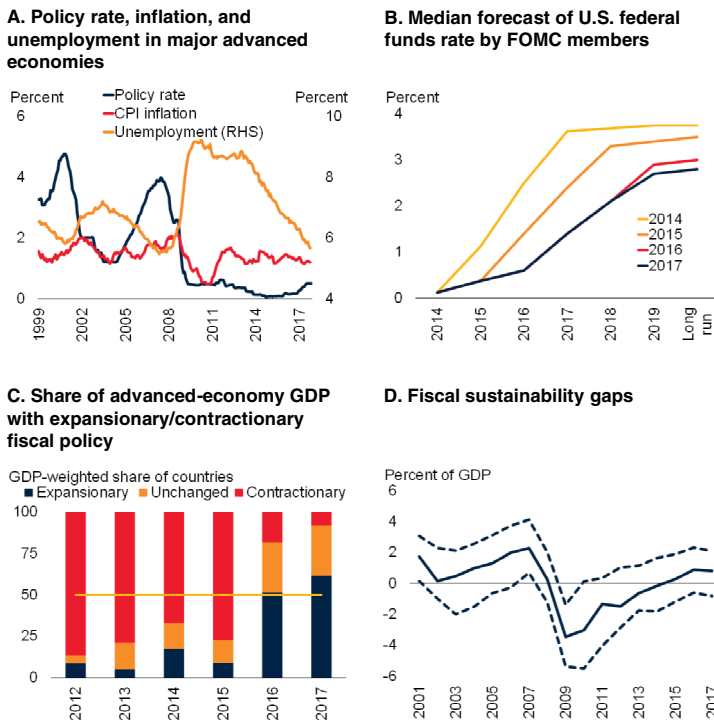
In advanced economies, monetary policy is gradually normalizing but still faces important challenges, including stubbornly low inflation. Fiscal policy has become generally more supportive to growth, but fiscal space remains limited in many advanced economies. Amid rising demographic pressures, productivity-enhancing reforms are urgently needed. In China, further reforms could help reallocate factors of production toward more productive sectors.

Monetary and financial policies in advanced economies

Monetary policy normalization is underway in the United States and, to a lesser extent, in the Euro Area, as the recovery continues. However, despite

FIGURE 1.21 Monetary and fiscal policies in advanced economies

Challenges for monetary policy normalization include continued low inflation despite declining unemployment. The U.S. Federal Reserve has repeatedly revised down its medium-term policy rate expectations. Expansionary fiscal policies were undertaken in a growing number of countries in 2016-17, while fiscal sustainability gaps have narrowed.



Sources: Federal Reserve Board, Haver Analytics, International Monetary Fund, World Bank.

A. Weighted averages for Euro Area, Japan, and the United States. Last observation is November 2017 for policy rates and October 2017 for CPI inflation and unemployment.

B. Forecasts for each year correspond to the December FOMC meeting.

C. Expansionary fiscal policy defined as a decline in the cyclically-adjusted primary balance of more than 0.2 percentage point of potential GDP. Contractionary fiscal policy is defined as an increase in the cyclically-adjusted primary balance of more than 0.2 percentage point of potential GDP.

D. Sustainability gap is measured as the difference between the primary balance and the debt-stabilizing primary balance, assuming historical median (1990–2016) interest rates and growth rates. A negative gap indicates that government debt is on a rising trajectory; a positive gap indicates government debt is on a falling trajectory. Figure shows median in advanced economies. Dashed blue lines denote the interquartile range, while solid blue line is the median. Sample includes 34 advanced economies.

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strengthening activity, inflation remains below central banks' objectives (Blanchard, Cerutti, and Summers 2015; Ciccarelli and Osbat 2017; Figure 1.21). Both transitory and structural factors appear to be at play, making central banks' tasks particularly difficult as uncertainty about the trajectory of inflation and real equilibrium interest rates remains elevated (Carney 2017; Bobeica et al. 2017; Miles et al. 2017). The U.S. Federal Reserve has continued to revise down its medium- to long-run policy interest rate expectations, while the ECB continues to highlight the need for policy

accommodation despite diminishing economic slack.

The extraordinary monetary stimulus of recent years has raised concern that it may have encouraged excessive financial risk-taking. For this reason, it will be important that central banks carefully manage the unwinding of policy accommodation, including the normalization of balance sheets. Financial market reforms and measures to improve the loss-absorbing capacity of major financial institutions have improved the resilience of the financial system (Yellen 2017; Firestone, Lorenc, and Ranish 2017). However, there still are risks to financial stability, including possible asset price overvaluation, rising leverage, and a concentration of risks in non-bank financial institutions. Financial regulation and supervision should continue to be reinforced, including further improvements in bank resolution frameworks and improved supervision of non-banks. Macroprudential policies could play a more active role to curb leverage cycles and mitigate risks associated with low interest rates (European Systemic Risk Board 2016; Rubio and Yao 2017; Claessens 2015).

Fiscal policy in advanced economies

In recent years, the role of counter-cyclical fiscal policy has regained prominence in the policy debate, especially when monetary policy is constrained (Auerbach and Gorodnichenko 2017; Jordà and Taylor 2016; Christiano, Eichenbaum, and Rebelo 2011). Marking a significant shift from previous years, expansionary fiscal policies were undertaken in countries representing more than 50 percent of advanced-economy GDP in 2016, and more than 25 percent in 2017. The share of countries implementing contractionary fiscal policies dropped drastically, from more than 70 percent in 2015 to 12 percent in 2017. However, fiscal space is limited in some economies, notwithstanding some improvements (Kose et al. 2017b). Since the need for fiscal stimulus has become less urgent as economic slack diminishes in most advanced economies, growth-enhancing tax and expenditure reforms should play a more prominent role in policy discussions (Barbiero and Cournède 2013; IMF 2017c).

In the Euro Area, closer fiscal coordination could further enhance resilience to domestic and external shocks (Dabrowski 2015). Stricter compliance with common fiscal and macroeconomic surveillance rules could help make a central fiscal authority more acceptable to all (Juncker et al. 2015). In the United States, public infrastructure programs and comprehensive tax reforms could deliver growth dividends over time.

Structural policies in advanced economies

Persistently weak productivity gains in coming years could lead to a further slowdown in potential growth amid rising demographic pressures. This would further constrain wage growth, and make it more difficult to reduce inequality and sustain social safety nets.

The slowdown in productivity growth across advanced economies pre-dated the global financial crisis. It was most visible in the United States, where the benefits of the information and technology revolution had been the largest from the mid-1990s to mid-2000s (Foda 2016). However, the deceleration in productivity has also been noticeable in other major economies, including the Euro Area after the global financial crisis.

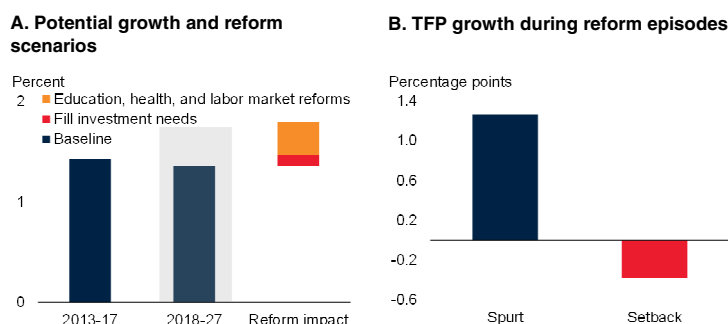
To offset the impact of population aging on potential growth in coming years, reforms will need to be geared toward boosting productivity growth and labor participation. Policies that raise the quality of education and training; further improve female, youth, and senior labor market attachment; and match changing labor market needs would be particularly beneficial (Figure 1.22). In addition, investment needs could be filled through high-quality public infrastructure, better regulation, and well-designed R&D incentives. Encouragingly, reform spurts can reinforce growth prospects. In some advanced economies, most notably in the Euro Area, facilitating debt restructuring and strengthening bank balance sheets could help facilitate private investment and encourage the relocation of capital toward higher-productivity firms.

Policy challenges in China

China has initiated a wide range of reforms in recent years. Efforts have focused on excess

FIGURE 1.22 Structural policy in advanced economies

Structural reforms could offset the impact of demographic aging on potential output growth. Reform spurts tend to be followed by improvements in productivity growth.



Source: World Bank estimates.

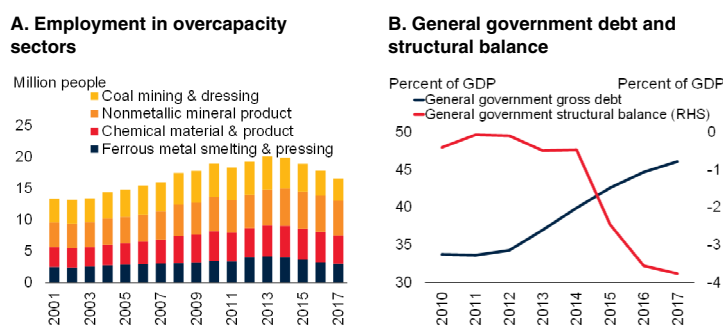
A. GDP-weighted averages of production function-based potential growth under different policy scenarios as described in Chapter 3. Shaded area indicates forecast.

B. Simple averages of TFP (total factor productivity) growth. TFP growth refers to potential TFP growth, as estimated in Chapter 3. Data use Worldwide Governance Indicators (WGI): Based on an event study of 26 statistically significant events for 38 advanced economies during 1996-2015. A detailed methodology is available in Chapter 3.

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FIGURE 1.23 Policy challenges in China

In China, efforts have focused on excess capacity reduction, as well as fiscal and financial reforms. Fiscal policy remained expansionary in 2017, supporting growth but contributing to rising public debt.



Sources: CEIC, China National Bureau of Statistics, International Monetary Fund.

A. Data for 2017 are as of October 2017.

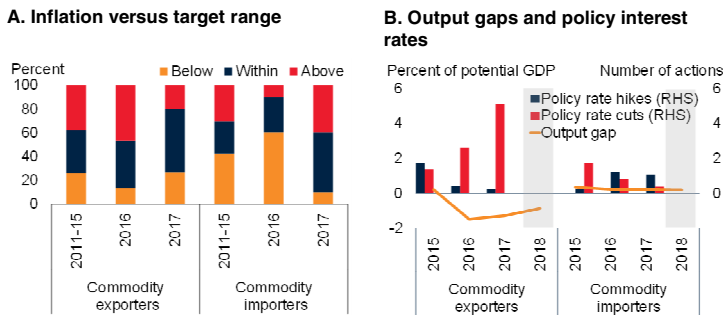
B. Gross debt is as a percent of GDP; structural balance is the cyclically-adjusted fiscal balance as a percent of potential GDP. General government gross debt ratios in 2016 and 2017 are estimates.

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capacity reduction (Figure 1.23), as well as fiscal and financial reforms to contain financial sector vulnerabilities. Fiscal policy remained expansionary in 2017, supporting growth but contributing to rising public debt. Tighter enforcement of capital flow management measures has helped ease capital outflow pressures. Regulatory efforts have gained momentum since the October Party Congress, as new rules were announced to lift caps on foreign ownership of financial institutions and

FIGURE 1.24 EMDE monetary policy

Inflation in EMDEs generally eased in 2017, most notably in some large commodity exporters, and is within target bands in most EMDEs with inflation targets. Policy interest rate actions in commodity exporters and importers were reflective of cyclical positions. Continued monetary policy accommodation among commodity exporters would be consistent with still negative output gaps in 2018.



Sources: Haver Analytics, National Bureau of Statistics of the Republic of Moldova, World Bank. A. Sample includes 15 commodity exporters and 10 commodity importers. Bars for 2017 consider actual versus target range (year-on-year) inflation in November. Bars for other years consider actual versus target inflation in December of the respective years. Bars for 2011-15 are simple averages. B. Sample includes 11 commodity exporters and 11 commodity importers. Commodity importers aggregate excludes China. Output gaps and policy interest rates are GDP-weighted averages. Policy rate data are year-to-date as of December 19, 2017. Shaded areas indicate forecasts.

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tighten oversight of commercial banks. Deleveraging measures need to be intensified to address vulnerabilities and improve fiscal sustainability of subnational governments. Further financial and corporate sector reforms could also help reallocate capital and labor toward more productive firms and sectors. This could increase the contribution of productivity to potential growth by about 1 percentage point over the long term (Chapter 2; IMF 2017b). Efforts to build human capital through better education and training, and reforms that improve the institutions and business environment, could also provide a further boost to productivity and potential output (World Bank 2017j).

Challenges in emerging market and developing economies

Inflation in EMDEs generally eased through most of 2017, most notably in commodity exporters, allowing the latter to pursue a more accommodative monetary policy stance. Rising debt and rapid credit growth in some EMDEs highlight the importance of strengthening financial stability. Fiscal space remains constrained across EMDEs, particularly in commodity exporters, which limits their ability to

undertake countercyclical policy, even in the face of sizable negative output gaps. In the longer term, structural policies—such as improvements in education and health systems, as well as labor market, governance, and business climate reforms—may help stem the expected further decline in potential growth. Reforms that boost education may also reduce inequality. In addition to these challenges, oil-exporting EMDEs need to pursue policies that bolster diversification and resilience to oil price fluctuations.

Monetary and financial policies

Headline inflation in EMDEs generally eased through the second half 2017, most notably in some large commodity exporters (e.g., Brazil, Russia). Inflation is now within target bands in the majority of EMDEs that have adopted targets, including in some large commodity importers where it was previously below target (Figure 1.24). Policy interest rate adjustments during 2017—mostly hikes by commodity importers, and nearly all cuts by commodity exporters—were reflective of their cyclical positions. Continued monetary policy accommodation among commodity exporters would be consistent with still-negative output gaps expected for 2018.

Benign global financing conditions and low financial market volatility may have lessened pressures to reform and modernize financial sector regulations in EMDEs. However, with debt building and credit growth accelerating in some EMDEs, strengthened macroprudential policy frameworks could play an important role in assuring financial stability, especially given the potential unexpected effects from the unwinding of monetary accommodation in major advanced economies, as well as higher-than-expected volatility in capital flows.

Macroprudential policies, such as caps on bank loan-to-value and debt-to-income ratios, have been found to be particularly effective when credit growth is high (Cerutti, Claessens, and Laeven 2015), while both prudential and targeted capital inflow management tools can reduce the riskiness of external liabilities (Cardarelli, Elekdag, and Kose 2010). The rapid increase of portfolio and other investment flows in 2017, including cross-

border bank loans, may warrant particular attention, given that their volatility has historically been much higher than that of foreign direct investment flows (Pagliari and Hannan 2017). Macprudential tools may be particularly useful for EMDEs with pegged exchange rates, where the transmission of global financial shocks to domestic banking sectors and through capital flows appears to be greater (Obstfeld, Ostry, and Qureshi 2017).

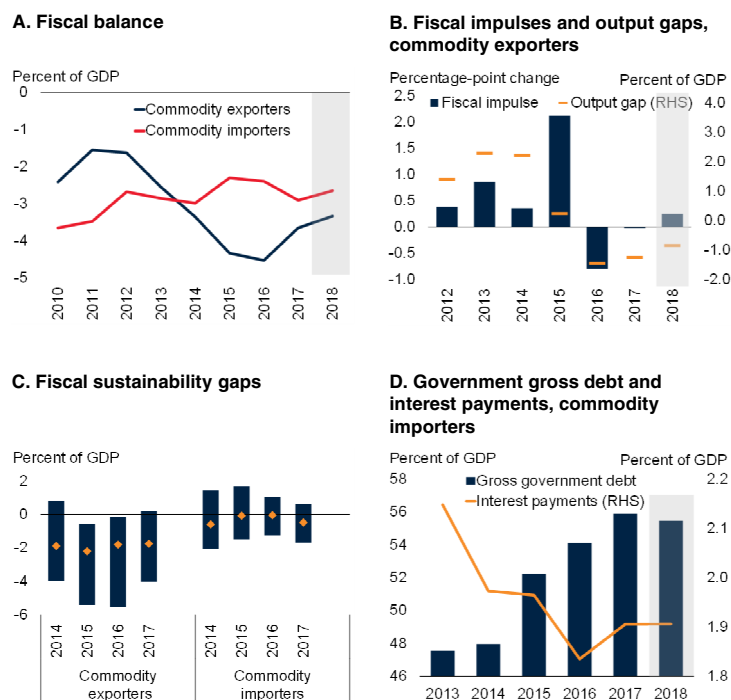
Fiscal policy

Among commodity exporters, government revenues are recovering from the earlier terms-of-trade shock and fiscal deficits are narrowing (Figure 1.25). Fiscal policy in commodity exporters is becoming less procyclical, with negative output gaps no longer accompanied by fiscal consolidation. Steps are being taken, or are contemplated, to place their fiscal position on a more sustainable footing. These include reductions in energy subsidies (e.g., Argentina, Indonesia, Malaysia, Mexico, Saudi Arabia, the United Arab Emirates), cuts in expenditures (e.g., the Islamic Republic of Iran, Malaysia, Russia, Saudi Arabia), and the introduction of value-added taxes (e.g., GCC countries; Boersma and Griffiths 2016; World Bank 2016a). Despite these efforts, fiscal sustainability gaps are still large, which is contributing to growing debt-to-GDP ratios. While a more accommodative policy stance would help close negative output gaps in commodity exporters, the necessary fiscal space is limited and debt dynamics continue to be a critical challenge, including for low-income countries (World Bank 2017g).

In commodity importers, fiscal sustainability gaps are much smaller. However, rapid expenditure growth in 2016-17 resulted in protracted deficits and continued increases in public debt, which is likely to have exceeded 55 percent of GDP in 2017. Although interest payments have been declining despite growing debt, they could rise markedly if global financing conditions were to tighten abruptly. In both commodity exporters and importers, a substantial share of external debt (private and public) is denominated in foreign currency, pointing to vulnerabilities to global

FIGURE 1.25 EMDE fiscal policy

As revenue growth catches up with expenditure growth across EMDEs, fiscal deficits are anticipated to narrow. Fiscal policy in commodity exporters is becoming less procyclical. However, fiscal sustainability gaps remain large in these economies. Although such gaps are much smaller in commodity importers, government debt as a share of GDP has been rising for this group. As a result, both commodity exporters and importers face debt-related vulnerabilities.



Sources: International Monetary Fund, Kose et al. (2017), World Bank.

A. Figure shows median in each country group. Shaded area indicates forecasts. Sample includes 61 commodity importers and 93 commodity exporters.

B. Fiscal impulse is defined as the change in the structural fiscal deficit from the previous year. A decline in structural deficit (a negative fiscal impulse) is a fiscal consolidation—countercyclical if implemented while output gaps are positive—while an increase in the structural deficit (positive fiscal impulse) is a fiscal stimulus—countercyclical if implemented while output gaps are negative. Sample includes 11 commodity exporters.

C. Sustainability gap is measured as the difference between the primary balance and the debt-stabilizing primary balance, assuming historical median (1990–2016) interest rates and growth rates. A negative gap indicates that government debt is on a rising trajectory; a positive gap indicates government debt is on a falling trajectory. Blue bars denote the interquartile range, while orange diamonds denote the median for each country group. Sample includes 44 commodity exporters and 28 commodity importers.

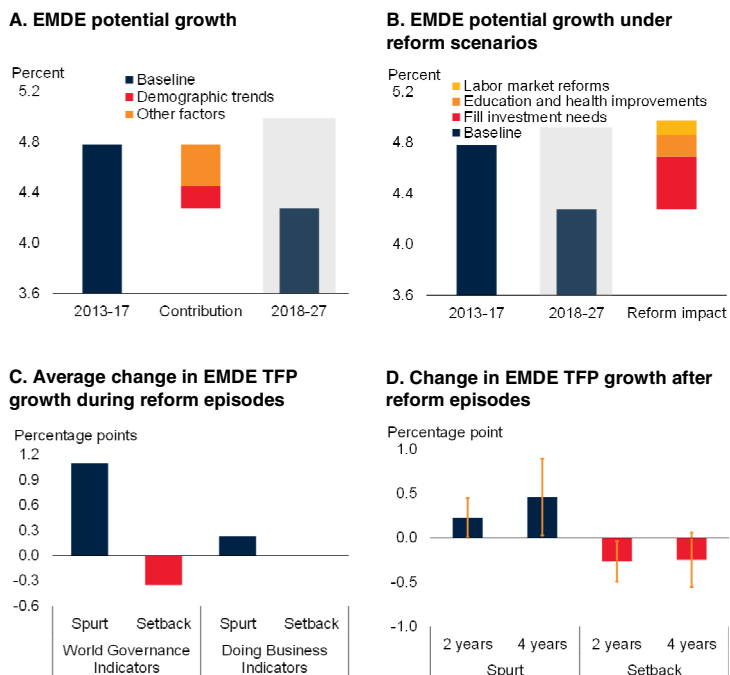
D. Interest payments reflect general government expenses paid on interest. Sample includes 51 commodity-importing EMDEs.

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capital market turbulence and currency depreciation (Burger, Warnock, and Warnock 2017). Indeed, the rapid increase in private-sector debt across EMDEs suggests the possibility of growing contingent liabilities for the public sector, given the potential call for bailouts if balance sheet stresses become systemic (World Bank 2017g). If realized, contingent liabilities—particularly those stemming from the financial sector—can lead to substantial fiscal costs (Bova et al. 2016).

FIGURE 1.26 EMDE structural policy

Education and health improvements and labor market reforms could reverse the expected decline in EMDE potential growth over 2018-27 compared with 2013-17. Around reform episodes, EMDE total factor productivity growth tends to improve.



Source: World Bank estimates.

A. B. Shaded areas indicate forecasts.

A. GDP-weighted averages of production function-based potential growth as described in Chapter 3.

B. GDP-weighted averages of production function-based potential growth under different policy scenarios as described in Chapter 3.

C. Simple averages of TFP (total factor productivity) growth. TFP growth refers to potential TFP growth, as estimated in Chapter 3. Worldwide Governance Indicators (WGI): Based on an event study of 110 statistically significant events for 77 EMDEs during 1996-2015. Doing Business Indicators (DBI): Based on an event study of 29 statistically significant events for 77 EMDEs during 2002-17. A detailed methodology is available in Chapter 3.

D. TFP growth refers to potential TFP growth, as estimated in Chapter 3. Regression coefficients on dummies for structural reform spurts and setbacks from local projections model for lags of four years, for a sample of 77 EMDEs during 1996-2015. Data use Worldwide Governance Indicators. Vertical bars show 90 percent confidence interval. A detailed methodology is available in Chapter 3.

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There is still considerable scope for growth-enhancing fiscal reforms among EMDEs. Most notably, tax reforms can be implemented to mobilize revenues and create the fiscal space to fund needed development priorities, as carried out in a number of countries in recent years (e.g., Colombia, India, Kazakhstan, Malaysia, the Philippines, Russia, Vietnam). Such reforms may include broadening the tax base, eliminating loopholes and unnecessary preferences (e.g., avoiding base erosion and profit shifting), and strengthening tax administration and collection to reduce avoidance (OECD 2017c). Moreover, expenditure reforms could enhance the quality of public spending, by having mechanisms in place

to prioritize and evaluate the efficacy of public projects, as well as strengthening institutions to foster growth given fiscal constraints.

In addition, introducing fiscal rules, stabilization funds, and medium-term expenditure frameworks can foster institutional credibility and help restore fiscal space (Huidrom, Kose, and Ohnsorge 2016). These types of reforms can also help discourage procyclical, asymmetric fiscal responses to cyclical shocks—that is, increasing current expenditures during booms but reducing investment expenditures during busts—that can threaten fiscal sustainability and undermine growth (Ardanaz and Izquierdo 2017). Finally, the unusually benign state of global financing conditions favor debt management operations to reduce the vulnerability of the public sector to shocks, including by lengthening the maturity of public debt and shifting debt into local currency.

Structural policies

Long-term trends point to a decline in EMDE potential growth to 4.3 percent on average over 2018-27, 0.5 percentage point below the 2013-17 average (Figure 1.26). Per capita potential growth is expected to weaken accordingly. A boost to public and private investment, if implemented efficiently, can help stem this decline; however, it will also need to be supplemented by measures to raise labor productivity and labor force participation (Chapter 3).

Reforms to improve education and health outcomes, as well as labor market policies to expand female labor force participation, could lift potential growth by raising labor supply and fostering total factor productivity growth. While education and health outcomes have strengthened in EMDEs in recent years, there is still room for substantial improvement. School enrolment rates and secondary school completion rates are near advanced-economy levels in many EMDEs; however, tertiary school completion rates are, at 13 percent on average in 2013-17, about one-half of the advanced-economy average. At 74 years on average in 2013-17, life expectancy in EMDEs is well below that in advanced economies (82 years). Similarly, global female labor force participation,

at 58 percent on average in 2013-17, remains three-quarters below that of men (74 percent), and even less in EMDEs.

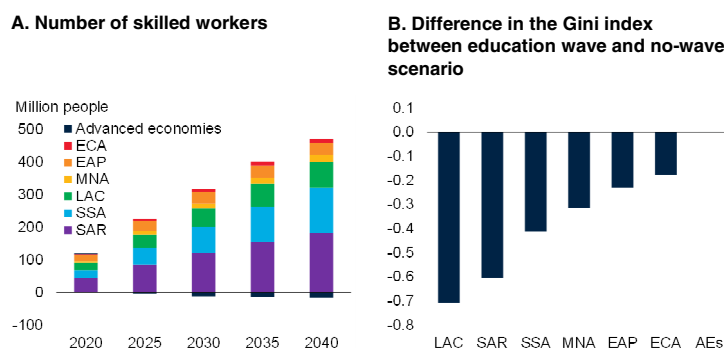
Improvements in education and health could also generate gains in EMDE potential growth. Stylized scenarios suggest that, of the expected 0.5-percentage-point slowdown in EMDE potential growth in 2018-27, about 0.2 percentage point could be reversed if education and health outcomes were improved substantially, and 0.1 percentage point if female labor force participation were increased through labor market policies. In regions with large room for improvement and a solid track record of implementing reforms, these growth dividends could be larger.

Furthermore, reforms to improve the business environment and promote good governance—e.g., to increase government effectiveness, reduce corruption, and enhance the rule of law and regulatory quality—could help reverse the slowdown in potential growth. Past experience illustrates that major governance and business reforms were associated with higher output, TFP, and investment growth (Chapter 3; Hodge et al. 2011; Acemoglu, Johnson, and Robinson 2001; Divanbeigi and Ramalho 2015). Reform spurts were, on average, associated with higher EMDE TFP and investment growth during the two to four years following such events.¹ Conversely, a typical reform setback was accompanied by lower TFP and investment growth. Improvements in political institutions can also help overcome a status quo bias that block reform progress (Stuti 2017; World Bank 2017j). Naturally, reform priorities differ across countries. Depending on the country context, pre-existing conditions and interactions between reforms would warrant careful sequencing to ensure synergies and avoid possibly politically destabilizing reforms.

In addition to these structural challenges, oil-exporting EMDEs—which suffered large losses in actual and potential output due to the 2014-16 oil price plunge—need to pursue policies that bolster

FIGURE 1.27 Education and inequality

New entrants of educated workers to the global labor market will come entirely from EMDEs, contributing to a decline of global inequality by 2030, largely reflecting income convergence among countries. Although within-country inequality will rise in importance at the global level, the education wave—the increase in skilled EMDE workers—will nudge down within-country inequality in EMDEs, albeit with regional differences.



Source: Ahmed et al. (2017).

A. B. 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, and SSA = Sub-Saharan Africa.

A. Skilled is defined as workers with more than nine years of education. Population projections are based on UN (2015). Education information is from harmonized household and labor surveys for 117 countries, keeping present rates of education attainment in the calculation of the supply of skilled workers.

B. The population weighted average difference in the Gini index is negative if there is an improvement in the within-country inequality between the education wave relative to the no-wave scenario. AEs = advanced economies.

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diversification and resilience to oil price fluctuations, given that prices are unlikely to recover substantially in coming years (Special Focus 1). Some have started undertaking reforms to limit their reliance on the energy sector, but progress has been mixed so far. Both vertical diversification in oil, gas, and petrochemical sectors, as well as horizontal diversification beyond these sectors, should be pursued, with an emphasis on technological upgrades and competitiveness (Cherif, Hasanov, and Zhu 2016; Gill et al. 2014; World Bank 2016c).

Education and inequality

Structural reforms that improve education will have substantial long-term impacts not only on potential growth, and thus on poverty reduction, but also on shared prosperity. In the next two decades, new cohorts of workers from EMDEs will enter the global workforce with better skills from more education (Figure 1.27). As the supply of skilled workers rises in EMDEs, an expected shift in the skill composition of the global labor

¹ TFP growth refers to potential TFP growth to capture the long-term impact of reforms.

force will have important consequences on global and within-country income inequality.

The number of skilled workers in global labor markets is likely to rise from 1.66 billion in 2011 to 2.22 billion by the middle of this century—an increase of about 33 percent (Ahmed et al. 2017). Importantly, EMDEs will be wholly responsible for this increase, since the absolute number of skilled workers in advanced economies will be declining due to population aging. This means that the ratio of skilled workers from advanced economies to those from EMDEs will fall from one-to-two to one-to-three by 2030.

Since better skills lead to higher income, this trend is expected to help lower global income inequality, largely reflecting income convergence among countries amid a higher supply of skilled workers in EMDEs—particularly in populous countries such as China and India. Consequently, as the average income across countries becomes more equal, the relative contribution of within-country inequality to global inequality is expected to raise, continuing a trend observed in the last two decades (Special Focus 2). Critically, this assumes

that job creation keeps pace to absorb the rising supply of skilled workers across countries.

Although within-country inequality is expected to rise in importance at the global level, the “education wave”—i.e., the expected increase in the supply of skilled workers—will likely mitigate increases in inequality in EMDEs, driven by reductions in the wage gap between skilled and unskilled workers. The benefits of the education wave are likely to be highest in Latin America and the Caribbean, South Asia, and Sub-Saharan Africa. Yet, it is critical that the expected improvements in years of schooling in the labor force of EMDEs be accompanied with better learning outcomes, as new technologies may disproportionately benefit more skilled workers. More generally, improving learning outcomes in EMDEs to increase productivity, employment, earnings, and economic growth will require a systemic change in the educational approach and the removal of political and technical barriers that prevent a focus on learning (World Bank 2018). With better skills from education, the promises of reduced global inequality can also be realized (Special Focus 2).

TABLE 1.2 List of emerging market and developing economies¹

Commodity exporters ²		Commodity importers ³	
Albania*	Madagascar	Afghanistan	Philippines
Algeria*	Malawi	Antigua and Barbuda	Poland
Angola*	Malaysia*	Bahamas, The	Romania
Argentina	Mali	Bangladesh	Samoa
Armenia	Mauritania	Barbados	Serbia
Azerbaijan*	Mongolia	Belarus	Seychelles
Bahrain*	Morocco	Bhutan	Solomon Islands
Belize	Mozambique	Bosnia and Herzegovina	Sri Lanka
Benin	Myanmar*	Bulgaria	St. Kitts and Nevis
Bolivia*	Namibia	Cabo Verde	St. Lucia
Botswana	Nicaragua	Cambodia	St. Vincent and the Grenadines
Brazil	Niger	China	Swaziland
Burkina Faso	Nigeria*	Comoros	Thailand
Burundi	Oman*	Croatia	Tunisia
Cameroon*	Papua New Guinea	Djibouti	Turkey
Chad*	Paraguay	Dominica	Tuvalu
Chile	Peru	Dominican Republic	Vanuatu
Colombia*	Qatar*	Egypt, Arab Rep.	Vietnam
Congo, Dem. Rep.	Russia*	El Salvador	
Congo, Rep.*	Rwanda	Eritrea	
Costa Rica	Saudi Arabia*	Fiji	
Côte d'Ivoire	Senegal	Georgia	
Ecuador*	Sierra Leone	Grenada	
Equatorial Guinea*	South Africa	Haiti	
Ethiopia	Sudan*	Hungary	
Gabon*	Suriname	India	
Gambia, The	Tajikistan	Jamaica	
Ghana*	Tanzania	Jordan	
Guatemala	Timor-Leste*	Kiribati	
Guinea	Togo	Lebanon	
Guinea-Bissau	Tonga	Lesotho	
Guyana	Trinidad and Tobago*	Macedonia, FYR	
Honduras	Turkmenistan*	Maldives	
Indonesia*	Uganda	Marshall Islands	
Iran, Islamic Rep.*	Ukraine	Mauritius	
Iraq*	United Arab Emirates*	Mexico	
Kazakhstan*	Uruguay	Micronesia, Fed. Sts.	
Kenya	Uzbekistan	Moldova, Rep.	
Kosovo	Venezuela, RB*	Montenegro	
Kuwait*	West Bank and Gaza	Nepal	
Kyrgyz Republic	Zambia	Pakistan	
Lao PDR	Zimbabwe	Palau	
Liberia		Panama	

*Energy exporters.

1. Emerging market and developing economies (EMDEs) include all those that are not classified as advanced economies. Advanced economies include Australia; Austria; Belgium; Canada; Cyprus; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hong Kong SAR, China; Iceland; Ireland; Israel; Italy; Japan; the Republic of Korea; Latvia; Lithuania; Luxembourg; Malta; Netherlands; New Zealand; Norway; Portugal; Singapore; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; the United Kingdom; and the United States.

2. An economy is defined as commodity exporter when, on average in 2012-14, either (i) total commodities exports accounted for 30 percent or more of total goods exports or (ii) exports of any single commodity accounted for 20 percent or more of total goods exports. Economies for which these thresholds were met as a result of re-exports were excluded. When data were not available, judgment was used. This taxonomy results in the classification of some well-diversified economies as importers, even if they are exporters of certain commodities (e.g., Mexico).

3. Commodity importers are all EMDEs that are not classified as commodity exporters.

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